

# Draft Master Environmental Impact Report

## Sly Park Recreation Area Master Plan

*January 2007*

SCH No. 2004102011

Prepared for:  
El Dorado Irrigation District



Prepared by:  
 FOOTHILL ASSOCIATES

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*Submitted Pursuant to: Division 13,  
California Public Resources Code*

Prepared for:

**El Dorado Irrigation District**

2890 Mosquito Road

Placerville, California 95667

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# EXECUTIVE SUMMARY

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## **Introduction**

This Executive Summary is provided in accordance with State CEQA Guidelines §15123. The CEQA Guidelines state that an Environmental Impact Report (EIR) will contain a brief summary of the proposed project, identify each significant effect with mitigation that would reduce or avoid that effect, identify areas of known controversy and issues raised by agencies and the public, and identify issues to be resolved.

This document is a Draft Master EIR analyzing the potential effects of implementing the Sly Park Recreation Area (SPRA) Master Plan and its individual components proposed by the El Dorado Irrigation District (EID). As required by the California Environmental Quality Act of 1970 (CEQA) (Public Resources Code 21000 et seq.), this Draft Master EIR examines the individual and incremental impacts of implementation of the Master Plan, as well as potential contributions to regionally cumulative impacts. Mitigation measures have been identified to avoid or minimize impacts identified as potentially significant. Consistent with CEQA requirements, this Draft Master EIR also analyzes a range of feasible alternatives to the Proposed Project, including the No-Project Alternative, required by CEQA. EID is Lead Agency for CEQA compliance related to the SPRA Master Plan.

The Master Plan includes environmental and public service improvements designed to enhance natural resources within SPRA, as well as to increase recreational opportunities. Degraded environmental and facility conditions within the Park resulting from financial constraints, combined with the recent transfer of ownership of SPRA to EID have necessitated the development of a long-term planning and management strategy to ensure the sustainability of natural resources within the region for continued public enjoyment and use.

This executive summary includes a brief project overview, identifies alternatives considered, identifies issues of concern, and provides a summary table of environmental impacts and mitigation measures that reduce those impacts.

## **Project Location**

SPRA is located near Pollock Pines in El Dorado County, California. The approximately 1,660 acre SPRA Master Plan area is located in the central portion of El Dorado County in Township 10 North, Range 13 East, and Sections 3, 8, 9 of the Mount Diablo Base & Meridian, and can be located on the U.S. Geological Survey (USGS) 7.5-minute series Sly Park quadrangle. SPRA ranges in elevation from approximately 3,500 to 3,800 feet. The project area can be accessed by U.S. Highway 50, Sly Park Road, and Mormon Emigrant Trail.

## **Project Overview**

The SPRA Master Plan establishes management guidelines and direction for future development of the recreational area located in mid-El Dorado County. The SPRA Master Plan strives to balance goals for recreation, and natural and cultural resource protection, including a desire to maintain the alpine character that defines much of the region.

The Master Plan establishes goals and objectives, area-wide design principles, for the 25 individual projects included within the Master Plan Program Elements. These would be developed in phases over the next 20 years.

The Master Plan includes several documents that have been prepared to guide future development and environmental protection/restoration of the Park. In combination with the Historic Properties Management Plan and Master EIR, the Master Plan provides fundamental planning guidance for development decisions and long-term management of the recreation area in a manner that will complement and preserve the Park's unique character.

### **Sly Park Recreation Area Master Plan Goals and Objectives**

To define the long-range planning strategy and articulate the vision for SPRA, the SPRA Master Plan establishes six goals:

- Resource Protection and Enhancement
- Fiscal Responsibility
- Public Safety
- Recreational Uses
- Facilities Management
- Community Participation

The following objectives have been identified to implement and support the six goals defined by the SPRA Master Plan:

#### **Goal: 1.0 Protect and enhance Sly Park's natural resources, scenic quality, water quality, and historical and cultural resources.**

##### **Objectives:**

- 1.1. Protect natural elements, including wildlife and aquatic habitats, forest, perennial and intermittent streams, riparian vegetation, wildlife, shoreline, and water quality through appropriate site design and development.
- 1.2. Cooperate with other public and private entities in the development of natural resource areas.
- 1.3. Restore degraded habitats and manage recreation use to limit adverse impacts.
- 1.4. Include habitat quality as a consideration in developing timber management strategies.
- 1.5. Consider the visual impact of park facilities and structures for proposed development and redevelopment projects.
- 1.6. Identify, assess, and use innovative conservation practices and technologies where and when appropriate.
- 1.7. Reduce erosion through the implementation of Best Management Practices (BMPs) throughout the park.

- 1.8. Reduce potential contamination of lake water by human and animal wastes by limiting pet and infant access to the water.
- 1.9. Use signage and effective public information strategies to educate the public regarding the impacts of waste on water quality, and to encourage pet owner responsibility for appropriate waste disposal.
- 1.10. Improve and stabilize shoreline trails to reduce and prevent erosion.
- 1.11. Preserve, restore, or re-create, where appropriate, significant historical resources.
- 1.12. Develop a Visitor Center at the park entrance with maps, information, and interpretive displays to educate the public about the sensitivity of Park resources and to increase interest in stewardship.

**Goal: 2.0 Manage the development and operation of Sly Park within the limits of available of financial resources while seeking innovative approaches to provide additional revenues.**

**Objectives:**

- 2.1 Coordinate staffing, acquisitions, development, and redevelopment with available funding programs.
- 2.2 Maintain existing and identify new opportunities for fee-based recreational programs and facilities that are substantially self-sustaining, such as conference facility rentals, cabin rentals, boat rentals, slip rentals, concessions, and timber sales.
- 2.3 Identify ways to increase revenues from existing park uses such as collecting lost day use fees by adding pay boxes to trailheads and equestrian staging areas outside the park entrance.
- 2.4 Actively identify and pursue federal, state, local, and private foundation grants.
- 2.5 Identify opportunities for businesses, organizations, and individuals to sponsor park programs and facilities through financial contributions.
- 2.6 Consider holding revenue generating events such as concerts, fishing tournaments, cycling/running events, and catamaran regattas when such activities do not compromise park resources or adversely affect adjacent property owners.
- 2.7 Establish a non-profit organization to secure donations and contributions that may be used for facility acquisition, development, and redevelopment (i.e., Friends of Sly Park Recreation Area).
- 2.8 Encourage opportunities for year-round use that provide additional revenue-generating opportunities. Actively target and market these opportunities.

**Goal: 3.0 Protect the health, property, and safety of park visitors, staff, and the surrounding community.**

**Objectives:**

- 3.1 Design and manage the park to permit safe public access to designated areas and to discourage access in areas that present excessive risk or a potential for adverse impacts on park resources.
- 3.2 Identify and implement emergency ingress and egress routes to allow visitor evacuation and access for emergency response units.
- 3.3 Educate Park visitors on how to safely enjoy the park and its resources through signage and other public outreach methods.
- 3.4 Provide adequate staffing to maintain facilities in good working order to protect public safety and to ensure their durability and longevity.
- 3.5 Provide adequate restroom facilities and trash pickup to meet the level of park use.
- 3.6 Develop agreements with local law enforcement agencies to provide regular patrols of key park areas and timely response to service requests.
- 3.7 Provide the level of park ranger presence needed to ensure adequate public services, safety, and enforcement of existing ordinances and rules.
- 3.8 Designate a variety of access routes to safely meet the pedestrian, bicycle, equestrian, and vehicular needs of Park visitors and reduce conflicts. Clearly map and mark the location of these routes with signage.
- 3.9 Improve telecommunications within the park.
- 3.10 Include assessment of fire risk as a consideration in timber management strategies.
- 3.11 Manage parking throughout the park to improve traffic and public safety and reduce potential for crime.
- 3.12 Reduce vandalism and destruction at park and recreation facilities through appropriate design, rapid repair response, and a citizen awareness and partnership program (i.e. “adopt-a-park”).

**Goal: 4.0 Explore a variety of environmentally and financially sustainable recreational facilities and programs to meet the diverse needs of District residents and other park visitors.**

**Objectives:**

- 4.1 Determine the sustainable level of recreational facility development and use, (particularly for camping, trails, and boating) to protect sensitive park resources while providing a high-quality recreation experience.

- 4.2 Periodically evaluate park facilities and programs against evolving recreation trends to identify opportunities that better meet visitors' needs.
- 4.3 Manage and design trails for a variety of users, including hikers, bicyclists, and equestrians.
- 4.4 Provide a wide variety of camping facilities to meet diverse interests and abilities, such as walk-in/ride-in/boat-in camping, cabins, tent cabins, yurts, and primitive and improved campsites.
- 4.5 Consider/coordinate recreational programming with facility acquisitions, development, and redevelopment.
- 4.6 Encourage the development of facilities and programs with other jurisdictions and interest groups to provide relevant, comprehensive, and cost-efficient recreational opportunities.
- 4.7 Target programs and facilities that are revenue-generating, self-sustaining, and/or not dependent upon extensive infrastructure, management, and/or maintenance.
- 4.8 Encourage partnerships with El Dorado County agencies that promote programs for traditionally underserved groups.
- 4.9 Provide adequate support facilities such as parking, restrooms, electrical and water hook-ups, and pull-through spaces for the number of allowed visitors.

**Goal: 5.0 Maintain and develop facilities in a manner consistent with available resources, the character of the affected recreation area, user needs, public safety, and park resource protection.**

**Objectives:**

- 5.1 Protect water quality, as well as natural and cultural resources, when developing and maintaining facilities.
- 5.2 Emphasize remediation and preventive maintenance of existing facilities to conserve natural and capital resources.
- 5.3 Develop and periodically update a prioritized list of potential capital improvements that reflects available financial resources, recreation demand, and the potential for revenue generation.
- 5.4 Develop and implement a maintenance management plan for the park that addresses deficiencies requiring immediate resolution as well as regular maintenance activities.
- 5.5 Consider availability of resources for management and maintenance costs before developing new facilities.
- 5.6 Initiate a facility assessment program to gather both staff and public input on proposed modifications to existing facilities.
- 5.7 Provide staff with adequate training and professional development opportunities to allow them to be effective and efficient in their responsibilities.

- 5.8 Acquire appropriate adjacent lands to meet existing and future recreation needs based on availability of funding and opportunities to transfer or trade lands.
- 5.9 Encourage development of facilities to accommodate multiple users when feasible (for example, scout camping and fine arts camp).
- 5.10 Use formal contracts to ensure quality control in the planning, design, and implementation of projects or activities carried out in cooperation with other agencies or groups.
- 5.11 Prioritize the preservation of the natural landscape and existing character of the park in the design and placement of new facilities and infrastructure.
- 5.12 Use indigenous plant materials for landscaping, when appropriate.
- 5.13 Consider the concerns of adjacent residents and property owners when locating park facilities.

**Goal: 6.0 Establish cooperative relationships between EID, other jurisdictions, and the public in providing recreational resources to the region and the local community.**

**Objectives:**

- 6.1 Establish regular meetings with the City of Placerville and El Dorado County Parks and Recreation agencies, the El Dorado County Office of Education, and other park districts and jurisdictions to continually review common natural resource and recreation issues and coordinate programs, activities, and facilities.
- 6.2 Coordinate interpretive opportunities and events with El Dorado County museums, the U. S. Bureau of Reclamation, the Sly Park Environmental Education Center, area naturalists, volunteer docents, and other similar sources of expertise.
- 6.3 Where appropriate, engage in joint-use management and acquisition efforts with other jurisdictions to most effectively and efficiently meet recreation needs.
- 6.4 Work with the El Dorado County Department of Transportation and the U.S. Forest Service (USFS) to encourage the creation of bikeways and trails that provide linkages between Sly Park and other regional recreation resources.
- 6.5 Continue to encourage interagency coordination and collaboration throughout the design process, as well as during implementation and long-term management.
- 6.6 Establish or expand partnerships with individuals and organizations to provide volunteer and community service opportunities for ongoing maintenance, development, and rehabilitation of the park and its recreational facilities.
- 6.7 Use and/or participate in surveys to periodically assess community recreation trends, user preferences, and levels of satisfaction with facilities, programs, and services.
- 6.8 Use public meetings to receive input regarding the planning of facilities and programs.
- 6.9 Publicize EID, its recreation programs and facilities, and its role within the greater regional area to community leaders and the public.

In support of the proposed goals and objectives of the SPRA Master Plan, the Plan identifies design standards by which proposed actions would be implemented. Although the SPRA Master Plan identifies conceptual recommendations to coincide with recreational and resource oriented management by EID, the SPRA Master Plan also identifies specific actions or components proposed by EID. Within the SPRA Master Plan, EID identifies individual activities and/or management strategies to implement the goals and objectives listed above within the individual elements of the Plan. EID has broken the Master Plan down into six elements, consistent with the six identified goals within the Plan. The six elements include: Recreational Elements; Educational Elements; Access Elements; Resource Management, Protection, and Restoration Elements; Facilities Infrastructure Elements; and Public Safety Elements.

## **Alternatives**

Alternatives to the project include an evaluation of a No Project Alternative, Proposed Project without New Marina Parking Lot Alternative, Widen Marina Drive for Parking on Both Sides – 20 Spaces, and Widen Marina Drive for Parking on One Side – 10 Spaces. The complete discussion of alternatives is contained in Chapter 7.0 Alternatives.

## **Issues of Concern**

CEQA Guidelines require that an EIR discuss areas of controversy and issues raised by agencies and the public. The Notice of Preparation (NOP) and Initial Study for the SPRA Master Plan Draft Master EIR were circulated for public review in September 30, 2004 for a period of 30 days. This Draft Master EIR addresses issues identified in the project's Initial Study and those raised by agency comments to the NOP. Issues of concern that are addressed in specific EIR chapters include:

- Land Use, including El Dorado County General Plan consistency and zoning;
- Aesthetics, including the project's impact to visual resources;
- Transportation and Traffic, including additional trip generation;
- Air Quality, including cumulative impacts from the project;
- Noise, including noise impacts on nearby residences from group campgrounds;
- Biological Resources, including potential impacts to special status species;
- Cultural Resource, including direct and indirect impacts on recorded prehistoric sites;
- Geology and Soils, including erosion and sedimentation;
- Hydrology and Water Quality, including potential impacts to Jenkinson Lake and its tributaries;
- Hazards and Hazardous Materials, including construction impacts and fire prevention and public safety; and
- Cumulative impacts on Air Quality from implementation of the project.

## **Environmental Impact and Mitigation Measures**

This Draft Master EIR uses the following terminology to denote the environmental effects of the proposed project:

**Less Than Significant Impact:** An impact which does not result in a substantial and adverse change in the physical environment. This impact does not require the implementation of mitigation measures.

**Potentially Significant Impact:** An impact that may have a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (CEQA Guidelines Section 15382). The existence of a potentially significant impact requires mitigation to be proposed that would reduce the magnitude of the potential impact.

**Significant Impact:** Substantial and adverse environmental change is likely to occur. A significant impact requires mitigation to reduce the magnitude of the impact.

**Significant and Unavoidable Impact:** Substantial and adverse environmental change is likely to occur. While mitigation may reduce the magnitude of the impact, there is no feasible mitigation that would mitigate the impact to less than significant.

This Draft Master EIR examines the impacts and potentially significant environmental effects that may result from the implementation of the SPRA Master Plan. Table ES – 1 summarizes the SPRA Master Plan’s resulting significant environmental impacts, any associated mitigation measures, and the resulting level of significance after mitigation. After mitigation, all environmental impacts have been reduced to a less than significant level with the exception of Aesthetics. Impacts to Aesthetics would result in a significant and unavoidable impact. Chapter 4.0, Environmental Analysis, (Sections 4.1 through 4.14) and Chapter 5.0, Cumulative Impacts, provide a detailed analysis of these impacts.

**Table ES – 1 — Summary of Impacts and Mitigation Measures**

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
<b>Land Use and Planning</b>			
<ul style="list-style-type: none"> <li>• All components within the SPRA Master Plan</li> </ul>	<p>Modifications to the existing facilities and implementation of the SPRA Master Plan would require discretionary approval by the County of El Dorado. As such, the proposed facilities and uses would be required to be consistent with the General Plan and the Zoning Ordinance. Implementation of the SPRA Master Plan and development of individual SPRA Master Plan components would result in inconsistency with the El Dorado County General Plan as currently proposed. However, approval of a general plan amendment (a change from Natural Resource to Tourist Recreational land use designation), a rezone (a change from Residential Agricultural to Recreational Facilities zoning districts) and a special use permit would allow for the implementation of Master Plan elements in a manner consistent with the General Plan and Zoning Ordinance.</p>	<p><b>LU-1:</b> An application for a General Plan amendment and rezone to Recreational Facilities shall be submitted to the El Dorado County Planning Services for review and approval. No development shall be permitted to commence until such time as the general plan amendment and rezone has been approved by the County of El Dorado.</p> <p><b>LU-2:</b> Before adoption of the SPRA Master Plan by the EID Board of Directors, an application for a special use permit shall be submitted to the El Dorado County Planning Services for review and approval. No development shall be permitted to commence until such time as the special use permit has been issued by the County of El Dorado.</p>	<p align="center">Less than Significant</p>
<b>Agriculture</b>			
<ul style="list-style-type: none"> <li>• Construct New Campsites</li> <li>• Construct Post/Pier Structures</li> <li>• Reconfigure Campsites</li> <li>• Trail Construction</li> <li>• Bridges at Trail Crossings</li> <li>• Waterless Toilets/Restrooms</li> <li>• Showers/Laundry Facilities</li> <li>• Construct New Parking Areas</li> <li>• Marina Parking Expansion</li> <li>• Realign/Improve Campground Access Roads</li> <li>• Reconfigure Main Entrance</li> <li>• Install Interpretive/Trail Signage/Kiosks</li> <li>• Construct Visitor Center/New</li> </ul>	<p>Development of individual components proposed under the SPRA Master Plan would have the potential to result in significant impacts related to agricultural and timber lands. Pursuant to the adopted County Interim Interpretive Guidelines for El Dorado County General Plan Policies 8.1.3.2 and 8.4.1.2, non-compatible land uses proposed on project area parcels would be required to provide for a setback of 200 feet when adjacent to parcels located within the Timberland Preserve and Residential Agricultural zoning districts.</p>	<p><b>AG-1:</b> A minimum 200-foot setback from parcel boundaries shall be maintained for the project footprint where abutting land identified by the County of El Dorado as located within the Timberland Preserve Zoning District. The requirements for the 200-foot setback may be reduced or waived for individual project components, if approved by the County Agricultural Commissioner or the Director of Development Services.</p> <p><b>AG-2:</b> On project parcels 10 acres or larger in area, agriculturally incompatible uses shall be set back a minimum of 200 feet from any adjacent parcel that is agriculturally zoned, unless the requirement for the 200-foot setback is reduced or waived by the County Agricultural Commissioner or the Director of Development Services.</p>	<p align="center">Less than Significant</p>

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
Maintenance Shop <ul style="list-style-type: none"> <li>• Construct New Facilities</li> <li>• Fine Arts Center</li> </ul>			
<b>Aesthetics</b>			
<ul style="list-style-type: none"> <li>• Construct Post/Pier Structures</li> </ul>	<p>The Scout/Youth camp is in an area that was rated Class III/IV, allowing for a higher degree of modification to the visual character. This is primarily because of the existing character of the landscape and the fact that the area is not very visible from most areas of SPRA. Because of the size of the Mess Hall and the number of Yurts proposed, this project would have the potential to significantly affect the views of the nearby residents, unless proper mitigation measures are implemented to screen these structures and help them to blend into the natural landscape.</p> <p>Improvements at Jenkinson Camp are unlikely to be visible from sensitive receptors because of screening by vegetation.</p> <p>Improvements at Chimney may be visible from adjacent campsites, from the Chimney day-use area, and from the Lake and would have the potential to significantly affect the visual quality, unless mitigation is incorporated.</p> <p>The proposed cabins at the Retreat and Event Center would have the potential to be visible from adjacent group camps, the Marina area, the south shore trail, and the north shore campgrounds west of the narrows. These cabins could have significant aesthetic impacts if mitigation is not incorporated.</p>	<p><b>AES-1:</b> Use colors for structures that are compatible with the natural landscape.</p> <p><b>AES-2:</b> Avoid removal of existing trees. Adjust locations of facilities as practicable to minimize impacts to existing vegetation. Use retaining walls where feasible to protect existing trees from cut/fill within the drip-line. Where removal of trees is necessary, replant with fast growing, native species suitable to site conditions. Develop a Mitigation Monitoring Plan to ensure survival of plantings.</p> <p><b>AES-3:</b> If existing vegetation is insufficient to screen improvements from potentially sensitive receptors, plant additional vegetation sufficient to provide a visual screen. Use both trees and shrubs to create a layered visual barrier.</p>	Less than Significant
<ul style="list-style-type: none"> <li>• Waterless Toilets/Restrooms</li> <li>• Showers/Laundry Facilities</li> </ul>	<p>The Master Plan design criteria specify that the “design and placement of facilities ...be subordinate to the natural landscape setting and consistent with the existing character of the Park” and that colors and finishes should “complement the shades and tones of the environment” and “appear natural and consistent with the environment.” If these criteria are applied to construction of restrooms, permanent site aesthetics impacts would be less than significant.</p> <p>Impacts to site aesthetics would be significant if trees are removed or</p>	<p><b>AES-2:</b> See above.</p> <p><b>AES-4:</b> Site facilities to minimize the need for extensive site grading. Avoid steep cut and fill banks that will have difficulty revegetating. Plant cut-and-fill banks to aid in revegetation. Use retaining walls where necessary to retain soil and minimize cut/fill banks. Consider the use of planting pockets or stepped walls with vegetation planted between tiers for retaining walls that cannot easily be screened by planting at the base of the wall.</p> <p><b>AES-5:</b> Where feasible, conduct construction at times when it will</p>	Less than Significant

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>large areas of soil are disturbed. Avoiding large trees and locating facilities where grading is minimized would reduce these impacts below a level of significance.</p> <p>Visual impacts because of construction could be significant if conducted during peak SPRA usage times. For construction of facilities in general, off-season times should be preferred over peak-season times, and weekdays over weekends.</p> <p>Shower/laundry facilities only have the ability to potentially affect views internal to a campground. Because of their limited size, they would not influence vista views. As with restrooms, if the design guidelines are followed, shower/laundry facilities should not affect the aesthetics of SPRA to a greater extent than the existing restroom facilities. These types of facilities fit with a visitor's expectations of a campground, and provided that they are "consistent with the existing character of the Park," would not result in a significant visual impact.</p> <p>Impacts to site aesthetics could be significant if trees are removed or large areas of soil are disturbed. Avoiding large trees and locating facilities where grading is minimized would reduce these impacts below a level of significance.</p> <p>Visual impacts because of construction could be significant if conducted during peak SPRA usage times. For construction of facilities in general, off-season times should be preferred over peak-season times, and weekdays over weekends.</p>	<p>not have significant impacts on SPRA visitors: off-season is preferable to peak-season, and weekdays are preferable to weekends.</p>	
<ul style="list-style-type: none"> <li>Construct New Parking Areas</li> </ul>	<p>New parking areas would have the potential for impacting aesthetics of SPRA in several ways:</p> <ul style="list-style-type: none"> <li>Creating large expanses of paved, graveled or packed-dirt surfaces;</li> <li>Centralizing cars which may result in increased glare during the day and increased light pollution at night;</li> <li>Removing trees;</li> <li>Creating unsightly cut/fill banks;</li> <li>Disturbing soil and vegetation during construction; and</li> </ul>	<p><b>AES-2, AES-4, AES-5:</b> See above.</p> <p><b>AES-6:</b> Where feasible, use naturally colored pavements or additives. Incorporate planting islands into parking lots help preserve existing trees, plant new trees and break up large expanses of pavement.</p> <p><b>AES-7:</b> Maintain plantings around parking areas to reduce glare and light impacts.</p> <p><b>AES-8:</b> Minimize soil and vegetation disturbance during construction. Replant disturbed areas as soon after construction is completed as feasible.</p>	<p>Less than Significant</p>

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
	<ul style="list-style-type: none"> <li>Storing and operating heavy equipment in a natural area.</li> </ul> <p>These impacts would generally be considered localized to the area immediately adjacent to the construction site. It is unlikely that the development of new parking areas would affect vista-views, but impacts would none-the-less be considered potentially significant if mitigation is not incorporated.</p>		
<ul style="list-style-type: none"> <li>Marina Parking Expansion</li> </ul>	<p>Development of the Marina Parking lot would have the potential to significantly affect the aesthetics of SPRA. Primary components of this project would include removal of numerous mature coniferous trees, creating a significant opening in the tree canopy, which would be visible from Sierra campground, the group campgrounds on the peninsula, the first dam site, the lake, and sections of the south shore trail. The parking lot would also involve cut and fill walls up to 12 feet tall. Additionally, cars parked in the lot will be highly visible because of bright colors and glare.</p> <p>The proposed parking lot is in a Class II objective area according to the visual assessment protocol applied. Changes should not attract the attention of the casual observer and should be low-level.</p> <p>The proposed changes are of such a magnitude, given the number of trees removed, the height of the retaining walls and the proximity to the lake that this project would result in potentially significant impacts to on site aesthetics for ten years or more, even if all mitigation measures are implemented. While the simulations showed that aesthetic impacts for vista views would be reduced within ten years by vegetative growth, this would not be true for areas immediately adjacent to the proposed parking lot, such as the road north of the lot and the trail between the lot and the lake.</p>	<p><b>AES-1, AES-2, AES-3, AES-4, AES-5, AES-6, AES-7, AES-8:</b> See above.</p>	<p>Significant and Unavoidable</p>
<ul style="list-style-type: none"> <li>Realign/Improve Campground Access Roads</li> </ul>	<p>Campground road alignments would generally result in improved site aesthetics because the purpose of these alignments are to reduce erosion and vegetation disturbance, improve grades, and better accommodate two-way traffic. In some areas, retaining walls may be required to accommodate cut/fill slopes. In those cases, some level of mitigation would be required to reduce the visual impact of the retaining walls.</p>	<p><b>AES-2, AES-4, AES-5, AES-8:</b> See above.</p>	<p>Less than Significant</p>

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>Additionally, realigning the roads would require heavy equipment for construction and paving. This construction would be planned to minimize impacts.</p>		
<ul style="list-style-type: none"> <li>Construct Visitor Center/New Maintenance Shop</li> </ul>	<p>These facilities are located at the entrance, away from the lake and screened by trees from any sensitive viewsheds. Visibility by potentially sensitive receptors would be negligible; however, the Visitor Center would potentially be seen by all visitors who enter the Park. If the design guidelines in the Master Plan are implemented, it would result in a visual improvement, rather than an impact.</p> <p>Temporary impacts because of construction could be significant, and construction would be done off-season or away from peak visitation times.</p>	<p><b>AES-5:</b> See above.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>Fine Arts Center</li> </ul>	<p>The Sugarloaf Fine Arts Camp is within several of the viewsheds identified as potentially sensitive in this study; however, because of intervening trees, parking structures or facilities are unlikely to be seen from sensitive viewpoints. Tree canopy modifications are likely to be noticed as holes in the canopy, so removal of existing trees should be avoided wherever possible. Where removal of trees over six inches DBH is necessary, additional trees should be planted to replace those removed. The facility parking lot, sports courts, and amphitheater are likely to have the largest impact on the canopy. The parking lot is on the opposite side of the ridge from potentially sensitive viewers, so it is less likely to create a noticeable hole than the other elements.</p>	<p><b>AES-2, AES-3, AES-6, AES-8:</b> See above.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>Lake Drive Stabilization</li> </ul>	<p>Stabilization of Lake Drive between Chimney and Hazel Creek camps would require relocation of the road and construction of a retaining wall upslope of the road. At this time, it is not known how large the retaining wall would be; however, it would be visible from the Lake and South Shore trail, as well as to travelers on Lake Drive, and would require mitigation to reduce visual impacts to a less than significant level.</p> <p>Additionally, construction would be coordinated to reduce the visual impact of heavy equipment and disturbed areas on visitors.</p>	<p><b>AES-4, AES-5, AES-8:</b> See above.</p>	<p>Less than Significant</p>

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
<b>Transportation/Traffic</b>			
<ul style="list-style-type: none"> <li>Applies to all components within the SPRA Master Plan</li> </ul>	No adverse impacts.	None warranted.	Not Applicable
<b>Air Quality</b>			
<ul style="list-style-type: none"> <li>Main Park Entrance</li> <li>Main Group Campground</li> <li>Scout/Youth Group Camp</li> <li>Construct New Parking Areas</li> <li>Marina Parking Expansion</li> <li>Realign/Improve Campground Access Roads</li> <li>Construct Visitor Center/New Maintenance Shop</li> <li>Fine Arts Center</li> <li>Lake Drive Stabilization</li> <li>Retreat and Event Center</li> <li>Mountain Bike Trail</li> <li>Lake Drive Access Improvements</li> </ul>	<p>Air Quality Impacts resulting from implementation of the project are categorized as follows:</p> <ol style="list-style-type: none"> <li>Short-term impacts related to construction activities; and</li> <li>Long-term impacts from the use of facilities, including additional vehicle trips from new visitors to SPRA because of the operation of new facilities.</li> </ol> <p>The individual components proposed as part of SPRA include a variety of recreational facility, educational, road and access, and natural resource protection and restoration improvements. Many of these improvements would require little or no mechanized construction activity. Components that are expected to require grading and building include facilities at the Sugarloaf Fine Arts Center, the Retreat and Event Center, the Scout/Youth Group Camp upgrade, and the Marina Parking Lot expansion. Road widening, paving, and alignment improvements would occur throughout SPRA. However, all components would be constructed in phases as funding allows</p> <p>The largest area to be disturbed from any single project at one time is expected to be less than two acres. The longest road widening and/or paving is at any single time is expected to be less than one-half mile. Among the cabins, yurts, and event buildings, the largest solid walled building to be constructed is expected to be approximately 15,000 square feet. It is anticipated that the maximum daily additional vehicle trips to SPRA generated by the Master Plan components, including the Sugarloaf Fine Arts Camp, the Retreat and Event Center, and the Scout/Youth Group Camp upgrade would be approximately 1,310 daily trips if all three of these event areas would be used at full capacity on the same day. However, on many days, one or more of these activity centers may not be utilized or would not be at full capacity.</p>	<p><b>AQ-1:</b> Construction activities will limit the amount of actively disturbed ground areas to no more than 6 acres on any single day.</p> <p><b>AQ-2:</b> The construction contractor(s) shall maintain equipment in tune per manufacturer specifications. The construction contractor(s) shall use catalytic converters on gasoline-powered equipment. The construction contractor(s) shall not leave inactive construction equipment idling for prolonged periods (i.e., more than 5 minutes).</p>	Less than Significant

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
<b>Noise</b>			
<ul style="list-style-type: none"> <li>• Construct Post/Pier Structures</li> <li>• Infrastructure</li> <li>• Reconfigure Existing Parking</li> <li>• Construct New Parking Areas</li> <li>• Marina Parking Expansion</li> <li>• Realign/Improve Campground Access Roads</li> <li>• Reconfigure Main Entrance</li> <li>• Construct Visitor Center/New Maintenance Shop</li> <li>• Main Group Campground</li> <li>• Fine Arts Center</li> <li>• Lake Drive Stabilization</li> </ul>	<p>Construction of a covered pavilion and duplex cabins at the Retreat and Event Center, and the construction of two mess halls, cabins, and yurts at the Scout/Youth Group Camp would involve a larger amount of equipment although these components would be built over a period of years and in different phases. The construction of SPRA improvements such as additional parking, campground access roads, visitor center, main group campground, and the Fine Arts Center would result in potentially significant impacts to noise during construction.</p>	<p><b>Noise-1:</b> Construction of potentially significant Master Plan components shall occur only during the hours of 7 a.m. to 7 p.m. Monday through Friday, between 8 a.m. and 5 p.m. on weekends, and between 8 a.m. and 5 p.m. on federally recognized holidays.</p>	<p>Less than Significant</p>
<b>Biological Resources</b>			
<ul style="list-style-type: none"> <li>• Construct New Campsites</li> </ul>	<p>Although special-status species surveys were conducted, special-status plant species and suitable habitat may occur in the vicinity of campsite construction. Therefore, the construction of new campsites at Dogwood Camp within mixed conifer and chaparral habitat may potentially affect special-status plant species and/or habitat.</p> <p>Construction of ten new primitive campsites may result in indirect impacts to waters of the U.S. (Jenkinson Lake). Construction of primitive campsites is not expected to directly affect Jenkinson Lake because work is occurring above the ordinary high-water mark (OHWM); however indirect impacts have a potential to occur from construction runoff. Indirect impacts to the water quality of Jenkinson Lake would be temporary and would be expected to last the duration of construction activities.</p>	<p><b>BIO-1:</b> Under the El Dorado County General Plan Policy 7.3.3.4, development of new facilities shall provide at least 100-foot setbacks from perennial streams and 50-foot setbacks from intermittent streams. Any facilities or new activities that must encroach closer shall be designed to minimize indirect impacts to wetlands to the greatest extent practicable. Additionally, design measures have been incorporated into project elements such as a 50-foot setback from the ordinary high-water mark of creeks, the minimization of cut and fill activities and the minimization of culvert installation will minimize impacts to potentially jurisdictional wetland features as well.</p> <p><b>BIO-5:</b> Construction of SPRA Master Plan elements may indirectly affect unnamed tributaries, creeks, or Jenkinson Lake from runoff during construction. If indirect impacts have the potential to occur during construction activities, additional measures may be required to maintain water quality standards of the waterways. If a 404 permit is required for the SPRA Master Plan, water quality concerns during construction shall be addressed in a required Section 401</p>	<p>Less than Significant</p>

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
		<p>water quality certification by the Regional Water Quality Control Board. A Storm Water Pollution Prevention Plan (SWPPP) will be required for the entire SPRA Master Plan project. SWPPPs are required in issuance of a National Pollutant Discharge Elimination System (NPDES) construction discharge permit by the U.S. Environmental Protection Agency. Implementation of Best Management Practices (BMPs) during construction is standard in most SWPPPs and water quality certifications. Examples of BMPs include stockpiling of debris away from regulated wetlands and waterways; immediate removal of debris piles from the site during the rainy season; use of silt fencing and construction fencing around regulated waterways; and use of drip pans under work vehicles and containment of fuel waste throughout the site during construction.</p> <p><b>BIO-17:</b> Additional rare plant surveys shall be performed before implementing specific components under the SPRA Master Plan, focusing on the specific area of proposed disturbance during the appropriate season for detecting the species. Areas subject to surveys shall be concentrated within areas proposed for new Park facility developments including but not limited to the Sugarloaf Fine Arts Center and the Black Oak Equestrian Center. Special attention shall be given to Pleasant Valley mariposa lily, which has a high likelihood of occurrence on the north side of SPRA.</p> <p>CDFG recommends a sufficient number of visits spaced throughout the blooming period of all special-status plant species to accurately determine their presence or absences of special-status plant species (CDFG 2000c). Generally, the blooming period to cover all target plant species identified in Table 1.1 1 covers February through October. Field surveys performed during June and July 2004 adequately covered the mid-blooming range of target plant species; however additional surveys are recommended before and after these months to catch early- and late-blooming target plant species. A minimum of two additional surveys are recommended, one during late-winter and spring months and one to cover early fall months.</p> <p>If special-status species are found, plant locations shall be described and mapped and the project shall be designed to avoid</p>	

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
		<p>impacts to the extent practicable. A mitigation plan developed from consultation with CDFG and CNPS shall be prepared. The plan should detail the various mitigation approaches to ensure minimal impacts to special-status plants species. Examples of mitigation include avoidance of the resource, salvage of plant materials where possible, acquisition of credits at an approved mitigation bank, or acquisition and preservation of property that supports these species. Preservation management strategies shall be developed in consultation with the appropriate resource agencies. For example, populations may be avoided and fenced if found where proposed trails or camping facilities are to be placed. Vegetation rehabilitation activities currently proposed under the SPRA Master Plan may be sufficient mitigation although consultation resource agencies shall be conducted to define an appropriate mitigation plan. If no special-status plant species are observed, no further mitigation would be required.</p>	
<ul style="list-style-type: none"> <li>Construct Post/Pier Structures</li> </ul>	<p>Construction of camping structures at Scout/Youth Group Camp may result in indirect impacts to Carpenter Creek, a potentially jurisdictional waters of the U.S. subject to Section 404 of the Clean Water Act. Work will not occur directly within the creek corridor therefore only indirect impacts from construction runoff are possible. Indirect impacts to the water quality of Carpenter Creek would be temporary and would be expected to last the duration of construction activities. Also, no impacts to any riparian habitat are anticipated to occur along Carpenter Creek under Section 1600 of the California Fish and Game Code.</p> <p>Trees will be avoided to the extent practical in the construction of camp structures; however tree removal may occur for the proper location of some structures. Also, trees planned for removal under these components may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur during tree removal. Construction of campground structures has the potential to affect active raptor nests, and/or remove potential raptor nest trees. Bald eagles are known to use an area as a wintering perch site in the vicinity of the proposed events center (near Mormon Emigrant Trail) (Merriam Green Associates Environmental Consultants</p>	<p><b>BIO-1, BIO-5, BIO-17:</b> See above.</p> <p><b>BIO-14:</b> Construction activities are not expected to occur during the rainy season; however, nesting territories of other raptor species could be established during winter months that could be disturbed by construction activities during that time. Specifically, resident owl species are known to initiate nest building and breeding during early winter months. For this reason, pre-construction nesting raptor surveys shall be performed within SPRA. Based on the final grading plans for specific SPRA Master Plan components, any trees that are planned for removal shall be surveyed for the presence of active raptor nests. A pre-construction raptor survey is recommended to determine the activity status of any identified raptor nests within SPRA including a 500-foot buffer from construction activities, if construction of any new facilities is expected to occur during the typical nesting season (February-September). The survey shall be conducted by a qualified biologist no more than 30 days before the start of construction activities. If more than 30 days lapse between the survey and the start of construction, an additional survey shall be performed. If the nests are found and considered to be active, construction activities shall not occur within 500 feet of the nests</p>	<p>Less than Significant</p>

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	<p>1995). Sharp-shinned hawk, osprey, northern goshawk, and California spotted owl are also present within SPRA and a potential nest could be removed during tree removal under the prescribed Master Plan components.</p>	<p>until the young have fledged and the appropriate resource agencies (USFS, USFWS, or CDFG) shall be consulted. If construction activities are proposed to occur during the non-breeding season (October-January), a survey is not required and no further studies are necessary. As discussed in BIO-11 through BIO-13, in order to avoid impacts to northern goshawk, bald eagle, California spotted owl, and other nesting raptors during their typical breeding seasons, construction activities should not occur from February through September.</p> <p>Avoidance measures for reducing impacts to nesting raptor species and potential nest trees have been incorporated into the SPRA Master Plan as a design guideline to the maximum extent feasible. For example, during campground re-configuration construction activities, no trees with a DBH of 6 inches or greater shall be removed; raptors are not likely to nest within trees less than 6 inches DBH. Ongoing recreational activities are not expected to have a significant affect on nesting raptors, as any raptors nesting in areas of recreational use will have become habituated to human activity.</p> <p><b>BIO-16:</b> Before the removal of any trees or structures within SPRA, a clearance survey shall be performed to determine the presence of bat roosts. The final grading plans for each individual project shall determine the trees and structures to be removed which shall be subject to the pre-construction survey. The pre-construction survey shall be conducted by a qualified biologist familiar with the identification of bat species and roosting sign. If special-status roosting bats are found during the pre-construction survey, CDFG or the USFWS should be consulted regarding measures to minimize impacts to roosting bats during construction. No trees or Park facility structures shall be removed that is used as by roosting bats. If special-status bats are not found during the pre-construction survey, no mitigation measures should be necessary for special-status bats.</p> <p><b>BIO-18:</b> The following measures are designed to protect existing trees and minimize impacts during construction activities.</p> <p>A) To protect the root zone, drift fencing (or similar protective</p>	

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		<p>barrier approved by El Dorado County) a minimum of 4 feet tall, shall be installed at least two feet outside the drip line of each protected tree. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the drip line protection area for preserved trees and shall establish the Critical Root Zone (CRZ) of the tree. The drift fencing shall not be moved once installed.</p> <p>Removal of tree branches and/or roots shall be minimized to the extent practical and shall be in compliance with the 2001 "American National Standard for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance-Standard Practices (Pruning)" (A300, Part 1) and with the 1995 International Society of Arboriculture (ISA) companion publication of "Tree Pruning Guidelines." The removal or severing of any roots on trees to be retained shall only be done at the discretion of an onsite arborist and shall not cause permanent damage to the tree. Roots shall be cut cleanly as close to the excavation as possible. Roots with cut faces of more than 1.5 inches shall be coated with emulsified asphalt or other approved coating formulated for use on damaged plant tissues. Any tree impacted by activity within its CRZ, including cuts to branches and/or roots shall be considered impacted and subject to the same mitigation as a removed tree.</p> <p>In the event that a stand of trees will be preserved, the entire stand may be fenced, as a group, per the above stated guidelines. Fencing shall be shown on construction plans and shall be installed before the onset of grading activities. Signs shall be attached to the fencing describing the trees as protected.</p> <p>B) No grading, vehicular traffic, dumping of excavated debris, materials storage, or disposal of chemicals or contaminated water shall be allowed within the CRZ of the trees to be retained as shown on final site plans. This includes but is not limited to washing concrete from tools or trucks; paint materials; sheetrock, mud, or stucco materials; or other chemicals such as solvents and herbicides. Nails, ties, screws, or other fasteners</p>	

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		<p>shall not be use to attach signs, braces, etc. to any tree trunks or branches.</p> <p>C) Drainage patterns on the site shall not be modified so that water accumulates in, or is diverted across, the CRZ of any preserved tree.</p> <p>D) Construction crews shall be informed of the above measures and shall be required to comply with the guidelines of this mitigation plan. They will also be provided a copy of the map illustrating areas to be fenced and avoided. Before construction, all construction personnel shall be required to sign a document acknowledging receipt and understanding of all tree protection and preservation requirements.</p> <p>E) A certified arborist shall monitor the protected trees periodically during construction to ensure the above-mentioned measures are carried out and to monitor the health and structure of the trees.</p> <p>F) If construction activities intercept major roots outside of the CRZ, a certified arborist shall be consulted to advise construction crews on how best to minimize damage to roots.</p> <p>G) Whenever feasible, utility trenches shall be established outside of the CRZ. If utilities must be located within this area, they should be placed in a conduit that is bored through the soil. Immediately backfill and water to the point of saturation all areas where soil cuts and trenches enter the CRZ of any existing tree.</p> <p><b>BIO-19:</b> To mitigate for the loss of trees, the following tree replacement measures shall be implemented for individual trees removed as part of the SPRA Master Plan:</p> <p>A) Based on final grading plans, each SPRA Master Plan project that would require tree removal shall be subject to an arborist survey and report. All trees that occur within the construction footprint will be inventoried by an ISA Certified Arborist. The survey will include numbering each qualifying tree (per El Dorado County guidelines) and recording required data such as species, size, health, and structural condition. Following the</p>	

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		<p>inventory of all trees proposed for removal, an arborist report will be completed and submitted to the Manager of Environmental Review Division.</p> <p>Replacement shall be required for all healthy native trees equal to or greater than 6 inch diameter at breast height (DBH) that will be removed. A healthy tree is defined as a tree with an average to be below-average amount of deadwood with respect to the tree's size and growing environment and little evidence of stress. A healthy tree shall also exhibit a low risk for failure as a public hazard in that it has minimal evidence of wounds, cavities, decay, or indication of hollowness within the root crown, trunk, or primary limbs, as well as lack of co-dominant stems or included bark in major trunk or branch attachments.</p> <p>B) For all trees, at least one (1) one-gallon seedling shall be replanted for every two inches of impact for a mitigation ratio of 1:2, thus a 12 inch DBH tree would require six (6) one-gallon replacement seedlings. Replacement seedlings shall be of the same genus and species removed.</p> <p>C) For oak (<i>Quercus</i> spp.) trees removed, replacement trees may be up to but in no case larger than 15-gallon size or to be consistent with General Plan Policy 7.4.5.2, the replacement requirement shall be calculated on an inch for inch basis, whichever measure is more stringent on tree replacement. The ratio of a 5-gallon oak replacement seedling to inches removed shall be at a minimum 1:3; the ratio of a 15-gallon oak replacement seedling to inches removed shall be at a minimum of 1:6.</p> <p>D) Tree re-planting may take place anywhere in SPRA in a location that provides conditions suitable to the growth requirements of the species including areas identified for reforestation in the Forest Management Plan.</p> <p>E) Replacement stock seedlings shall be purchased from a source in the SPRA region where feasible.</p> <p>F) A complete tree monitoring plan shall be required for the</p>	

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		<p>replacement trees. Monitoring shall be designed to ensure compliance with the established performance standard and to discover and remediate conditions that are detrimental or potentially detrimental to the plantings to ensure the continued success of the plantings. A minimum of eighty percent (80%) of the total plantings will survive annually (exhibiting fair health characteristics or higher) for a period of 3 years from the date of planting. If the plantings fail to meet the performance standard, they shall be replaced annually on an inch-for-inch basis, under the guidelines of this management plan to meet the 80% survival goal.</p> <p>Monitoring of the plantings will occur annually for three years, from the date of installation, conducted by a certified arborist or qualified biologist. Monitoring will consist of a site assessment to evaluate the health of each planting. Annual monitoring reports shall be submitted to the Manager of Environmental Review Division.</p> <p>The project proponent, or its successor, is the responsible party for monitoring plantings within SPRA. Any maintenance or remediation required to achieve the performance standard is the responsibility of the project proponent.</p>	
<ul style="list-style-type: none"> <li>Reconfigure Campsites</li> </ul>	<p>Currently, several sites within Rainbow and Kamloop camps are located within 50 feet of Hazel Creek and are planned for removal under the SPRA Master Plan in an effort to widen the buffer between campsites and riparian habitat associated with Hazel Creek. Removal of existing campsites within the 50-foot buffer of Hazel Creek could potentially affect upland winter aestivation habitat for special-status amphibian species including California red-legged frog and foothill yellow-legged frog, although because these existing campground areas are disturbed from human use, the potential for impacts to these species and/or habitat is minimal.</p> <p>Also, the re-configuration of campgrounds would not allow construction of new sites within 50 feet from the ordinary high-water mark of any creeks. The reconfiguration of campsites could encourage recreational collection of special-status amphibian species as well;</p>	<p><b>BIO-1, BIO-5, BIO-14, Bio-16, BIO-18, BIO-19:</b> See above.</p> <p><b>BIO-6:</b> A Streambed Alteration Agreement shall be obtained from CDFG, pursuant to Section 1602 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank or associated riparian vegetation of any stream within SPRA, specifically work that is occurring near Carpenter and Hazel creeks. Appropriate mitigation measures shall be developed in coordination with CDFG in the issued 1602 agreement.</p> <p><b>BIO-7:</b> A pre-construction survey for California red-legged frog and foothill yellow-legged frog should be performed within any areas proposed for a bridge crossing or where work will be occurring within a riparian corridor. Generally, this includes work being performed in proximity to Hazel and Carpenter creeks. Aquatic and upland habitat will be surveyed by a qualified biologist for the</p>	<p>Less than Significant</p>

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	<p>however, the 50-foot setback from new campsite construction would assist in preventing collection.</p> <p>The reconfiguring of campsites at Kamloop and Rainbow camps has the potential to affect Hazel Creek, a water of the U.S., and regulated waterway by the Corps. The Hazel Creek riparian corridor is also regulated under Section 1600 of the California Fish and Game Code. Additionally, the El Dorado County General Plan includes policies for wetland protection. Work associated with campsite reconfiguration would involve the removal of existing campsites and work below the ordinary high water mark of Hazel Creek. Work occurring within the stream corridor may also affect federally sensitive freshwater invertebrates.</p> <p>Any reconfiguration improvements would avoid removal of healthy native trees greater than six inches in diameter at breast height (DBH); however, some trees may require removal to meet the goals of the reconfiguration of campgrounds. If trees are proposed for removal, these trees maybe used by raptors as a nest tree. Also, trees planned for removal under these project elements may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur upon implementation.</p>	<p>presence of California red-legged frog or foothill yellow-legged frog.</p> <p>Because foothill yellow-legged frogs have been identified within Sly Park Creek within the SPRA, a clearance survey should be performed prior to construction to ensure no impacts will occur to this species that is known to occur within the SPRA. If this species is identified during the pre-construction clearance survey, any individuals should be safely re-located by a qualified professional out of the construction zone to an equivalent habitat located within the SPRA. The qualified biologist performing the survey should possess a valid California Department of Fish and Game Scientific Collecting Permit.</p> <p>Although California red-legged frogs have not been identified within the SPRA before, if this species is identified during a pre-construction survey, the USFWS should be contacted immediately for subsequent measures. No California red-legged frogs shall be moved or re-located as part of the pre-construction survey.</p> <p><b>BIO-8:</b> As discussed in Table 4.7.3, several Master Plan components shall require a Corps permit and/or Section 1600 Streambed Alteration Agreement. If either the Corps or California Department of Fish and Game require specific California red-legged frog or foothill yellow-legged frog impact avoidance measures, the applicant shall adhere to the conditions of the permit. These conditions are expected to include construction impact avoidance measures such as the presence of a biological monitor during creek restoration activities, a seasonal time restriction on work occurring within the creek bed, or a pre-construction survey.</p> <p><b>BIO-10:</b> Signs shall be posted to discourage collecting and handling of aquatic wildlife by recreational users. Interpretive trail signage and kiosks proposed for specific campgrounds shall serve to inform the public of the sensitivity and the ecological importance for preserving of riparian habitat and creek corridors. Interpretive signs and kiosks shall also define Park rules and prohibit collecting aquatic wildlife (other than fishing). Also, design measures such as creek access controls (boulders and cable fencing) at Pine Cone, Rainbow, and Kamloop camps have been incorporated into the SPRA Master Plan project where applicable. The re-configuration of</p>	

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		<p>campsites away from Hazel Creek at Hazel Creek, Kamloop, and Rainbow campgrounds would widen the buffer to Hazel Creek to enhance riparian habitat value; the increased distance of campsites to Hazel Creek shall further discourage foot traffic along Hazel Creek and reduce the likelihood of aquatic wildlife collection.</p> <p><b>BIO-15:</b> Avoidance measures for reducing impacts to federally sensitive invertebrate species have been incorporated into the SPRA Master Plan as a design guideline to the maximum extent feasible. Additionally, the 50- and 100-foot setbacks as required under the El Dorado County General Plan policies would aid in protecting federally sensitive invertebrate species. Also, the re-configuration of campgrounds shall not allow construction within 50 feet from the ordinary high-water mark of any creeks.</p> <p>Before construction occurring within the creek corridors for the two proposed span bridges, these potential habitat areas shall be surveyed to determine the presence or absence of Button's Sierra sideband, Gold rush hanging scorpionfly, South Forks ground beetle, and spiny rhyacophilan caddisfly. A qualified entomologist or invertebrate zoologist shall be retained that is familiar with the biology, habitat requirements, and identification of these species. An adequate number of surveys shall be performed over a period when the invertebrate species are identifiable. These species are assumed to be active and identifiable year-round. If any of these federally sensitive invertebrate species are identified within the SPRA area, any individuals should be safely re-located by a qualified entomologist out of the construction zone to an equivalent habitat located within the SPRA. If these species are not identified, bridge construction shall proceed as scheduled and no further mitigation should be necessary.</p>	
<ul style="list-style-type: none"> <li>Trail Construction</li> </ul>	<p>Trail construction at Hazel Creek Campground could result in impacts to special-status amphibian species (California red-legged frog and foothill yellow-legged frog) because of its proximity of the proposed work to Hazel Creek and mapped riparian habitat. The remaining campgrounds are not expected to be potential special-status amphibian habitat therefore impacts to these species are not expected</p>	<p><b>BIO-1, BIO-5, BIO-6, BIO-7, BIO-8, BIO-14, BIO-16, BIO-17, BIO-18, and BIO-19:</b> See above.</p> <p><b>BIO-4:</b> Based on site-specific projects, all Master Plan components that can feasibly be fitted with a crossing that will span and remain out of the ordinary high water mark and the 100-year flood hazard area of that waterway should be identified. Where determined</p>	<p>Less than Significant</p>

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	<p>to occur from trail construction in these areas.</p> <p>Specifically, the construction of the new mountain bike trail along the southern portion of the lake may affect potential riparian habitat where the trail is proposed to cross the two mapped riparian drainages in this area, although these stream crossings would be fitted with bridge crossings. These areas may be regulated under Section 1600 of the California Fish and Game Code and indirect impacts to water quality could occur during trail construction. The portions where the new bike trail is proposed to cross Sly Park and Hazel creeks at the eastern portion of the lake are potential special-status amphibian species and western pond turtle habitat. The portion of the mountain bike trail proposed at the southeast corner of the lake may occur in close proximity to the bald eagle and osprey nest that have been located on USFS land.</p> <p>Trail construction is expected to avoid trees and tree removal to extent practical by designing new trails around any trees; however, minor tree removal may be necessary. Any trees planned for removal may also be used by a nesting raptor and/or roosting bat species. Any trees planned for removal may be used as a bat roost site or by a nesting raptor.</p> <p>Along the northern portion of the lake where the proposed mountain bike trail will occur in more undisturbed and undeveloped portions (open forest areas) may represent potential sensitive plant species habitat and therefore impacts may occur to special-status plant species.</p>	<p>feasible, all bridge abutments shall be located outside of the ordinary high water mark.</p> <p><b>BIO-9:</b> Avoidance measures for reducing impacts to potential habitat for western pond turtle have been incorporated into the SPRA Master Plan as a design guideline to the maximum extent feasible. Also, the 50- and 100-foot setbacks as required under the El Dorado County General Plan will aid in the protection of western pond turtle and potential marsh habitat during construction activities. However, impacts may still occur during removal of existing campsites within the 50-foot buffer, construction of span bridges, and other project elements that are expected to occur within the 50- and 100-foot creek buffer.</p> <p>A pre-construction clearance survey for western pond turtle is recommended before construction activities occurring within potential pond turtle habitat. Potential habitat for western pond turtle occurs along Sly Park and Hazel creeks and potentially other perennial, slow-moving drainages. The clearance survey shall be performed during April or May when western pond turtle are most active and identifiable. It is assumed construction is not going to take place during the rainy season, a period when western pond turtle would be less identifiable. Open water areas with emergent vegetation with open rocks for basking shall be adequately surveyed to determine the presence or absence of western pond turtle within the creek corridors. The areas to be subject to clearance surveys shall be based upon final grading plans for each project element, specifically the two span bridges and campground reconfigurations. If western pond turtle are not observed, construction activities shall proceed as scheduled. If western pond turtle are observed, shall be consulted on subsequent impact avoidance measures.</p> <p><b>BIO-11:</b> Based on final grading plans, any project component that would involve the removal of potential nest trees shall be surveyed for the presence of a bald eagle nest. Federal protocol surveys shall be performed to determine the presence or absence of nesting and wintering bald eagles. As stated previously, bald eagles are known to winter at Jenkinson Lake and the first confirmed successful</p>	

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		<p>nesting attempt by a bald eagle pair occurred during 2004 south of Jenkinson Lake on USFS property as well as the previous two years. Additionally, nesting bald eagles have been recorded from nearby lakes in 2004. Therefore, tree removal shall not take place until confirming a bald eagle nest does not occur within the trees planned for removal.</p> <p>Timing construction activities to occur outside of the active bald eagle breeding season (early-February through July) at Jenkinson Lake, would reduce the likelihood of adverse effects on nesting bald eagle. Additionally, work associated with the implementation of the SPRA Master Plan is not expected to occur during the rainy season, which will also avoid impacts to bald eagles. CDFG recommends that specific survey guidelines and scheduling of surveys be handled with consultation with CDFG at the agency district or regional office level. CDFG recommends a minimum of three surveys during the nesting season to confirm the location of eagle territories (CDFG 1999). One survey shall be performed during early March (early incubation) to determine whether territories are occupied. CDFG recommends a second survey during late-April or early-May (early nesting period) to confirm if the territory is unoccupied, or if occupied in March to determine whether the breeding pair is still present. A third survey shall be performed during mid-June (late nestling period) to determine how many nestlings are present and may fledge (CDFG 1999). Performing directed surveys to identify breeding bald eagles shall also determine the location of any wintering bald eagles. Trees harboring any roosting, wintering bald eagles shall not be removed. As discussed in BIO 12 through BIO 14, in order to avoid impacts to northern goshawk, bald eagle, California spotted owl, and other nesting raptors during their typical breeding seasons, construction activities should not occur from February through September.</p> <p>If bald eagle nesting territories are found and defined, the bald eagle management and design guidelines for the SPRA Master Plan shall establish management zones based on a radius around the bald eagle nest. For example, the Habitat Management Guidelines for the Bald Eagle in the Southeast Region (USFWS 1987) provides recommended restrictions in a "primary</p>	

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		<p>management zone” within approximately 750 feet of a bald eagle nest, and lesser restrictions within a “secondary management zone” between 750 feet and one mile from the nest (exact distance would be dependent upon site specific factors). The Washington Department of Fish and Wildlife’s (WDFW) Priority Habitat and Species Management Recommendations (Washington Department of Fish and Wildlife 2004) recommend a survey buffer of at least 800 feet of a bald eagle nest. WDFW recommends buffering bald eagle nests within a two-zone management system similar to the USFWS guidelines, but with a primary zone within 400 feet of the nest and a secondary zone between 330 and 880 feet of the nest. For wintering eagles, 800- to 1,000-foot buffers around perching areas have been recommended where little screening cover is present (WDFW 2004).</p> <p>CDFG has not developed bald eagle protection guidelines for California, and reasonable measures may vary depending on site-specific and project-specific conditions. The bald eagle guidelines for the SPRA Master Plan shall be developed in coordination with the wildlife agencies and based on site-specific information and the best available scientific information regarding the bald eagle.</p> <p>The bald eagle management and design guidelines shall be designed to avoid “take” of bald eagles as defined under the California and Federal Endangered Species Acts and Bald and Golden Eagle Protection Acts, so that a take permit will not be necessary. However, even with these guidelines in place, if any federally funded or permitted activities take place that may affect bald eagles, a formal Section 7 Consultation with the USFWS shall be necessary. The bald eagle management and design guidelines shall be a useful component in assisting any Section 7 Consultation that takes place, to provide assurance to the USFWS that species impacts will be adequately minimized.</p> <p><b>BIO-12:</b> Based on final grading plans, any project component that would involve the removal of potential nest trees shall be surveyed for the presence of a nesting northern goshawk. The USFS has implemented a survey protocol for northern goshawk on USFS lands, Survey Methodology for Northern Goshawks in the Pacific</p>	

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		<p>Southwest Region (USFS 2000). This survey protocol is typically applied to USFS logging activities on state forest and non-state forest land; however, this survey methodology is recommended for implementation of the SPRA Master Plan project components as well. As with bald eagle, tree removal shall not take place until confirming an active northern goshawk nest does not occur within the trees planned for removal.</p> <p>For activities planned adjacent to non-USFS lands, databases and resource agencies shall be consulted for the location of known northern goshawk protected activity centers (PACs) (USFS 2004). To date, no northern goshawk PACs are known to occur within SPRA. PACs are delineated to include the known and suspected nest stand and to designate the best available 200 acres of forested habitat in the largest continuous patches based on aerial photography. If PACs occur within SPRA, directed surveys to establish the location or activity of the nest or PAC shall be performed. The USFS also recommends maintaining a limited operating period (LOP) prohibiting activities occurring within approximately 0.25 mile of a goshawk nest during the breeding season (generally February 15 through September 15) ) on USFS lands. The LOP would only apply to new Master Plan components occurring on USFS lands. The LOP would not apply to existing recreational trail use or maintenance or continued recreation use such as those at SPRA; however, new construction activities associated with the Master Plan components occurring on USFS lands shall be subject to USFS protocol guidelines. The LOP may be waived for individual components or activities of limited activity and duration or when a biological evaluation determines that such components are unlikely to result in breeding disturbance. The LOP may be reduced if the biological evaluation concludes that a nest site would be shielded from the proposed activity by natural topographic features that would minimize disturbance. If a northern goshawk nest is identified, the CDFG and/or USFS shall be consulted on subsequent impact avoidance measures. As discussed in BIO-11 through BIO-14, in order to avoid impacts to northern goshawk, bald eagle, California spotted owl, and other nesting raptors during their typical breeding seasons, construction</p>	

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
		<p>activities should not occur from February through September.</p> <p><b>BIO-13:</b> As with northern goshawk, a similar USFS survey protocol is recommended for California spotted owl and is based on the presence of owl PACs within the project site. This survey protocol is typically applied to USFS logging activities on state forest and non-state forest land; however, this methodology is recommended for implementation of the SPRA Master Plan project components. A California spotted owl protected activity center is identified by the USFS in the southeastern corner of SPRA (pers. comm. July 2004, Susan Yasuda, USFWS). As with bald eagle and northern goshawk, tree removal shall not take place until confirming an active northern goshawk nest does not occur within the trees planned for removal.</p> <p>For activities planned adjacent to non-USFS lands, databases and resource agencies shall be consulted for the location of known spotted owls PACs (USFS 2004). PACs are delineated using aerial photographs to include the known and suspected nest stand and to designate the best available 300 acres of contiguous forested habitat in the largest continuous patches. If PACs occur within SPRA, directed surveys to establish the location or activity of the nest or PAC shall be performed. The USFS recommends a LOP that prohibits construction activities occurring within 0.25 mile of an activity center during the breeding season on USFS lands (generally March 1 through August 31) unless directed surveys conducted before confirmed no spotted owls were nesting. The LOP would only apply to new Master Plan projects occurring on USFS lands. The LOP may be waived for individual components or activities of limited activity and duration or when a biological evaluation determines that such components are unlikely to result in breeding disturbance to California spotted owls on USFS lands. The LOP may be reduced if the biological evaluation concludes that a nest site would be shielded from the proposed activity by natural topographic features that would minimize disturbance. If a California spotted owl nest is identified, the CDFG and/or USFS shall be consulted on subsequent impact avoidance measures. As discussed in BIO-11 through BIO-14, in order to avoid impacts to northern goshawk, bald eagle, California spotted owl, and other nesting raptors during their typical breeding seasons, construction</p>	

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
		activities should not occur from February through September.	
<ul style="list-style-type: none"> <li>Bridges at Trail Crossings</li> </ul>	<p>Although the SPRA Design Standards and Guidelines identify clear span bridges where feasible to minimize impacts to drainage corridors, it may be infeasible to keep all bridge construction out of the 100-year flood hazard area and ordinary high water mark in individual locations, based on site-specific characteristics. Therefore, construction of span bridges at Scout/Youth Group Camp and Hazel Creek Camp may result in indirect impacts to Carpenter Creek and Hazel Creek, both jurisdictional waters of the U.S. subject to Section 404 of the Clean Water Act. Both creeks and riparian habitat are also subject to regulation under the California Fish and Game Code Section 1600. Any indirect impacts that may occur to the water quality of Hazel Creek would be temporary and would be expected to last the duration of construction activities. Additionally, the El Dorado County General Plan includes policies for wetland protection.</p> <p>Construction of span bridges proposed for the trail crossing at Hazel Creek and Carpenter Creek could potentially affect any special-status amphibian species (California red-legged frog and foothill yellow-legged frog) occurring within the immediate upland banks of the creeks. Also, bridge construction could affect potential western pond turtle if marsh habitat occurs in this portion of Hazel Creek as the creek opens up into the lake. The construction of new bridges could encourage recreational collection of special-status amphibian species. Additionally, western pond turtle has the potential to be impacted by the construction of span bridges at Hazel Creek Campground and Scout/Youth Camp.</p> <p>Construction of span bridges will avoid tree removal to the extent practical; however minor tree removal may be necessary to allow for proper bridge fittings. Therefore, tree removal may have the potential to affect active raptor nests if the tree is used as a nest tree. Trees planned for removal under these project elements may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur upon implementation.</p> <p>Bridge construction within suitable mixed conifer habitat has the potential to affect special-status plant species.</p>	<p><b>BIO-5, BIO-6, BIO-7, BIO-8, BIO-9, BIO-10, BIO-14, BIO-16, BIO-17, BIO-18, and BIO-19:</b> See above.</p>	<p>Less than Significant</p>

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
<ul style="list-style-type: none"> <li>Reconfigure Existing Parking</li> </ul>	<p>The reconfiguration of existing parking would most likely require some tree removal. Trees proposed for removal may be used by roosting bat species or nesting raptors.</p>	<p><b>BIO-11, BIO-12, BIO-13, BIO-14, BIO-16, BIO-18, and BIO-19:</b> See above.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>Construct New Parking Areas</li> </ul>	<p>The construction of new parking areas at the Miwok Trailhead may result in impacts to potential habitat for special-status amphibians within Carpenter Creek. Carpenter Creek is regulated under Section 404 and Section 1600 as well as any riparian habitat that occurs in the portion of Carpenter Creek proposed for new parking. Only indirect impacts may occur to Carpenter Creek during construction of the new parking area; work is not expected to occur directly within the creek bed therefore no direct impacts to waters of the U.S. or sensitive freshwater invertebrates are expected to occur. However, removal of riparian habitat may be necessary for parking lot construction near Carpenter Creek.</p> <p>The construction of new parking areas may require minor tree removal. Any trees proposed for removal may be used as a bat roosting site or a nesting raptor. If the existing museum structure at the Miwok Trailhead is used as a bat roost, demolition of the structure would affect roosting bat species.</p> <p>The construction of new parking areas within suitable mixed conifer habitat has the potential to affect special-status plant species. Specifically, the proposed Retreat and Event Center site has been identified as suitable Pleasant Valley mariposa lily habitat; however, this plant was not observed within this area of SPRA during directed floristic surveys.</p>	<p><b>BIO-1, BIO-5, BIO-6, BIO-7, BIO-8, BIO-11, BIO-12, BIO-13, BIO-14, BIO-16, BIO-17, BIO-18, and BIO-19:</b> See above.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>Marina Parking Expansion</li> </ul>	<p>The expansion of the Marina Parking Lot will require the removal of existing trees. Based on a preliminary site plan review for the parking lot expansion footprint, including a 15-wide buffer for construction, approximately 182 trees would be removed. The majority of trees to be removed would be among the species of pines identified in SPRA, ranging in size from 6 to 42 inches diameter at breast height (DBH). Six of the trees proposed for removal are oaks (<i>Quercus</i> spp.). The 182 trees proposed for removal fall into the following age classes: 62 trees 6 to 12 inch DBH; 77 trees 13 to 24 inch DBH; 37 trees 25 to 36 inch DBH; and 6 trees are greater than 37 inch DBH.</p>	<p><b>BIO-5, BIO-11, BIO-12, BIO-13, BIO-14, BIO-16, BIO-18, and BIO-19:</b> See above.</p>	<p>Less than Significant</p>

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>Trees planned for removal under these project elements may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur upon implementation.</p> <p>Trees planned for removal as a result of the proposed Marina parking lot expansion may be used as a bat roost and therefore impacts to bat roosts or the removal of a bat roost trees could occur during construction and would require mitigation. The removal of any tree that is occupied by an active raptor nest or as a bat roost within the areas of the proposed Marina parking lot expansion would be considered a significant impact.</p>		
<ul style="list-style-type: none"> <li>• Realign/Improve Campground Access Roads</li> </ul>	<p>Generally, the realignment of existing Park roads would avoid the removal of trees, but minor tree removal may be necessary for proper roadway improvements. Trees larger than 6 inch DBH would be avoided where possible. Trees planned for removal under these project elements may be used as a bat roost site or by a nesting raptor and therefore, impacts to roosting bats or nesting raptors could occur upon implementation.</p>	<p><b>BIO-1, BIO-14, BIO-16, BIO-18, and BIO-19:</b> See above.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>• Reconfigure Main Entrance</li> </ul>	<p>Work associated with the relocation of the dump station and reconfiguration of the main entrance may require minor tree removal although tree removal would be avoided to the extent practical. Tree removal has the potential to affect active raptor nests, and/or remove potential raptor nest trees if that tree is used by a nesting raptor. Trees planned for removal under these project elements may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur upon implementation.</p>	<p><b>BIO-14, BIO-16, BIO-18, and BIO-19:</b> See above.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>• Construct Visitor Center/New Maintenance Shop</li> </ul>	<p>Construction of the new visitor center and visitor parking at the Main Park Entrance may require minor tree removal .If a tree proposed for removal is used by a nesting raptor, potential impacts may occur to active raptor nests, and/or remove potential nest trees. Any trees planned for removal under these project elements may also be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur upon implementation. Additionally, if the two existing small buildings at the Main Park Entrance are used as a bat roost, demolition of the structures would affect roosting bat</p>	<p><b>BIO-14, BIO-16, BIO-18, and BIO-19:</b> See above.</p>	<p>Less than Significant</p>

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
	species.		
<ul style="list-style-type: none"> <li>Fine Arts Center</li> </ul>	<p>The removal of any trees in this area that are occupied by active raptor nests would be a significant impact and would require mitigation. Trees planned for removal under these project elements may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur during construction of the Sugarloaf Fine Arts Center.</p>	<p><b>BIO-11, BIO-12, BIO-13, BIO-14, BIO-16, BIO-18, and BIO-19:</b> See above.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>Rehabilitate Vegetation</li> </ul>	<p>Only vegetation rehabilitation activities occurring at Hazel Creek Camp may affect sensitive biological resources because of work occurring below the ordinary high water mark. The Hazel Creek restoration project would occur within the riparian corridor of Hazel Creek, a jurisdictional waterway under Section 1600 of the California Fish and Game Code and Section 404 of CWA. Direct and indirect impacts to Hazel Creek are anticipated to occur from rehabilitation activities. Also, work occurring in the stream corridor has the potential to affect foothill yellow-legged frog, California red-legged frog, and to a lesser extent western pond turtle (if marsh habitat occurs in this area of the creek). Work occurring within the stream bed may potentially affect federally sensitive freshwater invertebrate species.</p>	<p><b>BIO-5, BIO-6, BIO-7, BIO-8, and BIO-9:</b> See above.</p> <p><b>BIO-2:</b> The Hazel Creek restoration project will require a Corps permit as the restoration activities will be occurring within below the ordinary high water mark. This work would be covered under Nationwide Permit (NWP) 27, Stream and Wetland Restoration Activities. A pre-construction notification is required for the restoration of Hazel Creek and must be submitted to the Corps before work occurring within the creek corridor. Any permit conditions required by the Corps in the issuance of the permit will be followed for the duration of the restoration work.</p> <p>The stabilization of the bank along Lake Drive will require a Corps permit as it is occurring below the ordinary high water mark. This work would be covered under Nationwide Permit 13, Bank Stabilization; therefore NWP 13 shall be acquired before bank stabilization work occurring along Lake Drive. If the bank stabilization activity is less than 500 feet in length and the activity will not disturb more than one cubic yard per running foot, a post-notification to the Corps will be required to ensure compliance with this nationwide permit. If the length of bank stabilization is greater than 500 feet, a pre-construction notification package must be submitted to the Corps to ensure compliance with the permit. If a pre-construction package is required for the bank stabilization along Lake Drive, any permit conditions required by the Corps will be followed for the duration of the work.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>Lake Drive Stabilization</li> </ul>	<p>Stabilization of Lake Drive may affect Jenkinson Lake during activities associated with moving the road away from the shoreline and the reinforcement of the bank to prevent undercutting. Work is anticipated</p>	<p><b>BIO-3, BIO-5</b></p>	<p>Less than Significant</p>

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
	to occur below the ordinary high water mark. Direct and indirect impacts may occur to Jenkinson Lake during the realignment of approximately 500 feet of Lake Drive away from the existing shoreline.		
<b>Cultural Resources</b>			
<ul style="list-style-type: none"> <li>• Improve Access Loop Road</li> <li>• North Water Infrastructure</li> <li>• Scout/Youth Group Camp (all components)</li> </ul>	<p>CA-Eld-461 has the potential to contain subsurface cultural deposits that extend into the areas that would be disturbed by proposed Scout/Youth Group Camp improvements. If the deposit has data potential, the impact would be considered significant under CEQA.</p> <p>The completion of the Scout/Youth Group Camp would result in an increase in the number of individuals per year at the camp. This expected increase is estimated at approximately 5,000 people per year. The increased use in an area adjacent to a historical resource puts the resource at risk of disturbance from vandalism and unauthorized collection of cultural materials. Such disturbance would be considered significant under CEQA.</p>	<p><b>CR-1:</b> Avoid Ground-Disturbing Activities within 100 ft. of Bedrock Milling Stations at CA-Eld-461.</p> <p><b>CR-2:</b> Monitor Site Impacts at CA-Eld-461 and Take Appropriate Mitigation Action in Consultation with Native Americans.</p>	Less than Significant
<ul style="list-style-type: none"> <li>• Day Use Parking</li> <li>• Parallel Parking</li> <li>• Improve West Campsites and Access Road</li> <li>• Reconfigure campsites (except sites 24-27) on shore road</li> <li>• Tent Platforms</li> <li>• Shore Access Control</li> <li>• Rehabilitate Vegetation</li> </ul>	<p>The reconfiguration of existing parking areas, establishment of new parking areas, improvement and rehabilitation of existing campsites, establishment of tent platforms, and the rehabilitating vegetation have the potential to affect CA-Eld-263 as a result of associated ground-disturbing activities. If the cultural deposit associated with CA-Eld-263 extends into any of the areas that would be disturbed by these project components and if those areas of deposit contain data potential, the impact would be considered significant under CEQA.</p> <p>The installation of signage and barriers to limit shore access to eight designated points has the potential to affect CA-Eld-263 as a result of ground-disturbing activities in areas known to contain a data-rich cultural deposit and in the shore area that contains the bedrock mortars. This impact is considered significant.</p>	<p><b>CR-3:</b> Test Excavate to Determine Data Potential of Impact Areas at CA-Eld-263.</p> <p><b>CR-4:</b> Data Recovery in Areas of Impacts at CA-Eld-263.</p>	Less than Significant
<ul style="list-style-type: none"> <li>• Replace Lake Access Trail</li> <li>• Improve Entry</li> <li>• Reconfigure Campsites</li> <li>• Reconfigure Day Use Sites</li> <li>• Rehabilitate Vegetation</li> </ul>	Proposed improvements at Stonebraker Camp would reroute the existing lake access trail, improve the campground entry, reconfigure camp and day use sites, and rehabilitate vegetation. These components have the potential to affect SP-2005-1-H as a result of ground-disturbing activities. A significant impact would occur if SP-	<b>CR-5:</b> Documentation and Evaluation of SP-2005-1-H.	Less than Significant

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
	2005-1-H is determined eligible for the CRHR.		
<ul style="list-style-type: none"> <li>• Reconfigure Campsites</li> <li>• Rehabilitate Vegetation</li> </ul>	<p>Proposed improvements at the Hilltop Camp include reconfiguring campsites and rehabilitating vegetation. These components have the potential to affect P-9-1817 as a result of ground-disturbing activities. If P-9-1817 contains a subsurface cultural deposit that extends into the area that would be disturbed by these improvements, and if that deposit indicates that P-9-1817 has data potential, the impact would be considered significant under CEQA.</p>	<p><b>CR-6:</b> Test Excavate in Areas of Impacts to Determine Data Potential of P-9-1817.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>• Reconfigure Day Use Parking</li> <li>• Reconfigure Campsites</li> <li>• Rehabilitate Vegetation</li> <li>• Pilot Cabins</li> </ul>	<p>The proposed improvements at Chimney Camp include reconfiguring parking and campsites and rehabilitating vegetation. These components have the potential to affect SP-1985-1 as a result of ground-disturbing activities. If SP-1985-1 contains a subsurface cultural deposit that extends into the area that would be disturbed by these components and if that deposit has data potential, the impact would be considered significant under CEQA.</p> <p>The proposed addition of two deluxe cabins at Chimney Camp could result in significant impacts to cultural resources. CA-Eld-1333-H is exposed on a regularly basis each autumn when the lake reaches maximum draw down. The increased use of the campground during the time of the year when the site is exposed increases the potential for the site to be damaged through unauthorized artifact searching and vandalism. If CA-Eld-1333-H meets criteria a, b, or d of the CRHR, that impact would be considered significant under CEQA.</p>	<p><b>CR-7:</b> Avoid Ground-Disturbing Activities within 50 ft. of Bedrock Milling Stations at SP-1985-1.</p> <p><b>CR-8:</b> Evaluate CA-Eld-1333-H for CRHR Eligibility under Criteria a, b, and d.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>• Access Trails</li> <li>• Primitive Campsites</li> <li>• Waterless Toilets (2 Stations)</li> </ul>	<p>The Primitive Camp Area proposes the addition of signage and an access trail to the campsites, establishment of 10 campsites, and the installation of two double-pit toilets. This project has the potential to affect CA-Eld-1331 and CA-1335 as a result of ground disturbance. If CA-1331 or CA-Eld-1335 contains subsurface cultural deposits that extend into the areas that would be disturbed by the construction of the new Primitive Camp Area and if those deposits have data potential, the impact would be considered significant under CEQA.</p>	<p><b>CR-9:</b> Avoid Ground-Disturbing Activities within 50 ft. of Bedrock Milling Stations at CA-Eld-1331 and CA-Eld-1335.</p>	<p>Less than Significant</p>
<ul style="list-style-type: none"> <li>• Mountain Bike Trail</li> </ul>	<p>Ground-disturbing activities associated with construction of the proposed Mountain Bike Trail would have the potential to affect CA-Eld-1335 and P-9-1817. These sites are in close proximity to the</p>	<p><b>CR-10A:</b> Avoid Ground-Disturbing Activities within 50 ft. of Bedrock Milling Stations at CA-Eld-1335.</p> <p><b>CR-10B:</b> Test Excavate in Areas of Impacts to Determine Data</p>	<p>Less than Significant</p>

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
	proposed trail route. If these resources contain subsurface cultural deposits that extend into the areas that would be disturbed by proposed trail, and if either of those deposits have data potential, the impact would be considered significant under CEQA.	Potential of P-9-1817.	
<ul style="list-style-type: none"> <li>Access Improvements</li> </ul>	Ground-disturbing activities associated with the proposed Lake Drive Access Improvements would have the potential to affect CA-Eld-263, CA-Eld-728, and SP-1985-1, as these sites are situated in close proximity to Lake Drive. If cultural deposits associated with these sites extend into the areas that would be disturbed by the proposed improvements and if any of those deposits have data potential, the impact would be considered significant under CEQA.	<p><b>CR-11A:</b> Test Excavate to Determine Data Potential of Impact Areas at CA-Eld-263 and CA-Eld-728.</p> <p><b>CR-11B:</b> Avoid Ground-Disturbing Activities within 50 ft. of Bedrock Milling Stations at SP-1985-1.</p>	Less than Significant
<ul style="list-style-type: none"> <li>Applies to all components within the SPRA Master Plan requiring ground disturbance.</li> </ul>	<p>Such disturbance may result in the loss of integrity of cultural deposits and the loss of information if these deposits do exist. If such a deposit is determined to be a historical resource as defined by CEQA, its disturbance would result in a significant impact.</p> <p>Although no discernible impacts to human remains are anticipated, there is always the remote possibility that such remains are present below the ground surface and could be unearthed during ground-disturbing activities. This impact would be considered significant under CEQA.</p>	<p><b>CR-12:</b> Train Staff to Recognize Cultural Deposits and Stop Work in the event of an Unanticipated Discovery.</p> <p><b>CR-13:</b> Stop Work if Human Remains are Unearthed and Contact the El Dorado County Coroner.</p>	Less than Significant
<b>Geology/Soils</b>			
<ul style="list-style-type: none"> <li>Construct Post/Pier Structures</li> <li>Reconfigure Campsites</li> <li>Waterless Toilets/Restrooms</li> <li>Showers/Laundry Facilities</li> <li>Reconfigure Existing Parking</li> <li>Construct New Parking Areas</li> <li>Realign/Improve Campground Access Roads</li> <li>Reconfigure Main Entrance</li> <li>Construct Visitor Center/New Maintenance Shop</li> </ul>	It is not anticipated that implementation of the SPRA Master Plan would result in substantial adverse impacts related to Geology and Soils. SPRA Master Plan goals and objectives identify the importance of protecting of natural resources, including the reduction of erosion within SPRA. Construction activities associated with implementation of the SPRA Master Plan and development of individually proposed components would have the potential to result in significant impacts related to geology and Soils. However, mitigation measures have been identified to reduce potentially significant impacts associated with implementation of the Master Plan on a project by project basis. Implementation of the Master Plan would result in a planning strategy for the long-term management of resources and soils conservation within SPRA.	<b>GEO-1:</b> The applicant shall hire a California-registered geotechnical engineer experienced and knowledgeable in the practice of soils engineering to perform site-specific geotechnical studies. The study shall identify any areas of unstable geology or soils, as well as map and characterize the extent of slope instability or potential for landsliding. The report shall provide recommendations for project design alterations, considerations or other features which could reduce the potential hazards to an acceptable level. All feasible recommendations from the study(s) shall be required as part of the project approval and may include the designation of building envelopes, where appropriate. Areas of landsliding identified within the studies shall be repaired or avoided by development to the extent that they would pose no risk to life or property.	Less than Significant

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
<ul style="list-style-type: none"> <li>Fine Arts Center</li> <li>Lake Drive Stabilization</li> </ul>			
<ul style="list-style-type: none"> <li>Construct New Parking Areas</li> <li>Realign/Improve Campground Access Roads</li> <li>Reconfigure Main Entrance</li> <li>Lake Drive Stabilization</li> </ul>	See above.	<b>GEO-2:</b> Final grading plans shall be submitted to a licensed professional geotechnical engineer for review and recommendation. All recommendations shall be incorporated into project design.	Less than Significant
<b>Hazards and Hazardous Materials</b>			
<ul style="list-style-type: none"> <li>Construct Post/Pier Structures</li> <li>Waterless Toilets/Restrooms</li> <li>Reconfigure Existing Parking</li> <li>Construct New Parking Areas</li> <li>Reconfigure Main Entrance</li> <li>Construct Visitor Center/New Maintenance Shop</li> </ul>	<p>Implementation of the SPRA Master Plan would provide the framework for long-term management of SPRA for continued recreational use as well as resource conservation. Implementation would not involve land uses that would be likely to result in exposure of the environment or the public to hazardous materials. However, the potential exposure during project construction of previously unidentified hazardous materials related to historical and current land uses does exist. Therefore, impacts are considered potentially significant.</p> <p>The risk of wildfire is very high within SPRA. However, SPRA Master Plan proposes proactive planning for fuel load reduction, emergency preparedness and evacuation, as well as continued coordination with CDF and the El Dorado County Fire Safe Council. Continued interagency coordination, in combination with broad planning for emergency response within SPRA, as well as risk reduction is anticipated not to result in significant risk related to wildfire hazard.</p> <p>It should also be noted that forest management by EID in accordance with the FMP and past and future fuel load management help Sly Park to act as a buffer between residential and private/public forests. The SPRA Master Plan is not “development” in the sense of an “urban wildland interface community.” In this particular case, the changes resulting from the Master Plan would reduce the risk of fire.</p>	<p><b>HAZ-1:</b> Before demolition of existing on-site structures, the project applicant shall:</p> <ul style="list-style-type: none"> <li>Remove and properly dispose of or recycle all petroleum, chemicals, and hazardous materials from the property;</li> <li>Follow standard remedial procedures as required by the County Department of Environmental Management;</li> <li>Conduct an asbestos survey for all existing on-site structures proposed for demolition. The survey shall be conducted under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines before commencement of any demolition activities. Pursuant to NESHAP guidelines, all friable asbestos shall be removed by qualified professionals before building demolition; and</li> <li>Conduct a lead paint survey of existing on-site structures proposed for demolition. As a component of this survey, all soils surrounding the existing structures shall be sampled for residual fragments of lead-based paint.</li> </ul>	Less than Significant
<ul style="list-style-type: none"> <li>Construct New Parking Areas</li> <li>Reconfigure Main Entrance</li> </ul>	See above.	<b>HAZ-2:</b> During site preparation and construction activities, if evidence of previously unidentified hazardous materials contamination is observed or suspected (i.e., stained or odorous soil, or oily or discolored water) construction activities shall cease	Less than Significant

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
		and a Registered Environmental Professional II shall assess the situation. If necessary, the environmental professional shall prepare a sampling plan to collect soil and/or groundwater samples to determine whether or not the suspected location has been adversely affected by past activities. The samples shall be analyzed for the contaminants determined to be a potential health concern by the environmental professional. Depending on the nature of the contamination (if any), the Hazardous Materials Division of the El Dorado County Department of Environmental Management shall be contacted for further direction, which could include further investigation or remediation to all applicable federal, State, and local standards.	
<ul style="list-style-type: none"> <li>Applies to all components within the SPRA Master Plan</li> </ul>	<p>Fire prevention activities associated with implementation of the SPRA Master Plan would result in a net benefit to SPRA, and surrounding residents and communities by development and implementation of fuel reduction management activities, coordination with the El Dorado County Fire Safe Council for public education and outreach, development of an evacuation plan for SPRA, and continued coordination with CDF for controlled burning and the removal of dead, dying and diseased trees. No adverse impact would result with implementation of a Fire Safe Plan as specified in the required mitigation.</p> <p>It should also be noted that forest management by EID in accordance with the FMP and past and future fuel load management help Sly Park to act as a buffer between residential and private/public forests. The SPRA Master Plan is not “development” in the sense of an “urban wildland interface community.” In this particular case, the changes resulting from the Master Plan would reduce the risk of fire.</p>	<p><b>HAZ-3:</b> Before adoption of the SPRA Master Plan by the EID Board of Directors, a Fire Safe Plan prepared by an RPF shall be reviewed and approved by the El Dorado County Fire Protection District and/or CDF.</p>	Less than Significant
<b>Hydrology and Water Quality</b>			
<ul style="list-style-type: none"> <li>Reconfigure Existing Parking</li> <li>Construct New Parking Areas</li> <li>Marina Parking Expansion</li> <li>Realign/Improve Campground Access Roads</li> </ul>	<p>Construction activities associated with these components would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB’s NPDES permit process for construction sites would address prevention and</p>	<p><b>HWQ-1:</b> Proper timing of construction and maintenance activities throughout the year such that potential impacts to water quality are minimized or avoided.</p> <p><b>HWQ-2:</b> Storm water runoff from construction areas shall be pre-treated, especially first flush, from roads and parking lots before</p>	Less than Significant

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
<ul style="list-style-type: none"> <li>Reconfigure Main Entrance</li> <li>Construct Visitor Center/New Maintenance Shop</li> <li>Fine Arts Center</li> <li>Lake Drive Stabilization</li> </ul>	controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.	discharging into existing waterways.	
<ul style="list-style-type: none"> <li>Bridges at Trail Crossings</li> </ul>	See above.	<b>HWQ-3:</b> A creek drainage study shall be prepared for bridged trail crossings, and design the bridge to either span the 100-year flood hazard or to not impede or redirect flood flows.	Less than Significant
<ul style="list-style-type: none"> <li>Install Interpretive/Trail Signage/Kiosks</li> </ul>	See above.	<b>HWQ-1:</b> See above.	Less than Significant
<b>Public Services</b>			
<ul style="list-style-type: none"> <li>Applies to all components within the SPRA Master Plan</li> </ul>	No adverse impacts.	None warranted.	Not Applicable
<b>Recreation</b>			
<ul style="list-style-type: none"> <li>Applies to all components within the SPRA Master Plan</li> </ul>	No adverse impacts.	None warranted.	Not Applicable
<b>Utilities/Service Systems</b>			
<ul style="list-style-type: none"> <li>Applies to all components within the SPRA Master Plan</li> </ul>	No adverse impacts.	None warranted.	Not Applicable
<b>Cumulative Impacts</b>			
<ul style="list-style-type: none"> <li>All components within the SPRA Master Plan</li> </ul>	The implementation of a general plan amendment from Natural Resource to Tourist Recreational and the rezoning of portions of SPRA from Residential Agriculture to Recreational Facility, as described above under Land Use and Planning, is required for development of certain SPRA components, including the Sugarloaf Fine Arts Center and the Retreat and Events Center. The projected emissions of ROG and NOx from the proposed SPRA Master Plan components, although less than significant as a single project, would be greater than emissions created by development allowed under the existing Natural Resource designation, and therefore would be	<b>C-AQ 1:</b> EID will encourage car pooling, van pooling, and use of buses for groups attending events at the Scout Camps, Sugarloaf Fine Arts Center, and the Retreat and Events Center. This may include but not be limited to, providing information on brochures and event applications on the air quality benefits of group transit alternatives. EID shall consult with the El Dorado AQMD for ideas on appropriate education measures.	Less than Significant

Component ID	Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>considered cumulatively significant by the El Dorado County Air Quality Management District (AQMD). As the projected increase in emissions is primarily because of use of group centers, mitigation is proposed to in the form of education to increase car pooling and use of buses for group events. Mitigation would reduce the cumulative impacts to less than significant.</p>		

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## LIST OF ACRONYMS AND ABBREVIATED TERMS

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The following is a list of acronyms and abbreviated terms used in this master environmental impact report (EIR).

<b>Acronym</b>	<b>Definition</b>
<b>AADT</b>	Annual Average Daily Traffic
<b>ACOE</b>	Army Corps of Engineers
<b>ADA</b>	Americans with Disabilities Act
<b>AQAP</b>	Sacramento Regional Ozone Air Quality Attainment Plan
<b>AST</b>	Aboveground Storage Tank
<b>BAT</b>	Best Available Technology
<b>bgs</b>	Below Ground Surface
<b>BMP</b>	Best Management Practices
<b>USBR</b>	U.S. Bureau of Reclamation
<b>Caltrans</b>	California Department of Transportation
<b>CARB</b>	California Air Resources Board
<b>CDF</b>	California Department of Forestry and Fire Protection
<b>CEQA</b>	California Environmental Quality Act
<b>CESA</b>	California Endangered Species Act
<b>CFR</b>	Code of Federal Regulations
<b>CGS</b>	California Geologic Survey
<b>CHP</b>	California Highway Patrol
<b>CNDDB</b>	California Natural Diversity Database
<b>CNPS</b>	California Native Plant Society
<b>CPRS</b>	California Parks and Recreation Society
<b>CTR</b>	California Toxics Rule
<b>CUPA</b>	Certified Unified Program Agency
<b>CWA</b>	Clean Water Act
<b>CWHR</b>	California Wildlife Habitat Relationships
<b>dB</b>	Decibel
<b>dBA</b>	A-Weighted Sound Levels
<b>DBH</b>	Diameter at Breast-Height
<b>DBW</b>	California Department of Boating and Waterways
<b>DG</b>	Decomposed Granite
<b>DHS</b>	California Department of Health Services
<b>DOT</b>	Department of Transportation
<b>EB</b>	Eastbound
<b>EDCFSC</b>	El Dorado County Fire Safe Council
<b>EDCOE</b>	El Dorado County Office of Education
<b>EID</b>	El Dorado Irrigation District
<b>EIR</b>	Environmental Impact Report
<b>EPA</b>	United States Environmental Protection Agency

<b>EPP</b>	Emergency Preparedness Plan
<b>ESA</b>	Phase I Environmental Site Assessment
<b>FEMA</b>	Federal Emergency Management Agency
<b>FESA</b>	Federal Endangered Species Act
<b>FMP</b>	Forest Management Plan
<b>FTE</b>	Full Time Equivalent
<b>GIS</b>	Geographic Information System
<b>HPMP</b>	Historic Properties Management Plan
<b>HSC</b>	California Health and Safety Code
<b>Hz</b>	Hertz
<b>LOS</b>	Level of Service
<b>LUST</b>	Leaking Underground Storage Tank
<b>MBTA</b>	Migratory Bird Treaty Act
<b>MCAB</b>	Mountain Counties Air Basin
<b>MOA</b>	Memorandum of Agreement
<b>MPN</b>	Most Probable Number
<b>msl</b>	Mean Sea Level
<b>NEPA</b>	National Environmental Policy Act
<b>NMFS</b>	National Marine Fisheries Service
<b>NPDES</b>	National Pollution Discharge Elimination System
<b>NRPA</b>	National Recreation and Parks Association
<b>NTMP</b>	Non-Industrial Timber Management Plan
<b>NTR</b>	National Toxics Rule
<b>NTU</b>	Nephelometric Turbidity Unit
<b>OES</b>	Office of Emergency Services
<b>OHWM</b>	Ordinary High Water Mark
<b>OSHA</b>	Occupational and Safety Health Administration
<b>PG&amp;E</b>	Pacific Gas and Electric
<b>PRAC</b>	Park Rangers Association of California
<b>PTEIR</b>	Programmatic Timberland EIR
<b>REC</b>	Recognized Environmental Condition
<b>RPF</b>	Registered Professional Forester
<b>RSS</b>	Reservation System Software
<b>RV</b>	Recreational Vehicle
<b>RWQCB</b>	Regional Water Quality Control Board
<b>SHPO</b>	State Historic Preservation Office
<b>SMUD</b>	Sacramento Metropolitan Utilities District
<b>SNFP</b>	Sierra Nevada Forest Plan
<b>SPI</b>	Sierra Pacific Industries
<b>SPRA</b>	Sly Park Recreation Area
<b>SSF</b>	Sugarloaf Station Foundation
<b>SWMP</b>	Stormwater Management Plan
<b>SWPPP</b>	Storm Water Pollution Prevention Plan
<b>SWRCB</b>	State Water Resources Control Board
<b>TAC</b>	Toxic Air Contaminants
<b>THP</b>	Timber Harvest Plan

<b>TPZ</b>	Timberland Preserve Zone
<b>USFS</b>	United States Forest Service
<b>USFWS</b>	United States Fish and Wildlife Service
<b>UST</b>	Underground Storage Tank
<b>WB</b>	Westbound
<b>WDFW</b>	Washington Department of Fish and Wildlife
<b>WDRs</b>	Waste Discharge Requirements
<b>WWTP</b>	Wastewater Treatment Plant

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# 1.0 INTRODUCTION

This document is a Draft Master Environmental Impact Report (EIR) analyzing the potential effects of implementing the Sly Park Recreation Area (SPRA) Master Plan and its individual components proposed by the El Dorado Irrigation District (EID). The Master Plan includes environmental and public service improvements designed to enhance natural resources within SPRA, as well as to increase recreational opportunities. As discussed below under the project background and need, degraded environmental and facility conditions within the Park resulting from financial constraints, combined with the recent transfer of ownership of SPRA to EID have necessitated the development of a long-term planning and management strategy to ensure the sustainability of natural resources within the region for continued public enjoyment and use.

As required by the California Environmental Quality Act of 1970 (CEQA) (Public Resources Code 21000 et seq.), this Draft Master EIR examines the individual and incremental impacts of implementation of the Master Plan and as well as potential contributions to regionally cumulative impacts. Mitigation measures have been identified to avoid or minimize impacts identified as potentially significant. Consistent with CEQA requirements, this Draft Master EIR also analyzes a range of feasible alternatives to the proposed Plan, including the No-project Alternative, required by CEQA. EID is Lead Agency for CEQA compliance related to the SPRA Master Plan.

## 1.1 Project Concept

The SPRA Master Plan establishes management guidelines and direction for future development of the recreational area located in mid-El Dorado County. The Master Plan strives to balance goals for recreation, and natural and cultural resource protection, including the desire to maintain the alpine character that defines much of the region.

The Master Plan establishes goals and objectives, area-wide design principles, for the 25 individual projects included within the Master Plan Program Elements. These would be developed in phases over the next 20 years.

The Master Plan includes several documents that have been prepared to guide future development and environmental protection/restoration of the Park. In combination with the Historic Properties Management Plan and Environmental Impact Report, the Master Plan provides fundamental planning guidance for development decisions and long-term management of the recreation area in a manner that would complement and preserve the Park's unique character.

To define the long-range planning strategy and articulate the vision for SPRA, the SPRA Master Plan establishes six goals. These goals are outlined below and are defined in Chapter 3 of this Draft Master EIR.

- 1.0 Protect and enhance Sly Park's natural resources, scenic quality, water quality, and historical and cultural resources.
- 2.0 Manage the development and operation of Sly Park within the limits of available of financial resources while seeking innovative approaches to provide additional revenues.

- 3.0 Protect the health, property, and safety of Park visitors, staff, and the surrounding community.
- 4.0 Explore a variety of environmentally and financially sustainable recreational facilities and programs to meet the diverse needs of District residents and other Park visitors.
- 5.0 Maintain and develop facilities in a manner consistent with available resources, the character of the affected recreation area, user needs, public safety, and Park resource protection.
- 6.0 Establish cooperative relationships between EID, other jurisdictions, and the public in providing recreational resources to the region and the local community.

## **1.2 Project Location and Background**

SPRA is located near Pollock Pines in El Dorado County, California (Figure 1-1 and Figure 1-2). The approximately 1,660 acre SPRA Master Plan area is located in the central portion of El Dorado County in Township 10 North, Range 13 East, and Sections 3, 8, 9 of the Mount Diablo Base & Meridian, and can be located on the U.S. Geological Survey (USGS) 7.5-minute series Sly Park quadrangle. SPRA ranges in elevation from approximately 3,500 to 3,800 feet. The project area can be accessed by U.S. Highway 50, Sly Park Road, and Mormon Emigrant Trail.

Jenkinson Lake was constructed as a unit of the Bureau of Reclamation's (Bureau's) vast Central Valley Project authorized by Public Law 356, enacted by Congress in 1949. Construction of the reservoir was completed in 1955, and responsibility for operations and maintenance was transferred to EID under a contractual agreement between the Bureau and EID. The reservoir was constructed primarily for irrigation and domestic, municipal, and industrial water supply purposes. Originally, management of the recreation resources was undertaken by the County of El Dorado (County), but in 1969 EID assumed responsibility for operations and maintenance of the recreation area.

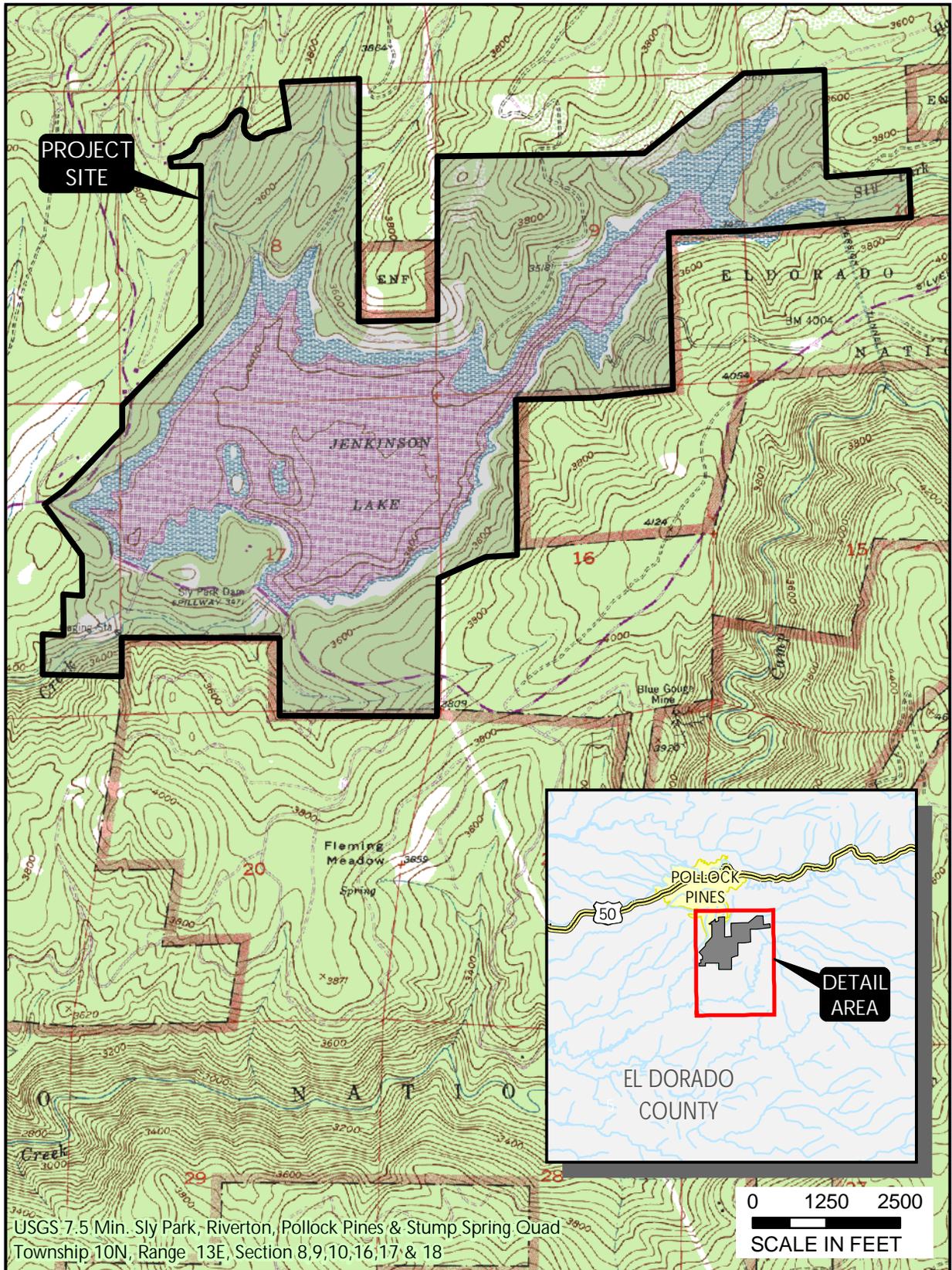
In accordance with Bureau policy, a General Recreation Development Plan was prepared for Jenkinson Lake in 1969 and updated in 1976. Even in 1976, it was noted that the reservoir had been a popular recreation area for 20 years because of its high water quality and diversity of recreational opportunities, including camping, hiking, swimming, boating, fishing, and water skiing. It should also be noted that recreation use has continually been high, frequently attaining maximum levels during the summer months, primarily on weekends. Between 1962 and 1974, annual attendance increased from 68,000 to 130,796.

Development within SPRA has been, and will continue to be, limited by the small size of Jenkinson Lake and the limited amount of moderately level campsites. The 1976 General Recreation Development Plan indicated that the size and slope limitations coupled with the highly erosive soils would be a constraint to extensive additional development of camping areas and access roads. In the 1976 Plan, the Bureau determined that previous development plans proposed a level of development considered to be excessively high and beyond the optimum capacity of the area. As a result, a policy was established to guide development and operations stating that recreation facilities at SPRA should be developed (and redeveloped) in a manner that



REGIONAL MAP





PROJECT SITE AND VICINITY



satisfied user-demands, while preserving the naturalistic environment and protecting existing resources.

Objectives in the 1976 Plan were developed to serve as a "yardstick" to measure and evaluate future developmental and operations planning alternatives, including recommending:

- Additional developments should be designed and located to minimize additional surface water use and demand.
- Improvements to the existing access and interior traffic circulation systems should be made to improve safety and reduce soil erosion and compaction.
- Additional development should be directed toward facilities that would reduce overcrowding or competition for use of existing facilities.
- Development along the south shore should be held to a minimum to preserve its scenic value.
- Consideration should be given to the development of an equestrian facility to provide Park users with an alternative to water-oriented activities.
- Interpretive programs should be established including self-guided nature trails and the development of a visitor center.
- Development of several small shower and washroom facilities located to serve the various camping areas (as opposed to one large unit).
- That existing programs for the redistribution of camping facilities, and soil and moisture conservation be continued.

As specified in the 1976 Plan, specific measures had been implemented to reduce soil erosion and compaction due to the high erosion potential of the soils found at SPRA. At that time, EID had been participating with the Bureau in a soil and moisture conservation program. The program consisted of spreading wood chips in camping areas and high "wear" foot traffic areas, stabilization of all road cuts and active erosion areas, construction of adequate ditching and culverts on all roads to handle stormwater runoff, providing paved parking areas for vehicle parking, the redesign of camping areas to reduce the concentration of sites to reduce soil compaction, and directing use of established trails by signs and barricades. It was recommended that these programs continue as an ongoing management practice to preserve the soil integrity. However, many of these practices were suspended before the current management working at SPRA, because of a lack of funding.

### **1.2.1 Transfer of Ownership**

Ownership of the Sly Park Unit of the Central Valley Project was transferred to EID from the Bureau on October 13, 2003, returning responsibility and control to the local land use authority. The transfer of ownership included the water rights as well as real property and associated

structures and appurtenant facilities, as authorized under the American River Act of October 14, 1949 (63 Stat. 583). Individual components of the Sly Park Unit include:

- The Sly Park Dam;
- Jenkinson Lake;
- Camp Creek Diversion Dam and Tunnel;
- Water conveyance pipeline from Jenkinson Lake to a holding reservoir and treatment plant two miles west of the Lake; and
- Treated water conveyance and distribution system to EID customers.

EID has managed the recreational use of the project area since 1969. However, several special use permits issued in 1955 by the U.S. Forest Service (USFS) for the encroachment of, and access to, various Sly Park Unit features and facilities remain in effect. Historically these special use permits have been issued to the Bureau and have only authorized the use of USFS lands for the operation and maintenance of existing Unit facilities. However, the transfer of ownership to EID would include new special use permits issued by the USFS to EID.

A joint CEQA/National Environmental Policy Act (NEPA) document was prepared on behalf of the Central California Area Office of the Bureau and EID for the transfer of ownership for the lands within the Sly Park Unit. Specifically, an Environmental Assessment and Initial Study/Mitigated Negative Declaration were prepared.

### **1.2.2 SPRA Master Planning Process**

The successful development, redevelopment, maintenance, and management of SPRA facilities depend heavily on how well the Master Plan reflects the needs and values of the local communities and user groups. For that reason, the public has had several opportunities to participate in a creative and interactive process during the preparation of the Master Plan, including four public workshops and a participatory design session or charette.

Two sets of workshops were held in both Pollock Pines and Shingle Springs to maximize the opportunity for public participation. The first two meetings involved a presentation to the audience of the overall project including the purpose, tasks, and schedule. The audience was then invited to prioritize the reasons they visit the Park to gauge the quality of the experience they were looking for. The latter two meetings focused on plan goals and objectives and solicited further input from the public on issues and opportunities they wanted to see addressed in the Master Plan. Additionally, stakeholder interviews and numerous meetings with EID staff were held during preparation of the Master Plan.

## 1.3 Purpose and Need for Project

### 1.3.1 Purpose of Project

The transfer of SPRA from the U.S. Bureau of Reclamation to EID in 2003 has created the impetus to master plan SPRA. The Secretary of the Interior was directed by Congress to convey all right, title and interest in and to SPRA to EID as stated in Section 212 of Appendix B, Title II of Public Law 106-377 (EID, September 2003). Master planning is an important method by which to evaluate parks and their futures, to involve the public in the decision-making process, and identify projects for future funding. Such a plan is necessary to serve as a basis for evaluating the land use or environmental implications of current and other foreseeable projects proposed for SPRA. The pre-existing Sly Park Updated General Recreation Development Plan prepared by the Bureau in 1976 is no longer a useful master planning tool because of its age and the recent land transfer from the Bureau to EID. The development of a current master plan would be consistent with EID's Mission Statement goals of protecting the natural environment and ensuring opportunities for quality recreation. Therefore, the SPRA Master Plan has been proposed to develop goals and objectives that would better assist EID in providing recreational opportunities while protecting the natural, physical and social environment of SPRA.

### 1.3.2 Need for Project

Since 1993, SPRA attendance increased through 2001, when attendance declined to 175,246 annual visitors, as shown in Table 1-1.

**Table 1-1 — Sly Park Recreation Area Ten-Year Attendance**

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
176,185	67,391	165,110	174,257	194,739	174,006	186,057	196,713	218,736	174,952	175,246

Source: El Dorado Irrigation District 2003.

As shown in Table 1-2, weekend day use dominates SPRA attendance, with a total of approximately 751,936 visitors between 1993 and 2003. Weekend campers between this period totaled 691,120, and weekend group area attendance was approximately 144,246. Boater usage totaled approximately 125,752 during the same timeframe. Campers stay an average of two nights per visit. Group area usage is dominated by Churches, followed by friends and families, multi-use groups, and weddings.

**Table 1-2 — Sly Park Recreation Area Usage  
between 1993 and 2003**

<b>Use Type</b>	<b>Total Number of Visitors 1993-2003</b>	<b>Weekday Visitors</b>	<b>Weekend Visitors</b>
Day Use	835,484	83,548	751,936
Camping	767,911	76,791	691,120
Group Areas	160,273	16,027	144,246
Boating	139,724	13,972	125,752

Source: El Dorado Irrigation District 2003.

Although SPRA usage has shown a slight decline in recent years, it is anticipated that future attendance will return to approximately pre-2002 levels. The drop in attendance in 2002 is likely attributed to the 9-11 disaster in 2001. It is believed that recreational travel was temporarily affected by this incident, thus reducing the number of annual visitors to SPRA. In addition, there is a latent demand for group camping facilities at SPRA. The proposed SPRA Master Plan proposes facilities that would accommodate some of the latent demand.

The SPRA Master Plan also provides a vision which balances multiple recreation and resource values that are sometimes in conflict. These include the following:

- Preservation of water quality;
- Opportunities to enhance quality recreation;
- Revenue generation;
- Working within fiscal constraints;
- Managing operation and maintenance practices and costs;
- Mitigation to reduce user conflicts;
- Improving public safety;
- Protection of cultural and historical resources;
- Protection and enhancement of natural resources;
- Working within environmental constraints; and
- Maintaining private property rights.

The process for developing this Master Plan was designed to concurrently address these objectives while engaging the public, building consensus among the diverse park visitor groups, and integrating environmental considerations.

## **1.4 Master Environmental Impact Report**

This Draft Master EIR has been prepared in compliance with CEQA, as amended (Public Resources Code Section 21000, et seq.) and the procedures for the implementation of CEQA set forth in the Guidelines for Implementation of the CEQA, 14 California Code of Regulations (CCR) Section 15000 et seq. to address the effects associated with the proposed Sly Park Recreation Area (SPRA) Master Plan.

The Master EIR is considered a type of first-tier document that may be prepared for Specific Plans and projects consisting of smaller individual projects to be implemented in phases, regulations to be implemented by subsequent projects, etc. Conversely, a Project EIR examines the environmental impacts of a specific project focusing on changes in the environment that would result from the development of the project. The Master EIR is intended to streamline the later environmental review of projects or approval included within the project, plan or program analyzed in the Draft Master EIR. Accordingly, a Master EIR shall, to the greatest extent feasible, evaluate the cumulative impacts, growth inducing impacts, and irreversible significant effects on the environment of subsequent projects within its scope. The Master EIR must also preliminarily describe potential impacts of anticipated subsequent projects for which insufficient information is available to support a full impact assessment. Information required about subsequent projects includes size, location, intensity, and scheduling.

An Initial Study shall be prepared to determine whether a subsequent SPRA Master Plan project and its significant environmental effects were addressed in the Master EIR. If it is determined that the subsequent project would have no additional effect on the environment, and that no new mitigation measures or alternatives would be required, EID would then prepare a written finding to that effect without preparing a new environmental document or any further CEQA findings (CEQA Guidelines Sec. 15177). Responsible Agencies would also be required to conduct a subsequent CEQA process where appropriate.

## **1.5 Interagency Coordination**

Public agencies are authorized by law to comment on other agencies' environmental documents as provided for in the Public Resource Code Section 21104 (CEQA Guidelines section 15044). Responsible agencies and other agencies with jurisdiction by law over natural resources must provide the lead agency with detailed performance standards for mitigation measures during the public review period of the Draft Master EIR.

### **1.5.1 Lead Agency**

The El Dorado Irrigation District (EID) is the Lead Agency for the purposes of preparing this Draft Master EIR under Section 15051 of the State CEQA Guidelines. The "Lead Agency" is a title referencing the public agency which has principal responsibility for carrying out or approving a project. The Lead Agency is also responsible for determining the level of environmental analysis required for individual projects under CEQA.

### **1.5.2 Responsible Agencies**

A "Responsible Agency" refers to a public agency which proposes to carry out or approve a project for which the Lead Agency is preparing or has prepared an EIR or negative declaration. With regards to CEQA, a Responsible Agency refers to all public agencies other than the lead agency that have discretionary approval power over the project. For the purposes of this Draft Master EIR, the County, California Department of Parks and Recreation (CDPR), California Department of Boating and Waterways (CBW), and the California Department of Forestry and Fire Protection (CDF) are Responsible Agencies. The CDPR and the CBW has discretionary authority over two grants for two facilities proposed under the SPRA Master Plan. These two projects include the Bumpy Meadows Trailhead and Day Use Area, and the new Marina parking

lot. EID has been very successful in past years in securing grant funding for a wide variety of improvements at SPRA.

The County has discretionary authority over issuance of all Special Use Permits and a General Plan Amendment associated with the proposed SPRA Master Plan. The County noted the need for a General Plan Amendment in response to the Notice of Preparation (Appendix A) circulated in October 2004.

Forest management within SPRA may include timber management practices necessitating that EID prepare a Timber Harvest Plan (THP) associated with the Forest Management Plan (FMP). CDF has discretionary authority over THPs.

### **1.5.3 Trustee Agencies**

The California Department of Fish and Game (CDFG) and Regional Water Quality Control Board (RWQCB) are examples of trustee agencies over the project. CDFG is the principal state department responsible for protecting, conserving, and perpetuating native fish, plants, and wildlife in California. It does this using a number of tools, one of which is the environmental review of proposed projects under the CEQA. The role of the trustee agency is to protect the natural resources affected by a proposed development project. Under CEQA, CDFG is the trustee agency for fish and wildlife, as well as for designated rare and endangered native plants of the state. CDFG also issues Streambed Alteration Agreements under Section 1600 of the California Fish and Game Code. CEQA compliance (i.e., Notice of Determination) is required before the issuance of the agreement. In the event that a Clean Water Act (CWA) Section 404 Permit is required from the U.S. Army Corps of Engineers (Corps), a CWA Section 401 Water Quality Certification would be required from the RWQCB. The RWQCB would also require compliance with CEQA before the issuance of the Certification. Section 4.7 of this Draft Master EIR discusses these regulatory requirements in greater detail.

## **1.6 Purpose and Intended Uses of the Master EIR**

EID determined that the preparation of an EIR would be required to fulfill the requirements of CEQA. EID determined that the proposed SPRA Master Plan could result in a significant effect on the environment (e.g., visual resources, biological resources, etc.).

The purpose of the Draft Master EIR is to inform the public agency decision makers and the general public about the proposed project and its significant environmental effects (e.g., visual resources, biological resources, etc.), possible ways to minimize or avoid those significant effects, and to describe reasonable alternatives. The Draft Master EIR will be subject to a 45-day public review period. Written comments provided by the general public and public agencies will be evaluated, and written responses will be prepared for all comments received during the designated comment period. Upon completion of the evaluation, a Final Master EIR will be prepared and provided to the EID Board for certification of compliance with CEQA and for review and consideration as part of the decision making process for the proposed project.

An additional purpose of the Draft Master EIR is to provide the County with sufficient environmental analysis for the issuance of the required Special Use Permit (SUP) and to approve the requested General Plan Amendment. However, the issuance of a SUP or General Plan

Amendment is not required for approval of the SPRA Master Plan. These County discretionary actions are only required for implementation of specific components identified in the Master Plan.

The Draft Master EIR will also be used to fulfill the requirements of CEQA for two responsible agencies, the CBW and CDPR. These agencies have discretionary authority over two facilities proposed under the SPRA Master Plan and will require CEQA compliance for the issuance of two individual grants intended to fund those facilities.

## 1.7 Scope, Organization and Content of the Master EIR

For purposes of function and clarity, this Draft Master EIR has been divided into the following sections:

- **Executive Summary:** provides a brief overview of the proposed project, the environmental analysis of the proposed project, and a summary of the alternatives considered.
- **Chapter 1.0, Introduction:** provides information related to the history of the proposed project; purpose and need for the proposed project; project objectives; purpose and intended uses of the Draft Master EIR, scope, and the organization and content of the Draft Master EIR.
- **Chapter 2.0, Environmental Setting:** provides a description of the physical environmental conditions in the vicinity of the project as they existed at the time the Notice of Preparation (NOP) was published from both a local and regional perspective. The environmental setting provides baseline physical conditions by which EID will determine whether a project impact is significant.
- **Chapter 3.0, Project Description:** provides a precise location and boundaries of the proposed project; a general description of the project's technical, economic, and environmental characteristics, including principal design considerations and intended uses of the Draft Master EIR.
- **Chapter 4.0, Environmental Analysis:** describes the potential for the proposed project to result in significant impacts. This portion of the Draft Master EIR is organized in accordance with the applicable environmental resources. As described in the Initial Study dated September 30, 2004, the proposed project is not expected to result in significant impacts on population and housing, nor energy and mineral resources. The balance of the environmental evaluation in the Draft Master EIR is directed at the potential for the proposed project to result in significant impacts to aesthetics, transportation/traffic, air quality, noise, biological resources, cultural resources, geology/soils, hazards and hazardous materials, hydrology/water quality, public services, recreation, and utilities/service systems. This assessment of impacts considers the regulatory framework, environmental baseline conditions at the time of publication of the NOP, thresholds for significance recommended by CEQA and other relevant statutes and regulations, and the potential to reduce or avoid significant impacts.

- **Chapter 5.0, Cumulative Impacts:** describes impacts that are created as a result of the combination of the project evaluated in the Draft Master EIR with other projects causing related impacts. The discussion will provide a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of EID. When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the discussion will briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the Draft Master EIR.
- **Chapter 6.0, Other Discussions Required by CEQA:** provides a discussion of effects found not to be significant for agriculture, land use, population and housing, and energy and mineral resources. A discussion of significant environmental effects which cannot be avoided if the project is implemented will also be included in addition to a discussion of any irreversible or irretrievable commitments of resources that would be involved in the proposed project if implemented, as well as growth inducing impacts.
- **Chapter 7.0, Alternatives to the Proposed Project:** describes a range of reasonable alternatives to the proposed project, or to the location of the project, which would attain most of the basic objectives but would avoid or substantially reduce any of the significant effects of the project, including a "no project" alternative. Although not capable of meeting most of the basic objectives of the proposed project, the no project alternative was analyzed in accordance with the requirements of CEQA. The anticipated environmental effects of the alternatives are compared to those analyzed for the proposed project in Chapter 4.0 of the Draft Master EIR.
- **Chapter 8.0, References:** lists all sources used in the preparation of this Draft Master EIR.
- **Chapter 9.0, List of Preparers:** lists the persons, firm, or agency who prepared the Draft Master EIR by contract or other authorization.
- **Chapter 10.0, Organizations and Agencies Contacted:** identifies all federal, state, or local agencies, other organizations, and private individuals consulted in the preparation of the Draft Master EIR.

## **2.0 ENVIRONMENTAL SETTING**

### **2.1 Regional Setting**

El Dorado County encompasses thousands of acres of forest, with the Eldorado National Forest and Tahoe National Forest making up more than 50 percent of the county. In addition, three County regional parks are located within the Sierra Nevada. Much of SPRA is located adjacent to forest properties owned publicly by the USFS and privately by Sierra Pacific Industries (SPI). However, numerous private residences are located to the west and northwest of SPRA. The USFS properties provide a large network of open space on the west slope of the Sierra Nevada in El Dorado County.

A rural population of approximately 5,000 residents resides in the Pollock Pines area distributed over an area of approximately 5.8 square miles. The City of Placerville, with a population of approximately 10,200, is approximately 17 miles from SPRA, adjacent to U.S. Highway 50 and Sly Park Road.

### **2.2 Physical Characteristics**

#### **2.2.1 Existing Facilities**

##### **2.2.1.1 Campgrounds**

A variety of family and group camping opportunities are provided throughout SPRA. All campgrounds are equipped with waterless restrooms and potable water spigots; however, no showers are available within the recreation area.

##### **Family Campgrounds**

There are currently eight family campgrounds that serve families, individuals, or small parties located along the north shore offering from four to 55 sites each for a total of 164 available by reservation (Figure 2-1). Given a maximum capacity of eight people per site, the total number of campers can peak at 1,350 (see Table 2-1).

The following generalizations apply to a large majority of campsites:

- Sited on gradients ranging from eight to 20 percent.
- Furnished with a picnic table, campfire ring and barbecue.
- Parking for one to two vehicles.
- Partially to completely shaded by the forest canopy.
- No designated parking area.
- No designated tent sites.
- No definition of campsite area.

Intensified by the sheer proximity of campers to one another, a lack of privacy has resulted in user conflicts. User conflicts are not uncommon and are certainly more frequent when the SPRA is at capacity on summer weekends.

**Table 2-1 — Family Campground Capacities**

<b>Campgrounds</b>	<b>Total Campsites</b>	<b>Maximum Campers</b>
Pine Cone Camp	38	312
Jenkinson Camp	11	88
Sierra Camp	55	440
Stonebraker Camp	4	32
Hilltop Camp	23	184
Chimney Camp	9	72
Hazel Creek Camp	19	152
Dogwood Campground	5	70
Total	164	1,350

Source: El Dorado Irrigation District, 2006

***Pine Cone Camp***

The Pine Cone campground consists of 38 total campsites distributed throughout two distinct areas. On the west side, 18 campsites are on a small, broad peninsula that extends approximately 300 feet out into the lake. Approximately one-third of the area consists of slopes between five and 10 percent; the remainder of the area is sloped at gradients ranging between 10 and 14 percent. Tree cover at the campground is dense but not solid.

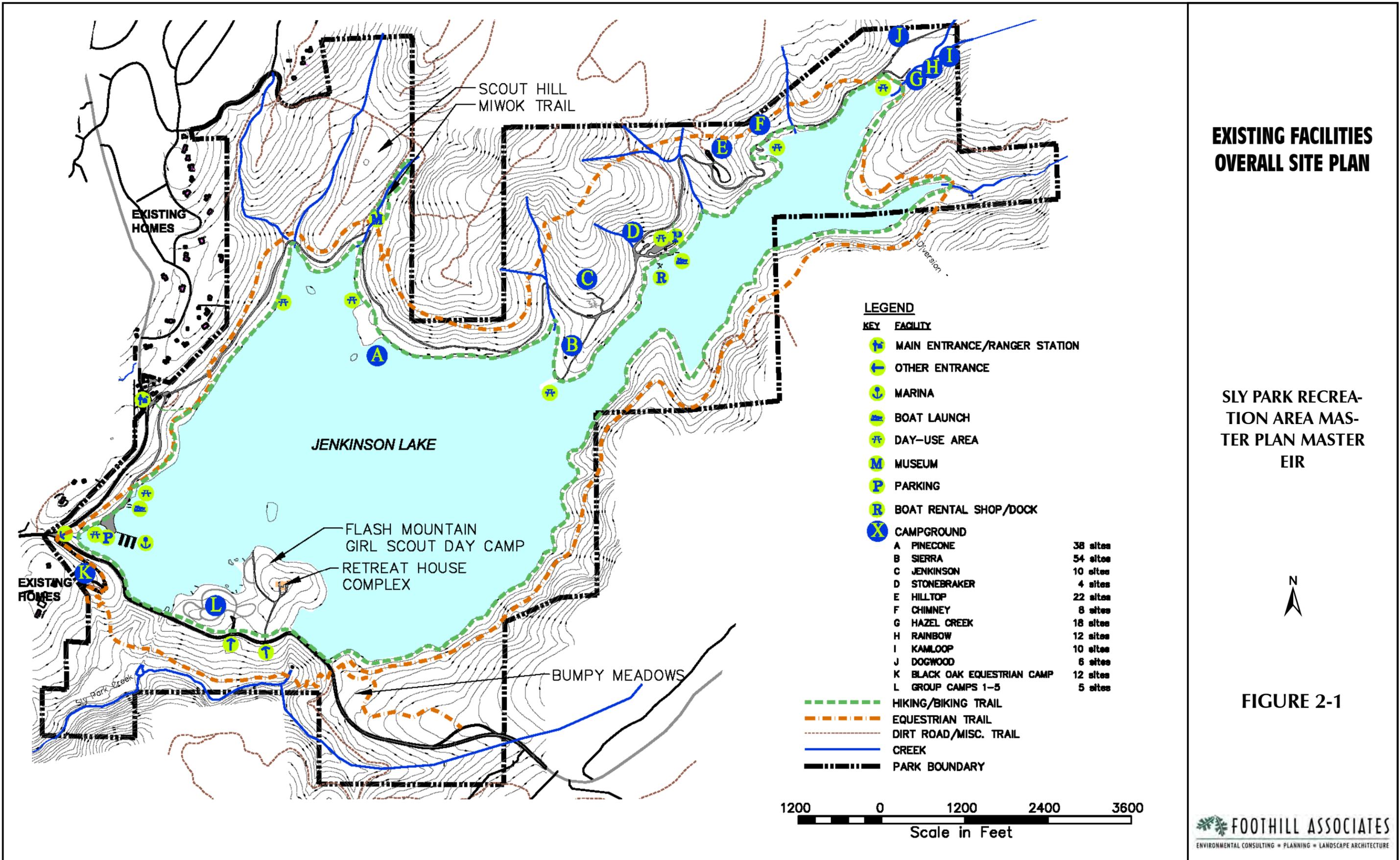
On the east side, a single-lane road runs along the top of the bank separating the remaining 20 campsites from the water’s edge. Seventeen of these campsites are located on grades ranging from 16.5 to 22 percent; the other three are on gradients of approximately 12 percent. These sites at Pine Cone Campground are heavily eroded and compacted because of the effects of intense camping, resulting in poor tree health.

***Jenkinson Camp***

The Jenkinson campground consists of 11 campsites at Jenkinson, most of which were constructed as handicap accessible sites using retaining walls to improve accessibility. This campground has not been affected by erosion and soil compaction because the retaining walls have functioned as barriers to define the campsites.

***Sierra Camp***

At Sierra Campground, there are a total of 55 campsites. The campground extends down a large peninsula from Lake Drive to Jenkinson Lake. A total of 36 campsites are along the ridge with gradients ranging between 11 and 17 percent.



**FIGURE 2-1**

An additional 14 sites are on the west side of the peninsula within proximity to the high-water line on slopes ranging from 18 to 28.5 percent. These sites are particularly degraded and the vegetation is trampled. Many sites have been developed by cutting into the slope without the support of retaining walls. Erosion at these sites is substantial because of the loss of vegetation from trampling. The remaining five sites are located up the grade near Lake Drive on a gradient of approximately 11 percent. The campground supports a substantial number of large trees. However, soil compaction and erosion has negatively affected the health of the on-site trees.

### ***Stonebraker Camp***

Stonebraker Campground consists of four campsites between Lake Drive and the boat trailer parking lot. Slopes associated with the lower two sites range from 10 to 12 percent, while the upper two sites range in gradient from 17 to 23 percent. Large trees shade the upper sites, but the lower two sites are much more exposed.

### ***Hilltop Camp***

The Hilltop Campground is on the north side of Lake Drive, approximately 100 feet above the high-water level. The campground consists of 23 campsites located around a single-lane figure-eight campground road with gradients ranging from five to 11 percent. Soil compaction and subsequent tree loss has resulted in substantial openings in the tree canopy. The camp sites located at the outer edges of the campground road provide views of the lake.

### ***Chimney Camp***

The Chimney Campground is similar in nature to the east end of the Pine Cone Campground, with the exception that the campsites are located adjacent to Lake Drive. Two of the sites are adjacent to each other on the lake side of the road on a gentle knoll that sits between two drainage swales. These two sites are private and have a view of the cove with the chimneys.

The remaining seven sites are upslope of Lake Drive across from the cove. Two sites contain slopes of approximately 20 percent, four are on a 14 to 16 percent slope, and the remaining site is on a slope of approximately nine percent. There are noticeable holes in the tree canopy, again resulting from tree loss due to soil compaction.

### ***Hazel Creek Camp***

There are 19 campsites provided at Hazel Creek Camp. Six of these sites back up to Hazel Creek, while the remaining sites are distributed throughout the campground along an unnamed single-lane access road. The gradient throughout the entire campground is approximately 2.5 percent.

### ***Dogwood Camp***

Dogwood Camp is located immediately across Lake Drive from Rainbow and Kamloop, and abuts lands owned by SPI. There are five designated campsites at this site, in which the average slope is approximately 9.5 percent. Two of the campsites are unique in that they are able to accommodate up to four vehicles with a maximum capacity of 20 people.

## **Group Campgrounds**

There are two major group campgrounds within SPRA (Figure 2-1). Two group campgrounds, Rainbow and Kamloop, are on the north shore at the east end of Lake Drive east of Hazel Creek Camp. Rainbow and Kamloop are primarily for youth groups. However, if these campgrounds are not reserved by youth groups, the spaces are released for other groups or individual use, especially on weekends and holidays. The tree canopy over the entire area is relatively dense and uniform. The group area most favored by Park users is on the peninsula between the First and Second Dam in the southwest area of SPRA (referred to as the Group Campground). Campsite capacities are reflected in Table 2-2.

**Table 2-2 — Group Campground Capacities**

<b>Main Group Campground</b>	<b>Maximum Campers</b>	<b>East-End Group Site</b>	<b>Maximum Campers</b>
#1	60	Rainbow	80
#2	100	Kamloop	60
#3	80	Subtotal	140
#4	50	Total Group Site Campground Capacities	530
#5	100		
Subtotal	390		

Source: El Dorado Irrigation District, 2006

### ***Rainbow Camp***

There are 17 designated campsites at this group campground located around a church-key shaped, single-lane road that comes off the south side of Lake Drive. The south edge of the campground road is only about 100 feet from the centerline of Hazel Creek though. All but two sites are sited on a gradient of approximately 5.5 percent.

### ***Kamloop Camp***

This campground is at the eastern edge of the recreation area, nearly at the end of Lake Drive. The configuration of this campground is almost identical to Rainbow Camp but with only 10 designated sites. The south edge of this campground road is only about 75 feet from the centerline of the creek, with two campsites located between the road and the creek. Gradients in this area range from approximately two percent in the vicinity of the creek to seven percent closer to the road.

### ***Group Campground***

There are five designated sites in this area varying in size and capacity, depending on the number of vehicles per group. These sites are in particularly high demand and are generally reserved a year in advance for annual gatherings and special events. These sites are furnished with a number of picnic tables that can be moved within the campsite, a large fire ring, and a pole light. Five floating docks can be used for unloading camping equipment and supplies from boats and for fishing and swimming activities. Site number five has use of two docks; Sites one and two each have use of two others; and Sites three and four share use of the fifth dock. Usage is allocated based on the proximity of the camp area to the dock.

Because of a greater density of users in a limited space, these group sites contribute significantly to high noise levels (and subsequently lead to conflicts between campers), and the greater number of campers has an increased level of impact on the site. As with the regular campsites, most of the group campsites lack clear definition (particularly with regard to circulation) and sense of privacy.

### **Black Oak Equestrian Campground**

The Black Oak Equestrian Campground is on a knoll off the south side of Mormon Emigrant Trail west of the First Dam. The entrance is at the corner of Mormon Emigrant Trail and Sly Park Road, making it somewhat difficult to find for first-time visitors. Although not visible from the campground, private, residential property with single-family homes abuts the SPRA boundary to the west.

The equestrian campground provides 13 undesignated campsites that can accommodate up to 100 people, depending on the size and number of vehicles brought in. The area has portable, metal-frame paddocks, restrooms, water spigots, and a common corral area. On the south side of the campground is a trailhead with signage, for easy access to equestrian trails at the recreation area to the east and north, and USFS trails to the south. As with other campgrounds, there is a lack of campsite definition and the soil is highly compacted.

#### **2.2.1.2 Scout Camps**

##### **'Flash Mountain' Girl Scout Day Camp**

The Girl Scout Day Camp is on the west side of the Mormon Emigrant Trail just north of the group campground and west of the Retreat House Complex occupying an area of approximately 1.65 acres. This area has been dedicated for use as a day camp by up to 200 Girl Scouts for a few weeks each summer. Although several leveled areas containing campfire rings are located throughout the campground, the Girl Scouts primarily use the existing picnic tables in the area for their activities. In addition, a small area behind the maintenance shed at the Retreat House Complex has been developed as an archery range.

On occasion, the area is used for overnight groups and can accommodate up to 60 campers. The Flash Mountain Girl Scout Day Camp site is steeper and more heavily forested than any of the other campgrounds. The campsites are very small and compact due to topographical constraints.

##### **Boy Scout Hill**

Although not formally developed, the Boy Scouts requested to relocate to this 11-acre campground from the east-end group campgrounds to provide greater separation from regular and group campgrounds. Development of this area was halted by EID pending completion and approval of the Master Plan. As a result, Boy Scout Hill lacks amenities such as potable water or toilets.

Hundreds of Boy Scouts converge on this site once or twice a year, primarily in summer, to attend regional Boy Scout Camporees. Access is from an existing gravel road that splits off of Lake Drive at the first hair-pin curve beyond the main day-use area. During Boy Scout Jamborees, parents drop scouts off at the bottom of the camping area and continue on the loop

road and out of the scout area by the Miwok Trail and Lake Drive. Traffic and congestion associated with the drop-offs only exacerbates traffic problems on Lake Drive.

### **2.2.1.3 Day-Use Areas**

Ten designated day-use areas along the west and north shores provide for lakeside recreation activities such as fishing, swimming, sun-bathing, and picnicking. Other available recreational activities include hiking, biking, and horseback riding.

#### **The “Main” Day Use Area**

The largest day-use area, referred to as the “main” day-use area, is along the west shore of Jenkinson Lake below Boy Scout Hill between the shore and Lake Drive. The north end of the day-use area is reservable for groups. There are a number of picnic tables and barbecues located along this linear area as well as waterless restrooms. An extensive tree canopy provides shade to the site throughout the day.

Parking and handicap accessibility are the biggest challenges for visitors. There is only limited parking on narrow shoulders of the narrow road. The gently sloped shoreline in this area serves as a beach for day users. Although there is evidence of erosion, it is not as severe as on the opposite side of the lake.

#### **Pine Cone Day-use Area**

The Pine Cone day-use area that is on the northwest side of Pine Cone Camp provides a limited number of picnic tables. Minimal parking is available for this area.

#### **Sierra Day-use Area**

This popular day-use area is sited on the peninsula that extends out into the Jenkinson Lake at the southern tip of Sierra Camp. An asphalt walkway lined with mature shade trees bisects the length of the peninsula. Although not in good health, these trees provide shade for a number of scattered picnic tables, benches, and barbecues.

Late in the summer, the lake level draws down to expose a somewhat sandy beach on the west shore of the day-use area, although visitors must negotiate over boulders to access the sandy beach area. These boulders were originally placed to stabilize the shore and minimize erosion. Although parking is limited, the area is nearly level. Waterless restrooms are available within the adjacent campground.

#### **Stonebraker Day-use Area**

A few oak-shaded picnic tables near the restroom building provide an overlook of the east end of the lake, where it is generally quieter than the main body of the lake because of speed restrictions for boats and other watercraft.

#### **Chimney Day-use Area**

Heading east on Lake Drive, the Chimney day-use area is near the Chimneys east of the Hilltop Campgrounds. This area is more beach-like than the other day-use areas previously described. Picnic tables and barbecues are placed informally throughout the area, some under a few larger trees for shade. Although a small designated day-use parking lot for this area is available, spaces

are not marked and its capacity is not sufficient to satisfy demand during peak use. Because of the parking shortage, day-use parking often overflows into neighboring campsites before the arrival of registered guests, resulting in occasional conflicts.

### **Day-Use Area Number 6**

This day-use area consists of a handful of picnic tables and grills on the lake-side of, and immediately adjacent to, Lake Drive, just before the Hazel Creek Camp and Day-use Area. This area is very narrow and heavily vegetated, but does afford users a nice view across the upper Hazel Creek end of the lake/meadow. Lake Drive is too narrow to safely provide for on-street parking in the vicinity of the day-use area.

### **Hazel Creek Day-use Area**

The last day-use area is along the lake shore near the mouth of Hazel Creek. A half-dozen picnic tables are disbursed throughout this area and are generally shaded by some of the larger trees in the meadow. A waterless restroom and water faucet is also provided for visitor convenience, but again, parking is minimal and not clearly designated.

### **The Marina Day-use Area**

Back on the west end of the lake, picnic tables and barbecues are scattered on the hillside between Jenkinson Lake and Marina Road. This area provides views of the Sierra Nevada mountain range. Parking for this area is available at the Marina parking lot.

### **The Lagoon Day-use Area**

Two picnic tables and barbecues are located in the southwest corner of the Marina parking lot at the foot of the hill below Sly Park Road. This is the only handicap-accessible day-use area at SPRA. However, this area has no canopy of shade trees to offer relief from the summer sun.

### **Undesignated Day-use Areas**

#### ***The Dams***

Day-use access occurs in the vicinity of both the First and the Second Dams. Access to SPRA at this location is primarily by local residents who generally park on the shoulders of Mormon Emigrant Trail, walk around the guard rails, and out onto the embankments to fish and/or picnic.

#### **2.2.1.4 Trails**

A well-used, multi-use trail system encircles the entirety of Jenkinson Lake as shown on Figure 2-1. With little exception, the lower trail that parallels the shore line is designated for pedestrians and bicyclists. A separate trail designated for equestrian use is located along the higher reaches. Although signage exists along the trail to provide directions for trail users, appropriate directional signage is missing in many areas. There are also instances of non-designated trails intersecting the designated trails, potentially confusing trail users.

Rest areas are more available for pedestrians and bicyclists on the north shore because of the trail's proximity to campgrounds and day-use areas. Two designated rest areas are provided on the south shore, each with a single bench.

An equestrian trail originating at the Black Oak Equestrian camp runs along the south shore of the lake above the pedestrian trail. Other than a few tie bars, facilities such as toilets, potable water, and water troughs (there is a trough-type structure high on the north shore placed to catch water from a spring) are not provided. Equestrians are prohibited from leading their horses to the water's edge, and therefore, have limited access to water along the trail.

The trail system provides connectivity to other trail systems, including those of the Eldorado National Forest, such as the Fleming Meadow Loop Trail, the Mormon Emigrant Trail, the Mormon-Carson National Historic Trail, and the Pony Express Trail.

### **Staging Areas**

Noticeably lacking is any designated trail staging areas indicative of trailheads or any place where visitors can get information about Park trails or trail linkages. A substantial number of trail users park their vehicles on the dirt shoulder of Mormon Emigrant Trail, especially east of the Second Dam.

The old scaling road off of Mormon Emigrant Trail provides access for many equestrian users to stage day rides, although there is no official designation of the area for equestrian uses. The area does not include improvements generally needed for equestrian use, such as water troughs and hitching posts.

#### **2.2.1.5 Structures**

As previously described, SPRA surrounds Jenkinson Lake, the primary attraction of the recreation area. The primary function of the reservoir is to provide water for a majority of El Dorado County residents. The lake is approximately 2.5 miles long and irregularly shaped, with a surface area of 645 acres (Figure 2-1). The reservoir has a capacity to store 41,000 acre-feet of water, and is contained by two large earth-filled dams, which also support access to the Mormon Emigrant Trail.

Within the Park, permanent structures exist in two locations: the headquarters compound at the main entrance and the Retreat House Complex on the peninsula between the two dams. The headquarters compound includes six total buildings. In addition to the 1,484 square foot Park headquarters office located on the north side of the entrance, there is a 1,971 square foot workshop in the maintenance yard, including three small storage sheds (approximately 800 total square feet). A carport for an RV used by one of the year-round camp hosts sits immediately behind the office building.

The Retreat House Complex dates from the completion of construction of the reservoir by the Bureau of Reclamation (circa 1955). The complex includes: a 1,316 square foot retreat house with a kitchen, fireplace, bathrooms, and a basement (currently used occasionally for informal EID staff meetings); a 484 square foot detached single-car garage; a 1,000 square foot storage shed with windows; and a 1,500 square foot prefabricated office building recently placed on site. The house is available for lease to community groups for events, meetings, retreats, and workshops. Another 1,700 square foot metal-sided building sited west of the prefabricated office building is currently used by maintenance personnel.

## **2.2.1.6 Utilities**

### **Water Service**

The existing Sly Park Campground Water System consists of varying sizes of small diameter pipes that run somewhat parallel with Lake Road on the north shore, two old buoys used as water tanks, and a small pump station. The existing system has very little overall capacity, with inadequate fire flow capacity; and has to be supplemented during the summer months by potable water trucks. However, EID is the recipient of a federal grant that will provide funding for the design and installation of a new water line along the north shore.

The new 10-inch and eight-inch polyvinyl chloride (PVC) pipe waterline would be installed primarily within the existing paved Lake Drive alignment, which runs adjacent to the north shoreline of Jenkinson Lake and through the Sly Park campgrounds. The project will provide for design and construction of an underground water pipeline to the existing SPRA campgrounds with fire flow pressure to five fire hydrants. The pipeline would have an overall length of approximately 17,000 feet and would terminate at the Hazel Creek Campground. This waterline will ultimately tie into a recently installed two-inch diameter waterline that provides water to the remaining campgrounds to the east, including Hazel, Rainbow, Kamloop and Dogwood.

Pipeline construction through the recreation area would primarily follow existing paved road alignments, but may deviate in a limited number of locations; none of which would cross streambeds (Quad Knopf, Inc. 2003).

An existing six-inch water line parallels the Mormon Emigrant Trail, providing a portion of the south shore with potable water. This line runs to the group campgrounds and up to the Retreat House Complex. Currently, there are no plans to upgrade or replace this line.

### **Electrical Service**

Electrical service is available at the SPRA headquarters area and Marina, where a service line comes in from Sly Park Road. Service to the Black Oak Equestrian Campground, the large group campgrounds (Sites 1-5), and the Retreat House Complex comes in from Mormon Emigrant Trail. The only campground with electrical service along Lake Drive is Sierra Camp, including the camp host. Electrical service provided by Pacific Gas and Electric (PG&E) is transmitted through overhead lines entering SPRA on the south side of the lake and spanning the narrows.

### **Wastewater Treatment**

The SPRA headquarters office and Retreat House Complex are on septic systems; the system at the Retreat House's complex has been replaced within the past six years. All other toilets in the Park have self-contained holding tanks that must be pumped on a regular basis.

### **Phone Service**

With the exception of phone service to the Park office, phone service is not available elsewhere in the Park. Reliable cell phone service depends on several factors, including the carrier, the model of phone, and the physical location within SPRA when attempting to place a call.

### **2.2.1.7 Park Information**

A number of kiosks featuring local information, Park rules, and displays on local wildlife and Miwok Indian culture are at the entrance and at other locations at the Park, particularly at campgrounds and most day-use areas.

### **2.2.1.8 Circulation and Parking**

#### **Main Entrance**

Unlike most large recreation areas, there is only one main entrance at SPRA where visitors can check in and get information. Lake Drive originates at the main Park entrance and provides access to SPRA's north shore area from Sly Park Road (Figure 2-1). The Sly Park Road/Lake Drive Intersection is a four-legged intersection controlled by stop signs on the east and west legs. The east leg of the intersection includes two inbound and two outbound lanes. The west leg of the intersection is a single-lane approach to a convenience market/gasoline station. Traffic back-ups occur on southbound Sly Park Road when more than a half-dozen visitors are waiting to check into SPRA, because no auxiliary turn lanes exist on Sly Park Road at the intersection.

A small registration booth, on an island that separates the two incoming and two outgoing lanes, is used for registering and collecting fees from campers, day users, and boaters. This entrance also includes an information kiosk with a recreation area map and Park rules posted. A dump station is located adjacent to the outgoing lanes just inside the entrance. Other elements at the Park entrance include a weathered lapstrake rowboat serving as a historic monument, an access drive to the Park office and maintenance yard north of the Park entrance, and several free parking spaces on the south side of the entrance before the fee booth.

#### **Other Entrances**

Facilities on the south side of the lake are accessed from Mormon Emigrant Trail, including the Black Oak Equestrian Campground, the Group Campgrounds, Flash Mountain Girl Scout Day Camp area, and the Retreat House Complex. Visitors using those facilities must enter through the main entrance to access the area where they plan to camp, often resulting in inconvenience and confusion to visitors. Additionally, the entrances to these facilities are not well signed or marked, making it confusing for new visitors to the area to find the location they are looking for. The entrance to group campsite five at the group campgrounds is separate from the entrance for sites one through four. The entrance for site five is also the same used for access to Flash Mountain and the Retreat House complex. Although there is a loosely defined drop-off area that the Girl Scouts are supposed to use, the amount of traffic at drop-off and pick-up times results in congestion on Mormon Emigrant Trail, sometimes resulting in conflicts with visitors trying to access the group campsite.

#### **Internal Roads**

The circulation system serving SPRA comprises roads that fall into one of three general classifications. Major Access Roads link the Park with Sly Park Road and are intended to provide the capacity to accommodate peak traffic flows near the main gate. Collector Roads link the regional circulation system with the primary recreation area attractions, such as boat ramps, campgrounds, day-use areas, and trailheads. Campground Access Roads are paved roads that provide access to day-use areas within campgrounds, as well as to individual campsites.

## **Parking**

Because most visitors travel to and from SPRA by automobile, the availability of parking is an important issue to campers and day users alike. The parking spaces available throughout SPRA take several forms:

### ***Designated Parking Areas Near Boat Launching Areas***

These paved areas are intended to provide spaces for vehicle/trailer combinations as well as individual automobiles and boat trailers. The spaces in these areas are individually striped for both pull-in and drive-through use.

The Marina parking lot can accommodate 18 vehicles (one handicap accessible) and 33 vehicles with trailers (two are handicap accessible).

The boat parking lot at the Stonebraker boat launch ramp can accommodate 13 vehicles (one handicap) and 21 vehicles with trailers (one for handicap).

### ***Designated Parking Areas Near Group Day-Use Facilities Along Lake Drive***

In some locations, Lake Drive has been widened to provide on-street parking for day-use activities. This is the case immediately north of the Marina area, in the main day-use area east of the main entrance, and the Chimney day-use area. While the road has been widened in these areas, individual parking spaces have not been striped.

### ***Unimproved Day-Use Parking Areas***

Some parking is available for the day-use areas at Sierra Camp and Hazel Creek. However, these parking areas are not paved and are difficult to distinguish from the areas that are allocated to adjoining camping sites.

### ***Unimproved Campsite Parking***

Each campsite is intended to provide space for vehicles to park, and the number of spaces that each site occupant may use is restricted. However, these spaces are not paved and it is often difficult to distinguish the limits of the parking area allocated to each campsite.

### ***Roadside Parking***

The only parking along Sly Park Road consists of four parking spaces at the main entrance. These are often used by day-users who do not want to pay the day-use fee and who are willing to walk to the lake. Shoulder parking is prohibited along Sly Park Road.

Currently, many visitors will park on dirt shoulders along Mormon Emigrant Trail, particularly near the two dams to go fishing, hiking, or trail bike riding. These shoulders range from barely minimal to somewhat adequate; however, EID and USFS staff view this as a very hazardous practice because of the speeds at which heavy lumber trucks regularly travel on this road.

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## 3.0 PROJECT DESCRIPTION

The SPRA Master Plan establishes management guidelines and direction for future development of the existing recreational area located in mid-El Dorado County. The master plan strives to balance goals for recreation, and natural and cultural resource protection, including a desire to maintain the alpine character that defines much of the region.

The Master Plan establishes goals and objectives, and area-wide design principles, for the 25 individual projects included within the Master Plan Program Elements. These would be developed in phases over the next 20 years.

The Master Plan includes several documents that have been prepared to guide future development and environmental protection/restoration of the park. In combination with the Historic Properties Management Plan and Environmental Impact Report, the Master Plan provides fundamental planning guidance for development decisions and long-term management of the recreation area in a manner that will complement and preserve the park's unique character.

### 3.1 Sly Park Recreation Area Master Plan Goals and Objectives

To define the long-range planning strategy and articulate the vision for SPRA, the SPRA Master Plan establishes six goals:

- Resource Protection and Enhancement
- Fiscal Responsibility
- Public Safety
- Recreational Uses
- Facilities Management
- Community Participation

The following objectives have been identified to implement and support the six goals defined by the SPRA Master Plan:

**Goal: 1.0 Protect and enhance Sly Park's natural resources, scenic quality, water quality, and historical and cultural resources.**

#### **Objectives:**

- 1.1. Protect natural elements, including wildlife and aquatic habitats, forest, perennial and intermittent streams, riparian vegetation, wildlife, shoreline, and water quality through appropriate site design and development.
- 1.2. Cooperate with other public and private entities in the development of natural resource areas.
- 1.3. Restore degraded habitats and manage recreation use to limit adverse impacts.

- 1.4. Include habitat quality as a consideration in developing timber management strategies.
- 1.5. Consider the visual impact of park facilities and structures for proposed development and redevelopment projects.
- 1.6. Identify, assess, and use innovative conservation practices and technologies where and when appropriate.
- 1.7. Reduce erosion through the implementation of Best Management Practices (BMPs) throughout the park.
- 1.8. Reduce potential contamination of lake water by human and animal wastes by limiting pet and infant access to the water.
- 1.9. Use signage and effective public information strategies to educate the public on the impacts of waste on water quality, and to encourage pet owner responsibility for appropriate waste disposal.
- 1.10. Improve and stabilize shoreline trails to reduce and prevent erosion.
- 1.11. Preserve, restore, or re-create, where appropriate, significant historical resources.
- 1.12. Develop a Visitor Center/museum facility at the park entrance with maps, information, and interpretive displays to educate the public about the sensitivity of Park resources and to increase interest in stewardship.

**Goal: 2.0 Manage the development and operation of Sly Park within the limits of available of financial resources while seeking innovative approaches to provide additional revenues.**

**Objectives:**

- 2.1 Coordinate staffing, acquisitions, development, and redevelopment with available funding programs.
- 2.2 Maintain existing and identify new opportunities for fee-based recreational programs and facilities that are substantially self-sustaining, such as conference facility rentals, cabin rentals, boat rentals, slip rentals, concessions, and timber sales.
- 2.3 Identify ways to increase revenues from existing park uses such as collecting lost day use fees by adding pay boxes to trailheads and equestrian staging areas outside the park entrance.
- 2.4 Actively identify and pursue federal, state, local, and private foundation grants.
- 2.5 Identify opportunities for businesses, organizations, and individuals to sponsor park programs and facilities through financial contributions.
- 2.6 Consider holding revenue generating events such as concerts, fishing tournaments, cycling/running events, and catamaran regattas when such activities do not compromise park resources or adversely affect adjacent property owners.

- 2.7 Establish a non-profit organization to secure donations and contributions that may be used for facility acquisition, development, and redevelopment (i.e., Friends of Sly Park Recreation Area).
- 2.8 Encourage opportunities for year-round use that provide additional revenue-generating opportunities. Actively target and market these opportunities.

**Goal: 3.0 Protect the health, property, and safety of park visitors, staff, and the surrounding community.**

**Objectives:**

- 3.1 Design and manage the park to permit safe public access to designated areas and to discourage access in areas that present excessive risk or a potential for adverse impacts on park resources.
- 3.2 Identify and implement emergency ingress and egress routes to allow visitor evacuation and access for emergency response units.
- 3.3 Educate Park visitors on how to safely enjoy the park and its resources through signage and other public outreach methods.
- 3.4 Provide adequate staffing to maintain facilities in good working order to protect public safety and to ensure their durability and longevity.
- 3.5 Provide adequate restroom facilities and trash pickup to meet the level of park use.
- 3.6 Develop agreements with local law enforcement agencies to provide regular patrols of key park areas and timely response to service requests.
- 3.7 Provide the level of park ranger presence needed to ensure adequate public service, safety, and enforcement of existing ordinances and rules.
- 3.8 Designate a variety of access routes to safely meet the pedestrian, bicycle, equestrian, and vehicular needs of Park visitors and reduce conflicts. Clearly map and mark the location of these routes with signage.
- 3.9 Improve telecommunications within the park.
- 3.10 Include assessment of fire risk as a consideration in timber management strategies.
- 3.11 Manage parking throughout the park to improve traffic and public safety and reduce potential for crime.
- 3.12 Reduce vandalism and destruction at park and recreation facilities through appropriate design, rapid repair response, and a citizen awareness and partnership program (i.e. “adopt-a-park”).

**Goal: 4.0 Explore a variety of environmentally and financially sustainable recreational facilities and programs to meet the diverse needs of District residents and other park visitors.**

**Objectives:**

- 4.1 Determine the sustainable level of recreational facility development and use, (particularly for camping, trails, and boating) to protect sensitive park resources while providing a high-quality recreation experience.
- 4.2 Periodically evaluate park facilities and programs against evolving recreation trends to identify opportunities that better meet visitors' needs.
- 4.3 Manage and design trails for a variety of users, including hikers, bicyclists, and equestrians.
- 4.4 Provide a wide variety of camping facilities to meet diverse interests and abilities, such as walk-in/ride-in/boat-in camping, cabins, tent cabins, yurts, and primitive and improved campsites.
- 4.5 Consider/coordinate recreational programming and facility/land acquisitions, development, and redevelopment.
- 4.6 Encourage the development of facilities and programs with other jurisdictions and interest groups to provide relevant, comprehensive, and cost-efficient recreational opportunities.
- 4.7 Target programs and facilities that are revenue-generating, self-sustaining, and/or not dependent upon extensive infrastructure, management, and/or maintenance.
- 4.8 Encourage partnerships with El Dorado County agencies that promote programs for traditionally underserved groups.
- 4.9 Provide adequate support facilities such as parking, restrooms, electrical and water hook-ups, and pull-through spaces for the number of allowed visitors.

**Goal: 5.0 Maintain and develop facilities in a manner consistent with available resources, the character of the affected recreation area, user needs, public safety, and park resource protection.**

**Objectives:**

- 5.1 Protect water quality, as well as natural and cultural resources, when developing and maintaining facilities.
- 5.2 Emphasize remediation and preventive maintenance of existing facilities to conserve natural and capital resources.
- 5.3 Develop and periodically update a prioritized list of potential capital improvements that reflects available financial resources, recreation demand, and the potential for revenue generation.

- 5.4 Develop and implement a maintenance management plan for the park that addresses deficiencies requiring immediate resolution as well as regular maintenance activities.
- 5.5 Consider availability of resources for management and maintenance costs before developing new facilities.
- 5.6 Initiate a facility assessment program to gather both staff and public input on proposed modifications to existing facilities.
- 5.7 Provide staff with adequate training and professional development opportunities to allow them to be effective and efficient in their responsibilities.
- 5.8 Acquire appropriate adjacent lands to meet existing and future recreation needs based on availability of funding and opportunities to transfer or trade lands on a voluntary basis
- 5.9 Encourage development of facilities to accommodate multiple users when feasible (for example, scout camping and fine arts camp).
- 5.10 Use formal contracts to ensure quality control in the planning, design, and implementation of projects or activities carried out in cooperation with other agencies or groups.
- 5.11 Prioritize the preservation of the natural landscape and existing character of the park in the design and placement of new facilities and infrastructure.
- 5.12 Use indigenous plant materials for landscaping when appropriate.
- 5.13 Consider the concerns of adjacent residents and property owners when locating park facilities.

**Goal: 6.0 Establish cooperative relationships between EID, other jurisdictions, and the public in providing recreational resources to the region and the local community.**

**Objectives:**

- 6.1 Establish regular meetings with the City of Placerville and El Dorado County Parks and Recreation agencies, the El Dorado County Office of Education, the U.S. Forest Service, and other park districts and jurisdictions to continually review common natural resource and recreation issues and coordinate programs, activities, and facilities.
- 6.2 Coordinate interpretive opportunities and events with El Dorado County museums, the U. S. Bureau of Reclamation, the Sly Park Environmental Education Center, area naturalists, volunteer docents, and other similar sources of expertise.
- 6.3 Where appropriate, engage in joint-use management and acquisition efforts with other jurisdictions to most effectively and efficiently meet recreation needs in and near SPRA.
- 6.4 Work with the El Dorado County Department of Transportation and the U.S. Forest Service (USFS) to encourage the creation of bikeways and trails that provide linkages between Sly Park and other regional recreation resources.

- 6.5 Continue to encourage interagency coordination and collaboration throughout the design process, as well as during implementation and long-term management.
- 6.6 Establish or expand partnerships with individuals and organizations to provide volunteer and community service opportunities for ongoing maintenance, development, and rehabilitation of the park and its recreational facilities.
- 6.7 Use and/or participate in surveys to periodically assess community recreation trends, user preferences, and levels of satisfaction with facilities, programs, and services.
- 6.8 Use public meetings to receive input regarding the planning of facilities and programs.
- 6.9 Publicize EID, its recreation programs and facilities, and its role within the greater regional area to community leaders and the public.

In support of the proposed goals and objectives of the SPRA Master Plan, the Plan identifies design standards by which proposed actions would be implemented. Although the SPRA Master Plan identifies conceptual recommendations to coincide with recreational and resource oriented management by EID, the SPRA Master Plan also identifies specific actions, or projects proposed by EID. Within the SPRA Master Plan, EID identifies individual activities and/or management strategies to implement the goals and objectives listed above within the individual elements of the Plan. EID has broken the Master Plan down into six elements, consistent with the six identified goals within the Plan. The six elements include: Recreational Elements; Educational Elements; Access Elements; Resource Management, Protection, and Restoration Elements; Facilities Infrastructure Elements; and Public Safety Elements. Section 1.3 of this Draft Master EIR describes individual actions proposed by EID as components of individual SPRA Master Plan elements. All elements of the Master Plan would be implemented under the design standards and guidelines identified in Chapter 6 of the Master Plan, and summarized below.

## **3.2 Area-Wide Design Principles**

Preservation of the existing character of SPRA is emphasized throughout the Master Plan. The Design Standards and Guidelines identified by the SPRA Master Plan include area-wide design principles that address sustainable approaches to design relevant to the development of individual park elements and SPRA as a whole. These principles promote design that is sensitive to protecting the natural resources at the park while also creating facilities that meet the recreational needs of park visitors. The Design Standards and Guidelines also provide direction for specific types of improvement projects. These standards and guidelines are discussed in Section 1.3 of this Draft Master EIR along with the program elements to which they pertain. The area-wide design principles are discussed in the following sections.

### **3.2.1 Sustainable Design**

In 1991, the National Park Service launched a Sustainable Design Initiative in response to a number of environmental stress factors similar to those currently experienced within SPRA, including: (1) population increases; (2) park visitation increases; (3) demographic changes; (4) increased numbers and types of sites to manage; (5) environmental degradation; and (6) need to protect whole ecosystems.

Sustainable design principles incorporate conservation-based design concepts within development and construction planning and practices. The primary goals behind these principles include: (1) minimizing the use of resources; (2) conserving ecosystems; and (3) developing healthy environments for present and future generations. Implementation of these goals is facilitated through careful site planning, definition of environmental goals, and construction activity management.

### **3.2.2 Site Planning and Design**

#### **3.2.2.1 Building Placement**

Careful attention shall be given to the siting of all structures and facilities to protect sensitive areas, reduce the impacts to visual and natural resources, maximize energy efficiency, and preserve the character of SPRA.

- Buildings should be sited in locations that will minimize tree removal and preserve scenic views. Where feasible, clustering several small buildings in available openings would be preferable to removing trees to create an opening for a single larger building.
- Winter-use buildings should be sited to optimize solar heating opportunities and reduce exposure to winds. This includes proper unobstructed southerly orientation for roof-mounted systems and thermal gain from the building mass. Pay attention to the potential for future shadows from trees if panel systems are used.
- Summer-use buildings should be sited to take advantage of vegetation, orientation, prevailing winds, and other buildings to reduce the need for supplemental cooling.
- Natural features on potential sites shall be considered for integration into project design rather than being removed.
- Buildings shall be oriented parallel to topographic contours as much as possible to minimize grading.
- Buildings shall be located so that the activity associated with the building does not affect nearby sensitive environmental areas.
- All new buildings shall be situated to facilitate ADA/Title 24-compliant access.

#### **3.2.2.2 Grading and Drainage**

Site disturbances should be limited as much as possible to reduce environmental impacts, including soil compaction, erosion, and dust. Standards and guidelines for grading and drainage are as follows.

- Grading plans shall show locations of trees over six inches in diameter at breast height (DBH).
- Construction staging and access areas shall be planned to minimize impacts around project footprints.

- Cut and fill shall be minimized; however, slopes should not exceed a 3:1 gradient. Where slopes would need to exceed 3:1, logs, boulders, or other natural materials should be used to create retaining walls. Also, grading design shall seek to provide a diversity of gradients and profiles rather than uniform slopes.
- Grading should emulate the natural drainage of the area, directing water away from buildings and avoiding concentrated flows whenever possible.
- Infiltration trenches, sediment basins, or similar techniques should be used to filter stormwater runoff from roofs and paved or compacted surfaces where feasible. The use of culverts and other underground pipe systems should be avoided.
- The number of temporary access routes to construction sites shall be minimized.

### **3.2.3 Energy Efficiency**

Energy efficiency, a fundamental objective of sustainability, can be increased by proper site selection and by incorporating energy saving features into the building design.

- Natural ventilation to cool and heat buildings shall be used wherever possible.
- Mechanical equipment, where needed, shall be designed to minimize demand for power or fuel and to burn fuels cleanly.
- Building envelopes shall have adequate insulation to minimize heating and cooling costs.
- Overhangs, awnings, vents, and windows shall be incorporated into the design of buildings as feasible to provide passive climate controls for both heating and cooling.
- Energy efficient windows shall be used and properly installed to minimize air infiltration.
- Opportunities to incorporate thermal mass into the building design for passive heating should be considered.
- Demand for heating and cooling should be minimized by using vegetation where feasible to provide summer shade and to screen winter winds.
- A combination of energy efficient lighting and natural lighting shall be used to minimize electrical demand for lights and to reduce heat buildup.
- The design of interior spaces should include access to natural light when possible such as through windows or skylights. Access to natural light should be optimized by building orientation and window size and location.

### **3.2.4 Water Conservation**

Water conservation strategies identified within the Master Plan are multifaceted and would be coordinated to achieve maximum results. The following strategies would be applied in all proposed structures as well as the renovation of existing structures and infrastructure.

- Water-efficient fixtures and appliances shall be used in all new facilities and retrofitted in existing facilities as part of regular maintenance.
- Native and/or drought tolerant plant species shall be emphasized in ornamental landscaping to minimize irrigation demand.
- Where supplemental irrigation is needed, a water-efficient irrigation system shall be used. Such systems feature components such as drip emitters or bubbler heads that apply water directly to the root zone, minimize spray areas, and employ timers to prevent overuse.
- Porous paving should be installed to minimize erosion and to “recharge” the groundwater.
- Waterless toilets should be used.
- Swimming pools should be covered when not in use to prevent evaporative water loss.
- Opportunities to integrate graywater and stormwater recovery into facility design for irrigation should be considered.

### **3.2.5 Shape, Scale, and Massing**

Designs for proposed structures for SPRA would be visually harmonious with the natural environment by balancing the shape, scale, and massing of structures in relation to surroundings.

- Building profiles shall be subordinate to the natural setting and should not detract from scenic vistas. Vegetation may be used to obscure buildings and reduce their visual impact.
- Building size and architectural elements shall be in scale to the surrounding natural elements. It may be preferable to use several small buildings instead of a single large building, depending on the setting.
- Building shapes may range from organic—such as domed or round—to rectangular as long as they complement the natural setting.
- Buildings shall be visually compatible with other nearby structures to avoid creating juxtapositions that distract from the harmony of the natural setting.

### **3.2.6 Materials**

Materials used for structures and other improvements should be from sustainable sources whenever feasible, minimize maintenance, and preserve a sense of place.

### **3.2.6.1 Sources**

- Regionally indigenous materials should be considered for use when they can be collected in a sustainable manner and are economically feasible.
- Locally predominant, certified lumber should be used for construction of buildings and site furnishings.
- The use of products with post-consumer recycled content (decking, siding, roofing materials, and fencing) and salvaged materials should be encouraged.
- Rather than bringing in new materials, on-site materials such as logs or boulders should be incorporated into features, presuming such use does not cause environmental damage.
- Locally available materials (within a 100-mile radius from the site) should be used to minimize transportation costs.

### **3.2.6.2 Maintenance**

- While wood is commonly used for structures, concerns about rot, fire, and the need for periodic treatment, such as painting or staining, should lead to the consideration of alternate, more durable materials. However, alternate materials should be carefully selected to ensure that they do not conflict with the natural setting.
- Low-maintenance natural materials (for example, stone, redwood, or cedar) should be used when feasible.
- Materials that can be allowed to develop a natural patina or weather overtime should be considered over those that require regular cleaning, resurfacing, and/or painting.
- Materials should be selected to withstand the variations in temperature and precipitation typical to SPRA to limit the need for maintenance and replacement.

### **3.2.6.3 Wood and Simulated Wood**

- Designs for structures, furnishings and other improvements that use wood should look for opportunities to retain the natural quality of the wood, such as using logs or rough-hewn planks.
- Improvements shall not use CCA pressure-treated wood. Instead, use wood treated with Environmental Protection Agency (EPA)-approved preservatives and compatible corrosion-resistant fasteners.
- The minimal level of protection should be used for pressure-treated wood to meet the intended application. For example, railing and decking require less protection than ground-contact or permanent foundation uses.
- Where feasible, wood furnishings should be elevated to avoid ground contact and to reduce the required level of protection.

- Fencing and barriers should use natural cedar split railing, recycled plastic railing that looks like wood, or other materials that are consistent with the natural setting.
- Composite decking, manufactured from recycled wood and plastic post-consumer products, should be considered in lieu of wood decking because it is more durable and requires essentially no maintenance over the product life. Composite decking that mimics the texture and colors of real wood should be used. Many manufacturers also provide durable railing systems.

#### **3.2.6.4 Paving, Stone, and Stone Veneer**

- Native stone or natural-appearing stone products should be used where stone is needed for structural and retaining walls, fireplaces, chimneys, barbecue/grill structures, drinking fountains, kiosks, etc.
- Stone structures should be visually consistent with the rustic aesthetic of the park and/or the style of masonry found on historic structures in the area. To achieve a rustic look, use a variety of stones laid in a random horizontal pattern, with larger stones near the bottom.
- The method used for mortaring joints should be consistent with those used within visual proximity.
- Porous paving or unit paving should be used where feasible to allow stormwater infiltration and to reduce runoff.

#### **3.2.6.5 Color and Finish**

- Colors should complement those that occur naturally in the surrounding vegetation, rocks, soil, and water.
- A limited color palette should be used throughout the park to establish a consistent visual character.
- Finishes that appear unnatural or highly refined should be avoided. Clear stains that allow wood grain and character to remain visible are preferable to opaque stains.
- The use of bright and intense colors should be limited to architectural accents.

### **3.2.7 Architectural Components**

Major architectural components emphasized in the SPRA Master Plan include structural bases, exteriors, walls, and roofs to be constructed consistent with the standards identified below.

#### **3.2.7.1 Base**

- Structures on piers or poles should be enclosed to prevent fires from moving under the structure.
- When buildings are to be located on slopes, the foundations should be stepped to minimized grading and ground disturbance.

- The building base should visually tie the structure to the ground and be large enough to balance the mass of the structure above.
- Appropriate base materials should be used for the anticipated conditions of the site. Snow accumulation in some areas may require higher base elements than in others.

### **3.2.7.2 Exterior Walls**

- Supporting members for porch roofs and entries should use appropriately sized timber or multi-member posts to be in visual balance with the mass of roofs.
- Large unbroken expanses of flat wall should be avoided by including windows, shingles, or lapped siding for texture and surface relief.
- The exterior application of materials should be kept simple and uncomplicated and should not conflict with the natural setting.

### **3.2.7.3 Roofs**

- Roofs should appear more dominant than walls to visually integrate with the heaviness of the surrounding forest canopy.
- Simple roof forms should be used to keep the building profile unobtrusive.
- Historical precedent and the local vernacular should be referred to for examples of rooflines and materials, such as mining structures and old resort lodges.
- Roof materials that are non-reflective and blend with a natural color palette should be used.
- Materials that are resistant to wildfire, such as non-reflective metal or composition asphalt shingles shall be used for roofing. The entire roof assembly shall be Class 'A'.
- Covered porches may be provided to protect entries.

### **3.2.7.4 Decks**

- Decks may be used to extend living space of a structure outdoors. Where feasible, they may be located on the lake-side of a structure to take advantage of views of the lake and surrounding area.
- Porch decks may be constructed on the front sides of cabins and yurts to provide a sense of entry and an additional outdoor room.
- Decks may be used to link cabins to better suit the needs of large family groups and duplex cabins.

### **3.2.8 Design for Snow Management**

Although snowfall at SPRA does not usually exceed a few inches at any given time, on occasion a foot or two may fall in a single storm or may accumulate over the course of several storms. The following considerations pertain to snow management.

- All facilities shall be structurally designed to bear anticipated snow load.
- If buildings are to be occupied in winter, they shall have adequate wall and plumbing insulation, energy efficient windows, and a reliable source of heat with ventilation.
- Roofs shall be designed to avoid excessive accumulation of snow and to shed snow to areas that will not create hazards for pedestrians or vehicles.
- Pedestrian routes for winter use shall be clearly marked and graded to prevent ice buildup.
- Sufficient area to dump removed snow should be included in the design of roads and parking areas when these facilities will be used in the winter.

### **3.3 Sly Park Recreation Area Master Plan Program Elements and Components**

The proposed improvements in the SPRA Master Plan are organized into the following program elements.

- Recreation Facilities
- Education
- Access
- Natural Resources Protection and Restoration
- Park Operations and Maintenance
- Public Safety
- Facilities Infrastructure

The following sections discuss the proposed improvements comprising each program element as well as the related Design Standards and Guidelines. Figure 3-1 shows the overall improvements proposed under the SPRA Master Plan.

#### **3.3.1 Recreation Facilities Element**

The SPRA Master Plan addresses several types of existing and proposed recreational facilities. Improvements are proposed for the existing family and group campgrounds, Scout Hill youth group camp, Black Oak equestrian campground, and Stonebraker boat rental facility. Proposed new facilities include a primitive campground, a dog park, and a retreat/event center. Table 3-1

describes the specific proposed improvements for each of these facilities under the recreation facilities element.

### **3.3.1.1 Family and Group Campgrounds**

Currently, SPRA offers eight family campgrounds and three group campground areas, one with multiple group campsites. Improvements are proposed at all of these locations to address a variety of issues. The primary issues of concern within existing campgrounds are the lack of defined campsite boundaries, lack of adequate parking, and to a lesser degree campsite densities and locations. Where feasible, new campsites have been identified to offset sites lost to decreasing existing campsite densities or to replace sites that would be removed from sensitive areas. Some convenience camping units are also proposed as pilot projects in several locations to provide a greater variety of camping experiences. Figure 3-2 through Figure 3-6 show examples of proposed improvements for both family and group campgrounds.

#### **Campground Reconfiguration**

The reconfiguration of campgrounds would use the Design Standards and Guidelines, taking into consideration all site factors, including tree locations and clusters, slope conditions, natural drainages, and other site features. Adjustments to campsites, parking, roads, walkways, restrooms, common areas, and water spigots would be made as needed to reduce congestion, overcrowding, environmental impacts, and safety concerns. Vehicular circulation would be realigned in some of the campgrounds to provide greater layout efficiency, reduce vehicular conflicts, and minimize maneuvering – especially for large vehicles or those with trailers. Where feasible, opportunities to designate/develop accessible sites would be identified for each campground.

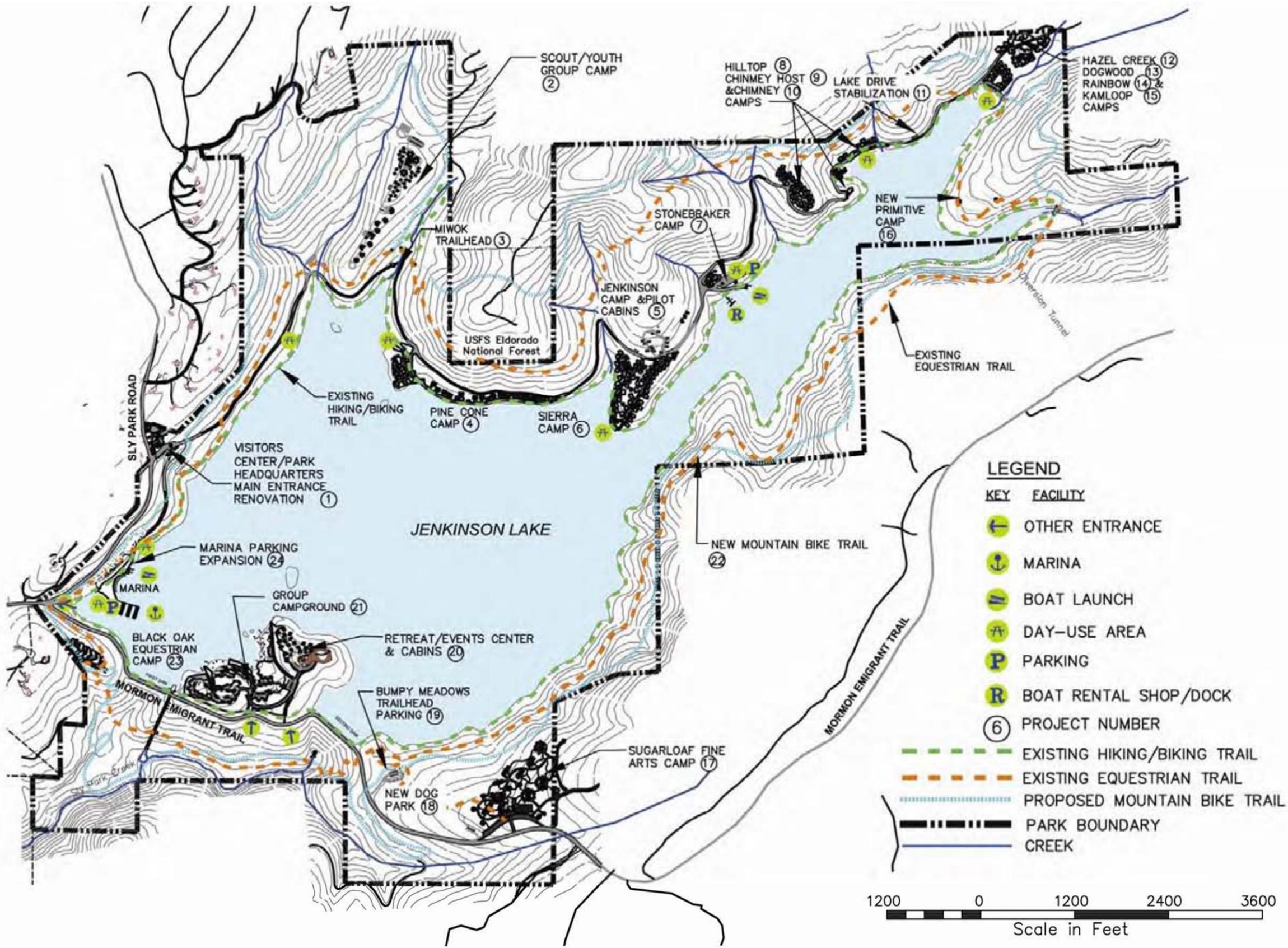
Several campsites would be removed that are currently located adjacent (within 50 feet) to Hazel Creek. Currently, the Hazel Creek campground and the Rainbow and Kamloop Group campgrounds abut Hazel Creek. The proposed renovation of these campgrounds would offer the opportunity to provide a wider buffer between Hazel Creek and the nearby campsites to enhance the riparian habitat and wildlife values. Locating campsites farther away from Hazel Creek would provide for better protection of wildlife and habitat and offer an excellent opportunity for restoration of the vacated campsites and disturbed riparian habitat.

Reconfiguration improvements would limit removal of healthy native trees greater than 6 inches in diameter at breast height (DBH), and be at least 50 feet away from the ordinary high water mark (OHWM) of creeks. Where possible, sites would be located on flat ground. If cut and/or fill is necessary, quantities would be balanced as much as possible. Any excess material would be spoiled in a location within SPRA in a manner that does not alter natural topography more than 8 inches and would be compacted to prevent erosion. In addition, the following Design Standards and Guidelines would be implemented during campground reconfiguration activities:

- Each campground layout should be reviewed on-site to ensure that grade transitions can be accomplished smoothly and with minimal need for retaining walls or other costly measures.
- Siting of campsites and day use areas should emphasize protecting natural resources and safety, as well as functionality.

- When demand and site conditions permit, up to 30 percent of the sites in a campground may be developed as tandem or double tandem sites to accommodate larger family groups.

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**EXISTING & PROPOSED FACILITIES OVERALL SITE PLAN**

**SLY PARK RECREATION AREA MASTER PLAN MASTER EIR**

**FIGURE 3-1**

**Table 3-1 — Proposed Projects Identified under the Sly Park Recreation Area Master Plan Recreation Facilities Element**

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
2	Scout/Youth Group Camp	2.07	North Area Tent Pods	Designate up to 25 tent pod sites with 3' wide DG connecting trails.	2	A
		2.08	North Waterless Toilets (3 stations)	Add 3 waterless toilet stations with total capacity for approx. 1,000 daily uses. See Section 3.3.1.1 of this Draft Master EIR for a discussion of Restrooms.	2	A
		2.09	North Mess Hall/Dining Area	Enclosed Mess Hall approx. 75' x 40' with trellised dining area, total footprint 100' x 60 approx.	2	B
		2.10	North Showers (2 stations)	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Shower/Laundry Facilities.	2	B
		2.11	North Amphitheater	Central fire circle with surrounding rows of bench seating set in DG approx. 80' diameter.	2	B
		2.12	North Cabin Pods (3 @ 6 ea.)	Each pod with 6 rustic cabins approx. 10' x 20' each connected by 3' DG trails (see Section 3.3.1.1 of this Draft Master EIR for a discussion of proposed cabins).	2	B
		2.13	South Yurt Pods (7 @ 5 ea.)	Each pod with 5 rustic yurts approx 15' diameter on raised platforms (see Section 3.3.1.1 of this Draft Master EIR for a discussion of proposed yurts).	4	B
		2.14	South Waterless Toilets (2 stations)	Add 3 waterless toilet stations with total capacity for approx. 700 daily uses. See Section 3.3.1.1 of this Draft Master EIR for a discussion of Shower/Laundry Facilities.	4	B
		2.15	South Showers (1 station)	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Shower/Laundry Facilities.	4	B
		2.16	South Amphitheater	Located NE of north turnaround below summit. Central fire circle with surrounding rows of tiered bench seating on uphill side set in DG approx. 80' diameter.	4	B
		2.17	South Mess Hall/Dining Area	Enclosed Mess Hall approx. 75' x 40' with trellised dining area, total footprint 100' x 60 approx.	4	B

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
4	Pine Cone Camp	4.03	Improve west campsites and access road	Remove sites 15 and 16 on shore, reconfigure remaining sites incl. back-in parking, regrade/resurface road and sign for traffic flow direction. See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites.	1	A
		4.04	Reconfigure campsites (except sites 24-27) on shore road	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites.	1	A
		4.05	Camping Platforms	Replace sites 24-27 with camping platforms. See Section 3.3.1.1 of this Draft Master EIR for a discussion of Camping Platforms.	2	A
5	Jenkinson Camp	5.02	Pilot Cabins	Build 1 duplex and 2 deluxe cabins with parking for a total of 6 cars. Locate cabins below existing road, on piers.	3	A
		5.03	Waterless Toilets (1 station)	Add 1 waterless toilet station with total capacity of 100 daily uses. See Section 3.3.1.1 of this Draft Master EIR for a discussion of Restrooms.	3	A
6	Sierra Camp	6.04	Reconfigure West Campsites	Reconfigure campsites on west road and loop. See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites.	2	A
		6.05	Reconfigure East Campsites	Reconfigure campsites on east road. See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites.	2	A
		6.06	Shower/Laundry Facility	Add shower and laundry facility (approx. 12' x 24'), with leach field and parking for 8 vehicles north of Lake Drive.	2	A
7	Stonebraker Camp	7.03	Reconfigure Campsites	Reconfigure existing 4 campsites. Enlarge northwest site (107) by cutting and retaining slope. Spoil and retain cut material below northeast (106) site to enlarge flat area of this site. Include designated parking for 10 vehicles, 3 each at 107 and 106. See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites.	2	A

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
		7.04	Reconfigure day use sites	Clearly designate boundaries of first three-day use sites, and eliminate fourth site (terrain is too steep). Add new site for 2 tables at far end of parking lot in flat area near trailhead.	2	A
		7.07	Expand Boat Rentals	Add 2 8' x40' sections to existing floating dock and acquire additional boats for rental.	1	A
8	Hilltop Camp	8.03	Reconfigure Campsites	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites.	3	A
9	Chimney/Hilltop Host Site	9.02	Reconfigure Host Site	Enlarge and reconfigure host site. See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites.	1	A
10	Chimney Camp	10.02	Reconfigure Campsites	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration. In addition, realign entry to sites 133 and 134 and allow for 1 car parking space each. Sites 133 and 134 may also be used as a double RV site. Enlarge site 138 by cutting and retaining bank, and combine with site 139 as double RV site with parking for 2 cars. Enlarge site 140 to allow RV access.	2	A
		10.04	Pilot Cabins	Add 2 deluxe cabins.	3	B
12	Hazel Creek Camp	12.01	Reconfigure Campsites	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites.	2	A
13	Dogwood Camp	13.02	Reconfigure Campsites	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites.	3	A
		13.04	Add New Campsites	Designate 2 new campsites in open, flat area above new road.	3	A
14	Rainbow Camp	14.03	Reconfigure Campsites	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites. Eliminate or relocate any sites within 50' creek buffer zone and restore buffer zone habitat as needed. Site 174 may need to be removed.	1	A

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
15	Kamloop Camp	15.03	Reconfigure Campsites	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites. Eliminate or relocate any sites within 50' creek buffer zone and restore buffer zone habitat as needed. Sites 180, 182, and 184 may need to be removed.	1	A
16	Primitive Camp Area	16.02	Primitive Campsites	Designate up 10 primitive campsites. See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration and Campsites.	3	B
		16.03	Waterless Toilets (2 stations)	Install 2 double-hole pit toilets.	3	B
18	Dog Park	18.02	Large and Small Dog Park Area	Build separate fenced dog park areas for large and small dogs, with benches and water fountain in each. Approx. size 1/4 acre minimum for small dog area, 1/2 acre for large dog area.	2	B
20	Retreat and Event Center	20.03	Outdoor Event Area and Pavilion	Install covered pavilion (approx 40' diameter on piers/post foundation), central gathering area, and demonstration xeriscape/native plants gardens surrounding turf and leading from parking lot to house. Include ADA accessible circulation throughout.	2	A
		20.04	Waterless Toilet Station 1	Install 2 waterless toilet stations, each with capacity for 300 uses per day.	2	A
		20.05	Cabins - Phase 1	Build 7 duplex cabins with decks and connecting 4' wide DG paths.	4	B
		20.06	Cabins - Phase 2	Build 12 duplex cabins with decks and connecting 4' wide DG paths.	4	B
		20.07	Waterless Toilet Station 2	Install waterless toilet station with capacity for 300 uses per day. Remove existing 6-8 hole pit toilet.	4	B
21	Main Group Campground	21.01	Relocate Host Campsite	Move host campsite to east nearer to Event Center access road.	2	A
		21.02	Shower/Laundry Facility	Build shower/laundry facility (approx. (12 x 24).	2	A
		21.06	Reconfigure Tent Sites Group Sites #1 and #5	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campsites.	2	A

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
		21.09	Reconfigure Tent Sites Group Sites #2	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campsites.	3	A
		21.12	Reconfigure Tent Sites Group Sites #3 and #4	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campsites.	3	A
		21.14	Group Kitchens	Build covered group kitchens (one per group site) with large barbeque or fire ring, picnic tables, shelter, and water.	3	B
23	Black Oak Equestrian Camp	23.01	Reconfigure Campsites	See Section 3.3.1.1 of this Draft Master EIR for a discussion of Campground Reconfiguration. Eliminate non-designated pull-throughs and parking as part of this work and more clearly define path to north restroom.	2	A
		23.04	Fence Manure/Bedding Dump Site	Provide fencing to enclose and define manure/bedding dump area.	2	A
		23.06	Self-serve Fee Station	Install a secure fee collection station for first-come, first-serve visitors to pay fees at the camp without having to go to the Main Entrance. Include signage at camp entrance explaining procedure.	1	A

Notes:

Phase: 1 – Proposed 3-Year Improvement Plan; 2 – Proposed 5-Year Improvement Plan;

3 – Proposed 10-Year Improvement Plan; 4 – Proposed Greater than 10-Year Improvement Plan

Priority: A – Highest priority improvement with respect to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

B – Lower priority improvement with respect to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

## **Define Campsites**

In accordance with the Design Standards and Guidelines, individual campsites would be clearly defined to minimize disturbance outside of the campsites, particularly around existing trees. A campsite name or number should be attached to posts at all entrances to the site, including pedestrian entrances. In addition, parking spaces should be easily discernable, hardened, and designed to limit intrusion into the site. Site amenities, including a picnic table and grill, should be located to avoid restricting or impeding pedestrian circulation within the site. A softened tent site should also be provided at each site to minimize site trampling. Lantern poles should also be provided to protect trees from damage.

The following additional Standards and Guidelines would apply to campsite layout and design.

- Family campsites should accommodate up to eight people and provide parking space for an automobile/trailer combination, a recreational vehicle, or an automobile.
- Group campsites should accommodate from 20 to 100 people, depending on the size of the area allocated to a particular site. Tent sites would be located at the periphery of the site away from trailers.
- Group campsites should provide parking for multiple automobiles, automobile/trailer combinations, and RVs.
- The number of campers allowed at any group campsite should be balanced with parking capacity. A typical ratio is 2.5 campers per vehicle. If adequate parking is not available, capacity of the site should be reduced unless a designated area for overflow parking can be provided within easy walking distance of the campsite.
- Because the nature of groups tends to be more gregarious than individuals and families, group campsites should be located away from family campgrounds.
- The living area of each campsite should be located to the right or rear of the parking spur. This is preferred because the doors of recreational vehicles are on the right side (passenger side of the vehicle) when facing the direction of traffic flow.
- Designated accessible campsites shall have accessible parking spurs and be conveniently located near accessible sanitary facilities. All designated accessible campsite components shall comply with the requirements of ADA/Title 24 and be connected to other campground features by accessible routes.
- The total minimum area for a family campsite should be 800 square feet, if including tent space and 650 square feet if no tent space is provided (RV only).
- A flat area of at least 144 square feet (12 feet by 12 feet) should be identified for each tent site. For accessible campsites, the pad should be elevated 15 inches above the surrounding area, retained by wood or concrete, and 4 feet of clearance shall be provided on all sides.

- Natural materials such as boulders, logs, split-rail fencing, or railroad ties should be used to define the camp space and minimize site impacts.
- Campsites should be surfaced with compacted sand, 3/16 inch gravel, or decomposed granite over permeable landscape fabric over compacted earth. Rounded materials such as pea gravel or creek gravel that do not compact well shall be avoided.
- Sites should be sloped from 1.5 percent minimum to 3 percent maximum to provide adequate drainage and a relatively flat camping area.
- Premium campsites can be provided with additional amenities such as utility hookups, serving table, and lantern poles.
- In general, a minimum 25- to 30-foot separation between family campsites should be provided. This would allow an adequate buffer for privacy and protection of natural resources.
- Campers in a group site expect to be in closer proximity to each other, and separation between sites is not as critical as for family campgrounds. Separation between individual tent sites in the larger group site should vary from 10 to 15 feet minimum depending on the overall space available.
- Group sites should be separated to the maximum extent possible to avoid groups disturbing each other. The minimum separation should be 50 feet apart, depending on group sizes and available space. A separation of 100 feet is preferable.

The proposed modifications at Stonebraker Camp include reconfiguration of the day use sites. The following design guidelines and standards would be applied to reconfiguration and development all day use areas within SPRA.

- Day use areas should be designed to accommodate a variety of visitors including individuals, families, and large groups.
- Day use areas should be located within 300 feet of a parking area.
- Handicap accessible picnic sites should be located no more than 150 feet from an accessible parking space, and be connected by an accessible route.
- At least one accessible picnic site should be provided at day use areas that are adjacent to accessible trails or parking lots.
- All accessible picnic sites shall comply with the requirements of ADA/Title 24.
- Picnic sites should be located to take advantage of views and afternoon shade from existing trees.

- A minimum width of 10 feet clear around picnic tables should be provided to allow movement on both sides of a standard 5-foot-wide picnic table.
- An area with a 6-foot-long table should be a minimum of 14 feet long; an area with an 8-foot-long table should be a minimum of 16 feet long.
- Tables in individual picnic areas should be separated by at least 15 feet to provide users with a sense of private space.
- For picnic tables in group day use areas, a minimum 3 feet should be allowed between the long sides and 4 feet between short ends. A 4-foot-wide clear space should be provided around the entire perimeter of any particular group area. Group picnic areas should be separated from each other by at least 25 feet.
- Heavy-duty picnic tables with integral benches ranging in length from 6 to 8 feet should be used depending on the capacity of the site. At least two of the picnic tables within a group picnic area closest to the accessible parking should be accessible.
- Thirty-gallon receptacles should be located at each entrance to a day use area. Additionally, a 30-gallon receptacle should be provided and placed in central proximity to each relative grouping of four to six picnic tables, depending on the frequency of use. For heavily used areas, more receptacles may be needed so that trash does not overflow between pick-ups.
- Heavy-duty, adjustable grills should be located at the edge of the picnic site downwind from the table.
- The grill shall be installed to avoid any fire hazard, such as nearby vegetation. The grill should be installed so that the cooking surface is at a maximum height of 34 inches above the ground.
- A minimum 4 feet clearance between the seat edge of the picnic table and the face of the grill should be provided for both safety and accessibility.
- Drinking fountains or potable water spigots should be provided within 200 feet of the farthest picnic site.
- A restroom should be located no farther than 300 feet from and no closer than 25 feet to picnic sites.
- The design of shade structures and picnic pavilions should be consistent with the forested aesthetic of SPRA.
- Picnic pavilions may have compacted gravel, compacted decomposed granite, or concrete floors. They may be furnished with adjustable grills with masonry bases, sinks with running water, and preparation/serving tables.

- All-weather benches should be placed at strategic locations in day use areas to take advantage of views and the afternoon shade of existing trees. They should be installed so that the front edge of the bench is at least 2.5 feet from the edge of any trail or path.

### **Shower/Laundry Facilities**

Propane and/or solar shower and laundry facilities are proposed for Sierra Camp and the Main Group Campground (Figure 3-2 and Figure 3-6). Two similar facilities are proposed for the Scout/Youth Group Camp (See Section 3.3.1.2 for a complete description). The Sugarloaf Fine Arts Camp also proposes showers (see Section 3.3.2.2 for a complete description). The following Design Standards and Guidelines would be implemented during design and construction of these facilities.

- Showers and laundry facilities should be coin/token operated and designed with water efficient fixtures to limit water use.
- Shower/laundry siting parameters are the same as for restrooms (see below).
- Shower facilities should have multiple private stalls and at least one accessible stall.
- Separate changing areas with benches and clothes hooks should be provided in the shower facility.
- The laundry facility should have a built-in counter for folding/sorting clothes.
- The laundry room should have its own access and should not be directly accessible from either of the restroom or shower area.
- Where feasible, motion and light sensitive light fixtures should be provided at the entrances of restrooms, showers, and laundry facilities. Lighting should be low intensity and illuminate only the doorway and nearby ground surface. Consideration should be given to installing a solar-power supply where electricity is not available.
- Disposal of shower/laundry grey water shall be accomplished with either on-site leach fields or by removal from the site to an appropriate disposal facility. Leach fields shall be sized and sited according to El Dorado County requirements.

### **Convenience Camping Units**

Convenience camping units are a new type of facility for SPRA and would be initially constructed as pilot projects to test market the demand and economic feasibility. The SPRA Master Plan proposes convenience camping units at several family campgrounds: camping platforms at Pinecone Camp and cabins at Jenkinson Camp and Chimney Camp. Cabins are also proposed at the Retreat/Event Center (see Section 3.3.1.5 for a complete discussion), and cabins and yurts are proposed at the Scout/Youth Group Camp (see Section 3.3.1.2 for a complete discussion).

A mixture of camping platforms, yurts, and cabins would provide opportunities to reserve all-season lodging for parties of two to eight. These types of units, in combination with site location

and varying amenities, could provide a wide range of affordability from very basic, more affordable units, to more deluxe accommodations.

With the exception of deluxe yurts and cabins, cooking would be conducted outdoors, and guests would use common campground facilities, such as toilets, showers, and water spigots for potable water. Basic amenities common to all convenience units should include at minimum a picnic table and parking spaces for one to two vehicles and, where feasible, a fire ring. Bedding, food, and a camp kitchen would not be provided.

### ***Camping Platforms***

Camping platforms are often used to accommodate campers in ecologically sensitive areas or where grades are too steep. They are relatively inexpensive to construct and can be provided in a variety of sizes and configurations. The following Design Standards and Guidelines would be implemented during the design and construction of all camping platforms.

- Camping platforms should be considered for areas where conditions are not suitable for traditional camping, especially in areas with sensitive habitat or steep grades. Because the majority of camping activity occurs on the platform, impacts to the site are reduced, especially soil compaction and damage to vegetation.
- Platforms may be covered with canvas tarps, shade cloth, trellis-type structures, solid roofs, or left open.
- Ramps shall be used to make ADA/Title 24-designated platforms accessible.
- Railings shall be constructed around platform edges that are 30 inches or more above grade.
- Sleeping and eating functions can be separated by providing separate platforms for tents arranged around another platform with a picnic table and a prep table with sufficient space for camp chairs. This also allows flexibility to vary the height of the platforms to better fit a site.
- Because campfires are generally desired by the majority of campers, a flat 11-foot diameter (minimum) area should be created preferably on the uphill side and adjacent to the “kitchen” platform to accommodate a 30-inch diameter fire ring/grill unit.
- If platform installation requires a cut into the existing grade, consider using 18- to 24-inch high retaining walls or large logs to retain the cut bank while providing campsite seating.

### ***Cabins***

Cabins have the advantage of being usable year-round; particularly when snow is on the ground (see Figure for an example location). The cabins envisioned for SPRA would be single-story structures on post-and-pier foundations with no more than 600 square feet of living space. Several cabin styles are proposed including one-room studio, two-room, duplex (two units with common wall), and deluxe units. Amenities may include lockable doors and windows, double

beds or single-sized bunk beds, dining table and chairs, futon sleeper sofa (double size) covered porches with benches, and decks on the view sides (see Design Standards and Guidelines below).

Duplex cabins could be rented either individually or together. A door could be provided between units if there is demand for this feature. A deluxe cabin is an upscale version of the standard cabin with more amenities. It could include a small refrigerator, convection/microwave oven, a gas barbecue grill, heating, air conditioning, lighting, and electrical outlets if service is available.

The following Design Standards and Guidelines would be implemented during all cabin design and construction.

- Cabins shall be designed to be consistent with the forest aesthetic of SPRA.
- Cabin configuration may be variable including basic one-room units, duplex units with two basic units sharing a common wall, or deluxe units with multiple rooms.
- Cabins should be single-story and shall not exceed 600 square feet. Cabin foundations shall be designed to minimize grading.
- Water and propane may be provided at some cabins.
- Showers and waterless toilets may serve a group of cabins or individual cabins.
- Cabin waste water disposal shall be designed to be consistent with El Dorado County regulations.
- Cabins may be outfitted with cots, bunks, simple furniture, hooks, shelving, and secure food storage units. Visitors shall provide their own bedding or sleeping bags.
- Some cabins may be winterized to facilitate year-round use.
- Some cabins should be made accessible for disabled campers.
- Cabins should be equipped with a locking door and windows.

### **Yurts**

The proposed yurts are circular domed tents that would be approximately 16-24 feet in diameter with plywood floors, structural wall supports, and clear plexiglass skylights for summer ventilation. The proposed yurts would be able to withstand high winds and would efficiently retain heat during the winter months. They can be provided with basic furniture such as a futon sofa, single/double-size bunk bed, a coffee table, and dining table. The following Design Standards and Guidelines would be implemented during yurt design and construction.

- Yurts should have a waterproof canvas tent-like roof, a plywood floor, structural wall supports, a venting skylight, framed-in lockable wooden door, window screens and flaps, and reflective insulation.

- Various yurt styles and designs may be used. Basic yurts are approximately 16 feet in diameter with a 10-foot-high ceiling and can sleep four. Larger deluxe yurts (24-foot diameter) can sleep up to eight and may include more amenities than the basic yurt.
- Consideration shall be given to selecting canvas colors for the sides and roofs that blend with the surrounding environment, such as light to medium browns and olive to forest greens.
- Cots, bunks, and simple furniture may be provided but visitors shall bring their own sleeping bags or bedding.

### **Group Kitchens**

The Master Plan suggests that each group campsite should have a central area for cooking, eating and gathering (Figure 3-6). This area would include at a minimum fixed picnic tables for eating, a large adjustable grill or two, and a table for cooking and food preparation. The fire ring should also be located in the communal area to limit impacts to as small of an area as possible. Other improvements would potentially include a large masonry barbecue, a two- or three-compartment stainless steel sink with hot and cold running water, one to two preparation tables, and enough picnic tables to seat the capacity of the site.

### **Additional Campground and Campsite Design Standards and Guidelines**

The Master Plan includes the following additional Standards and Guidelines that would be applied to the implementation of family and group campgrounds and campsite improvements.

#### ***Campsite Parking Spurs***

Back-in parking spurs are proposed for the Pinecone, Sierra, Hilltop, Hazel Creek, and Dogwood family campgrounds and the Kamloop, Rainbow, and the Main group campgrounds (see Figures 3-2 through 3-6 for examples). Back-in parking spurs are proposed for the Black Oak Equestrian Camp (see Section 3.3.1.6 for a complete description). The following Design Standards and Guidelines would be implemented during design and construction of all these facilities.

- Although back-in spurs may be located on either side of a one-way road, they are preferable on the left side for driver's side visibility.
- Back-in spurs should not be used where there is a change in grade from the main road of more than a few inches. They should be angled 30 to 45 degrees preferable, as measured from the road, but no greater than 60 degrees.
- Back-in spurs should be 14 feet wide for single-wide or at least 22 feet wide for double-wide. They should be 60 feet minimum in length to accommodate a trailer, plus a towing vehicle such as a car or truck, but length may vary to accommodate site features.
- Pull-through spurs should be located only on the right side of the road because trailer doors typically open on that side.

- Although pull-through spurs are generally preferred for large recreational vehicles, fifth-wheels, and very large, self-contained trailers, their numbers should be limited to just a few at the largest sites because they take up the most space.
- Pull-through spurs would be 14 feet wide and a minimum of 100 feet long to accommodate a trailer plus a towing vehicle such as a car or truck.
- Campsite parking spaces may be chipped and sealed, or surfaced with compacted road base, asphalt, or permeable pavers.
- For accessible sites, either a back-in or pull-through spur can be modified to increase width to a minimum of 20 feet at sites that slope no more than 1.5 percent.
- Natural materials, such as boulders, logs, and low rail fencing, should be used to define parking areas clearly.

### ***Pedestrian Circulation***

Defined pedestrian routes are critical for privacy and the preservation of the natural resources within SPRA. The following Design Standards and Guidelines would be implemented during design and construction of pedestrian facilities throughout the park.

- A 4-foot-wide accessible route should link all facilities within a campground, such as restrooms, parking lots, and accessible campsites, as well as places of interest, including the trail system that encircles the lake.
- The pedestrian route should be separated from the road wherever possible and should not bisect campsites. When a path needs to skirt the edge of a campsite, it should be separated from the campsite using a low barrier such as logs or boulders to reduce the potential for territorial conflicts.
- Natural materials, such as boulders, logs, and low rail fencing, should be used to define paths clearly.
- Paths would be signed at each road crossing to help direct pedestrians along the route and to minimize accidental intrusion into neighboring campsites.

### ***Campground Utilities***

Existing campground utilities may be affected by the proposed reconfiguration of campgrounds and campsites, as well as the installation of new water lines (see Section 3.3.7.1 for a full description of the proposed new water lines). The following Design Standards and Guidelines would apply to these projects as well as the design and implementation of any new campground utilities.

- Water should be provided from a spigot that has been installed in a rock-lined splash basin. The splash basin should be located no closer than five feet from the road, in close proximity to the site.

- Hydrants and spigots located along an accessible route or at an accessible site should have a 5-foot-wide accessible approach apron. The approach apron shall be flush with and constructed of the same material as the access route.
- A minimum of one water spigot, with pressure reducing valve if needed, should be provided per every 10 camping units or for every 20 people accommodated in a site.
- Spigots should be located no more than 300 feet from the farthest campsite.
- For premium sites, a spigot should be provided in the campsite and located so as not to attract and encourage use by other campers.
- If provided, utility hookups should be placed to the left rear of a single parking unit or the middle rear of a double parking space. Curb or bumper posts would also be provided to prevent an impact of a vehicle with the hookup.
- When electrical service is provided to a campsite, use a covered and grounded electrical box mounted to a post or in a manufactured assembly that includes a ground fault interrupter.
- Warning tape would be placed in the trench above the electric lines. Electrical facilities at each campsite should be sized to comply with National Electrical Code, Section 551 G and county ordinance.
- When water and/or electric hookups are provided at a campsite, they should be located on the left side of the parking spur at a point not more than 15 feet from the rear of the spur.
- Steel guard posts 4 to 5 inches in diameter and filled with concrete should be installed to protect hookups and located 18 to 24 inches away from the hookup on the side nearest the road.

### ***Trash Removal***

Trash removal is a vital part of park operations and maintenance in campgrounds and throughout the park. The following Design Standards and Guidelines pertain to the design and placement of trash receptacles.

- Trash receptacles should be located near the entrance to each campground. Additional 30-gallon receptacles or larger dumpsters should be placed in central locations throughout the campgrounds. The number and size of receptacles should be such that trash does not overflow between pick-ups.
- Plantings or stone walls can be used to screen trash receptacles from view.
- Trash receptacles within the campgrounds should be wildlife-proof. Trash should be collected as needed and contained in wildlife-proof storage areas.
- Separate bins should be provided and labeled for bottles and cans to encourage recycling.

### ***Restrooms***

The following Design Standards and Guidelines would be implemented during design and construction of restroom facilities in campgrounds, day use areas, and throughout the park.

- Restrooms should be sited to minimize compaction and erosion, as well as intrusions on other campsites.
- Restrooms should be sited along campground roads for maintenance and service reasons.
- A restroom should be sited and sized to provide facilities for the majority of users inside a 600-foot radius.
- At least one accessible stall should be provided at each restroom location that is connected to an accessible path or parking lot.
- Vegetative screening should be provided for those campsites nearest the restrooms to maximize privacy and minimize disturbance.

### ***Signage***

The following Design Standards and Guidelines for signage would be implemented during design and construction of campgrounds and the reconfiguration of existing campgrounds and campsites.

- Kiosks, signs, or message boards should be provided at each campground with a permanent display, including a campground map that effectively communicates site layout, accessible features, items of interest, and campground regulations.
- All campsites should be marked with an identifying site number. Campsite numbering may be on a separate post or marked on the parking spur surface at its intersection with the campground road.
- Campsite numbering should be at least six-inches high and be of a reflective material that can be easily seen at night to help campers identify their campsites upon arrival.

### ***Recreation Amenities***

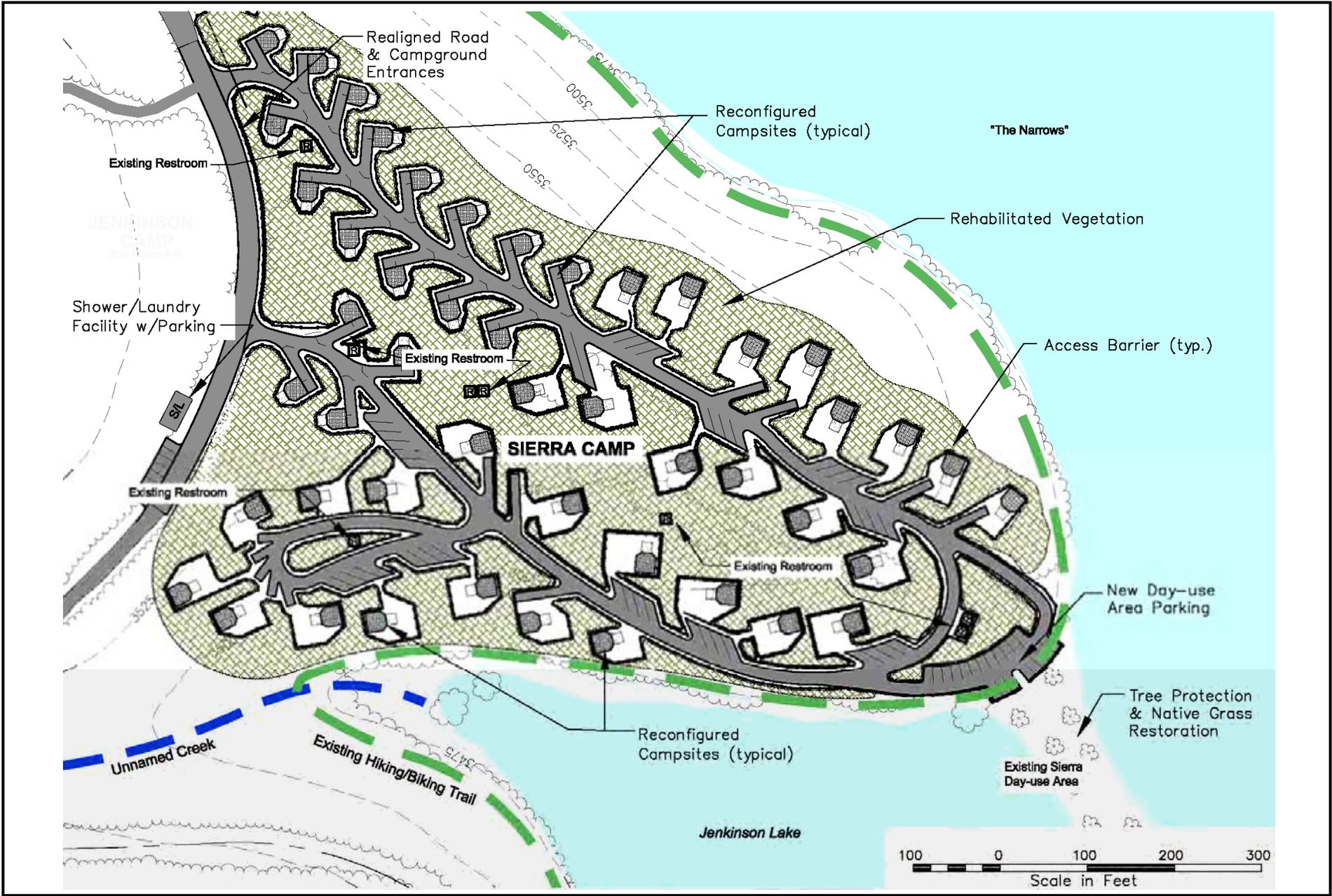
Where campground or day use configuration provides for additional recreation amenities, the following Design Standards and Guidelines would be implemented during design and construction of the facilities.

- Small court-type facilities such as horseshoes or bocce may be provided at larger campgrounds where there is adequate flat area to allow safe play.
- Horseshoe and/or bocce facilities shall include backstops or edging to contain loose pit material, horseshoes, or balls. The surrounding yard areas should be graded level with or slope away from walkways to eliminate ledges and steps that may cause ankle injuries.

## **Site Furnishings**

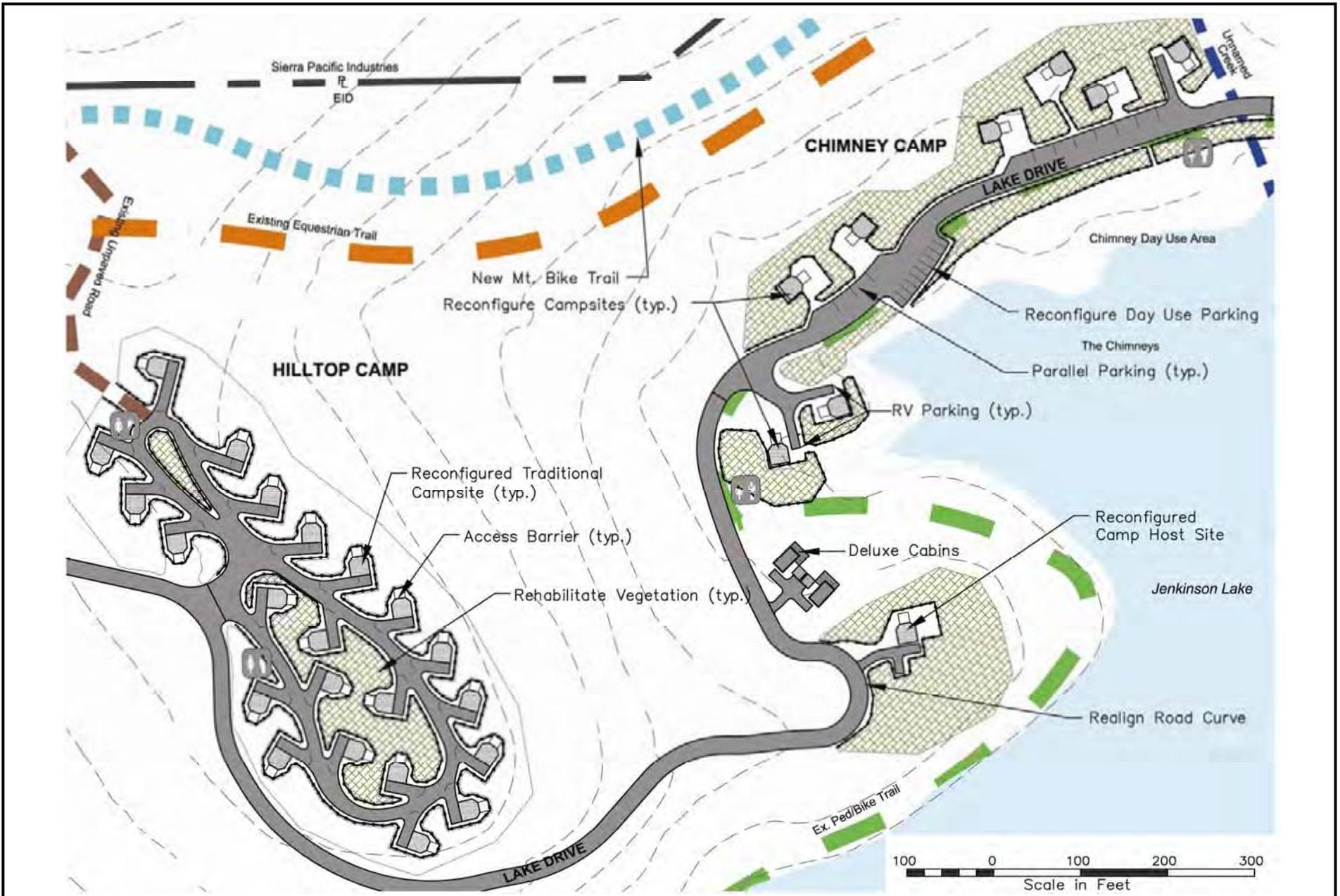
The following Design Standards and Guidelines would be implemented during design and construction of site furnishing at campgrounds and day use areas.

- Minimum campsite furnishings should include a picnic table and a fire ring and/or grill. These should be spaced to allow campers to circulate comfortably within the living area and still have room to set out folding chairs and an additional table or two. Group campsites should also include a large communal area or “kitchen.” Tables and fire ring and/or grill should be sized to meet site capacity.
- Picnic tables should be of heavy-duty construction with integral benches. The recommended minimum length is 8 feet, with longer tables in group sites. Tables in accessible sites should have extended ends and meet accessibility standards.
- An additional table for preparing food is an optional amenity that may be furnished at premium campsites.
- Pedestal grills should be located a minimum of 10 feet away and downwind of the picnic table, 5 feet from food preparation tables, and 5 feet horizontally from any vegetation and other fire hazards. They should be installed so that the cooking surface is not more than 34 inches above grade.
- For an accessible site, a pedestal grill should be between five and six feet away from the end of table. (This distance enables a person in a wheelchair to transfer hot pots from the grill to another surface without having to move the wheelchair). The grill should be within the edge of the living area with a 5-foot-wide clear space around all approachable sides.
- When a fire ring/grill is used, it should be located near a corner of the living area, downwind from the table, with a 5-foot-wide clear space around all sides to permit circulation and seating.
- Universal access fire rings and grills shall be used in designated accessible sites. Clear spaces around the grill and fire ring shall be surfaced with detectable warnings to alert a visually impaired person.
- Only compacted road base or gravel should be used under the fire ring and 12 inches beyond its edge; concrete should not be used because of the danger of extremely hot concrete exploding.
- Lantern poles should be provided at each campsite near the picnic table help to prevent lantern damage to trees and to reduce the risk of lanterns being dropped.
- Group campsite “kitchens” should include a large two- to three-compartment stainless steel sink with running water, a large masonry barbecue with adjustable grills, and extra preparation/serving tables.



**SIERRA CAMP RENOVATION**

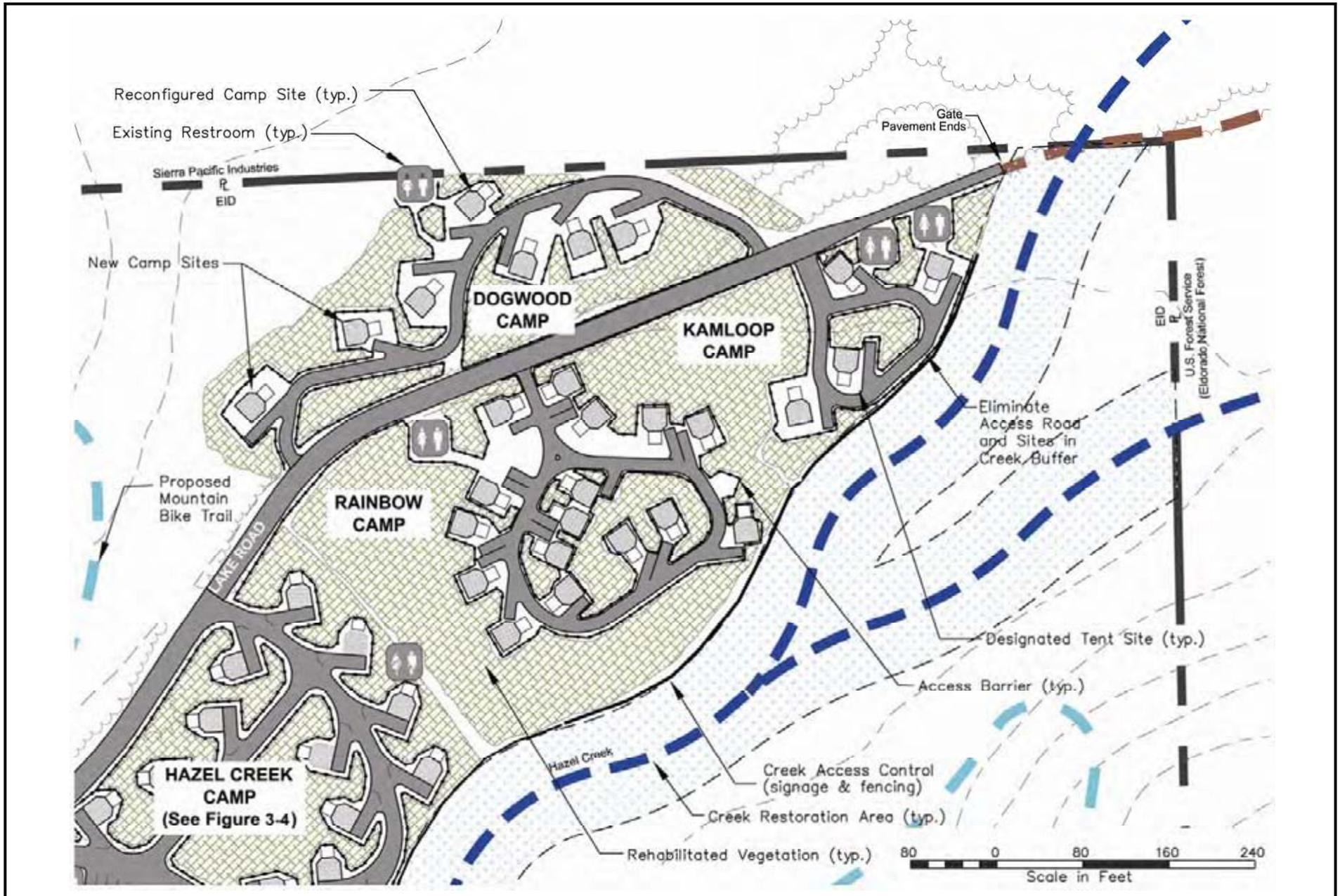




**HILLTOP CAMP RENOVATION - CAMP HOST SITE RENOVATION - CHIMNEY CAMP RENOVATION**

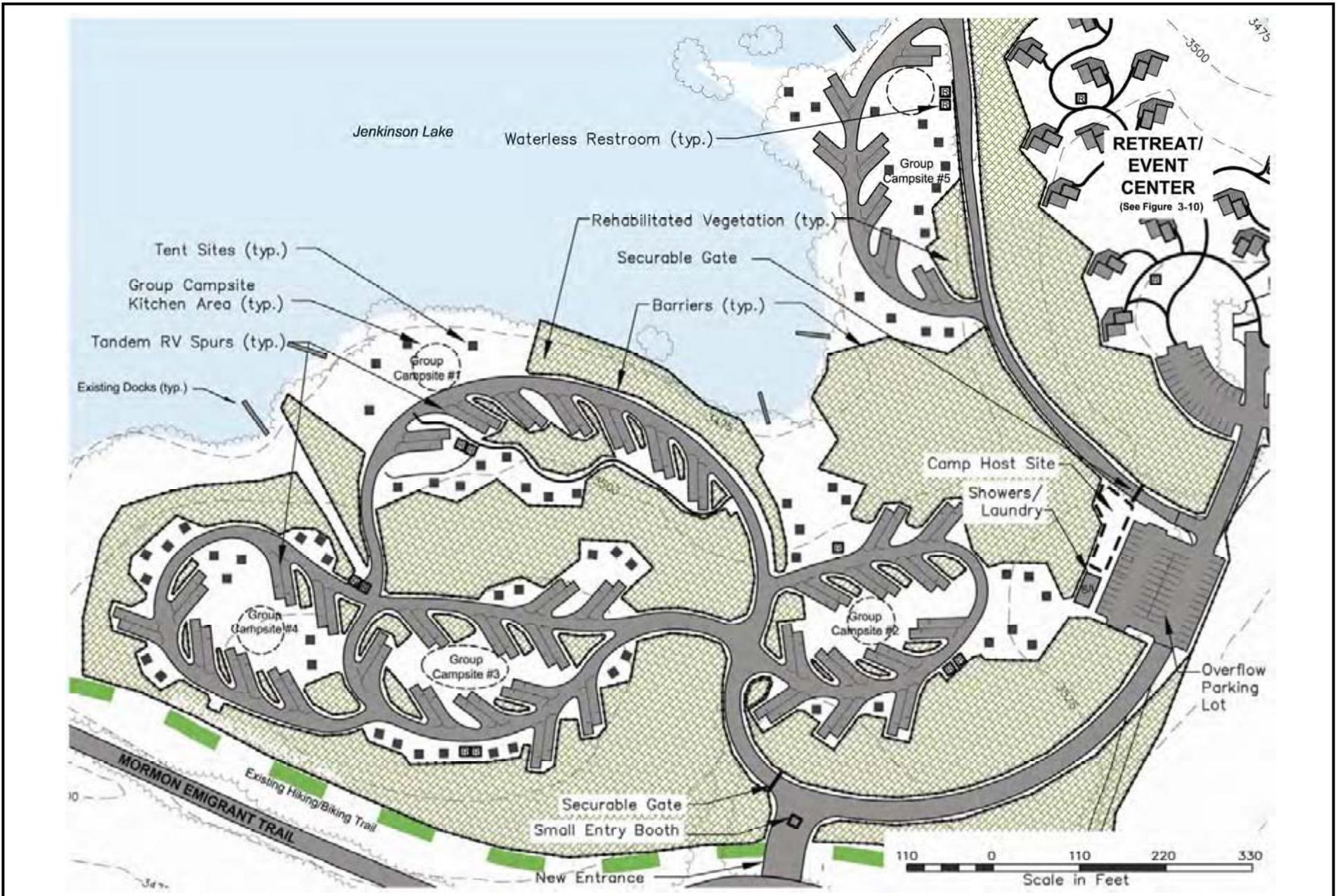






### DOGWOOD CAMP - RAINBOW/KAMLOOP GROUP CAMPS RENOVATIONS





**GROUP CAMPGROUND RENOVATION**



### **3.3.1.2 Scout/Youth Group Camp**

The Master Plan recommends improving the facilities on Scout Hill to support its continued use as a Scout/Youth group camp. Figure 3-7 illustrates the conceptual location of proposed improvements for the north area of the site. The location is isolated from other park users and is currently used several times a year by up to 360 campers. The intent of the proposed redesign is not to increase the capacity of the area but to better accommodate the existing level of use with less environmental impact and a higher quality recreation experience.

It is not anticipated that the development of the Scout/Youth Group Camp would add substantially more traffic to the U.S. 50 eastbound exit at Sly Park Road. However, in an effort to ensure that no adverse traffic impacts occur as a result of the Scout/Youth Group Camp, all events would be scheduled to avoid the peak hour traffic periods for Sly Park Road, Mormon Emigrant Trail, and the U.S. 50 and Sly Park Road interchange.

Access to the site would be via 1) the existing road, 2) a new trail from a new drop-off site that does not interfere with Lake Drive traffic, and 3) a second new drop-off location north of the site. The existing access road would be restricted to vehicular traffic except for park personnel or to deliver supplies or campers to Scout Hill. A new parking lot for up to 70 vehicles would be designated north of the site. Access and egress to the site would be improved by paving the existing road alignment. The west road would be widened to two lanes and the east road retained as one lane with one-way traffic going north to south. See Section 3.3.3 for Design Standards and Guidelines for these facilities.

The proposed improvements at Scout Hill include waterless or composting toilets, showers, fire rings, and pedestrian paths. Design Standards and Guidelines for these facilities are discussed above in Section 3.3.1.1. Potable water would also be brought to the site from the Lakewood Sierra area via a new water main in the existing road alignment, as discussed in Section 3.3.7.1. Approximately 35 yurts, 18 cabins, and 25 tent sites are proposed for construction at the Scout/Youth Group Camp and would be built following the Design Guidelines and Standards listed above in Section 3.3.1.1.

#### ***Amphitheaters***

Two amphitheaters are proposed for the Scout/Youth Group Camp. The proposed amphitheaters would consist of a central fire circle surrounded by rows of bench seating set in decomposed granite. The approximately 80-foot diameter rustic amphitheaters would be used for evening “campfire” programs. No amplified programs would be allowed. The following Design Standards and Guidelines would be implemented during the design and construction of the proposed facilities.

- Amphitheater construction should take advantage of natural topography to minimize cut and fill and reduce visual and noise impacts on adjacent property owners and other park visitors.
- Amphitheaters should be sited to minimize removal of trees and other native vegetation.

- No electronically amplified events shall be held in SPRA amphitheaters. Public address systems may be used briefly to introduce and conclude performances.
- Any lighting associated with the amphitheaters shall not cause a significant visual impact on adjacent property owners or detract from the camping experience of other park visitors.
- Permanent seating and stages at amphitheaters should be rustic in nature, consistent with the forest aesthetic of the park, have a low-maintenance requirement, and be able to withstand year-round exposure to the elements.

### ***Mess Hall/Tent***

Two mess hall/tents are proposed for the Scout/Youth Group Camp. The mess hall/tent would be approximately 75 feet by 40 feet in size with a total project footprint of approximately 100 feet by 60 feet. A tent-like mess hall could include a portable kitchen or partially-portable kitchen with picnic tables. The “dining” area could be used as an outdoor classroom or crafts area when not in use for meals. The following Design Standards and Guidelines would be implemented during the design and construction of the mess hall/tent facilities.

- Mess halls may be large tent-like structures or permanent buildings with solid or canvas walls.
- A trellised or covered outdoor dining area and picnic tables should be associated with the mess hall.
- A mess hall can include hot and cold potable water, a two- to three-compartment stainless steel sink, propane and/or wood fired oven or grill, food preparation/serving tables, refrigerated food storage, pantry space, and lockers for dishes and equipment.
- Disposal of mess hall grey water shall be accomplished with either on-site leach fields or by removal from the site to an appropriate disposal facility. Leach fields shall be sized and sited according to El Dorado County requirements.
- Proper food storage and trash disposal practices shall be used at all mess halls to secure the facility from intrusion and to protect wildlife.

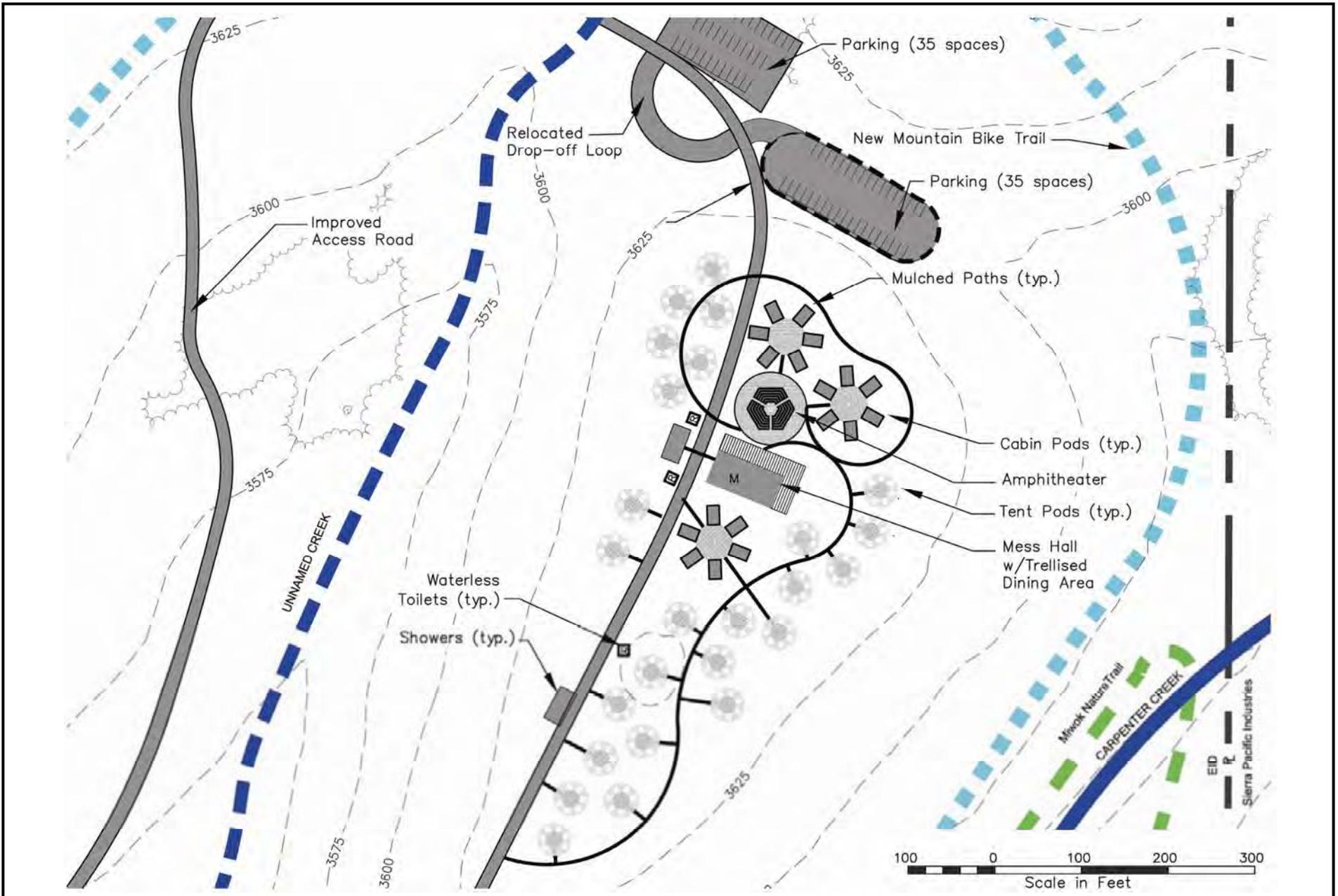
### **3.3.1.3 Primitive Camp**

Primitive campsites accessible only by trails (walk-in or ride-in) are proposed to be located on the peninsula between Hazel Creek and Sly Park Creek (Figure 3-8). The Master Plan suggests that the number of primitive campsites should be limited to ten, given the overall size of the park, and situated on flat areas a safe distance from dry scrub and forested areas for fire safety. Ongoing vegetation management of the area would be required to keep fuel load away from fire circles. Access for maintenance vehicles would be via the existing fire road once improvements are made to the Hazel Creek crossing. Facilities may include the following: (1) designated defined tent sites; (2) composting or waterless toilets; (3) picnic table; and (4) log benches.

The following additional Design Standards and Guidelines would be implemented during design and construction of the primitive camp.

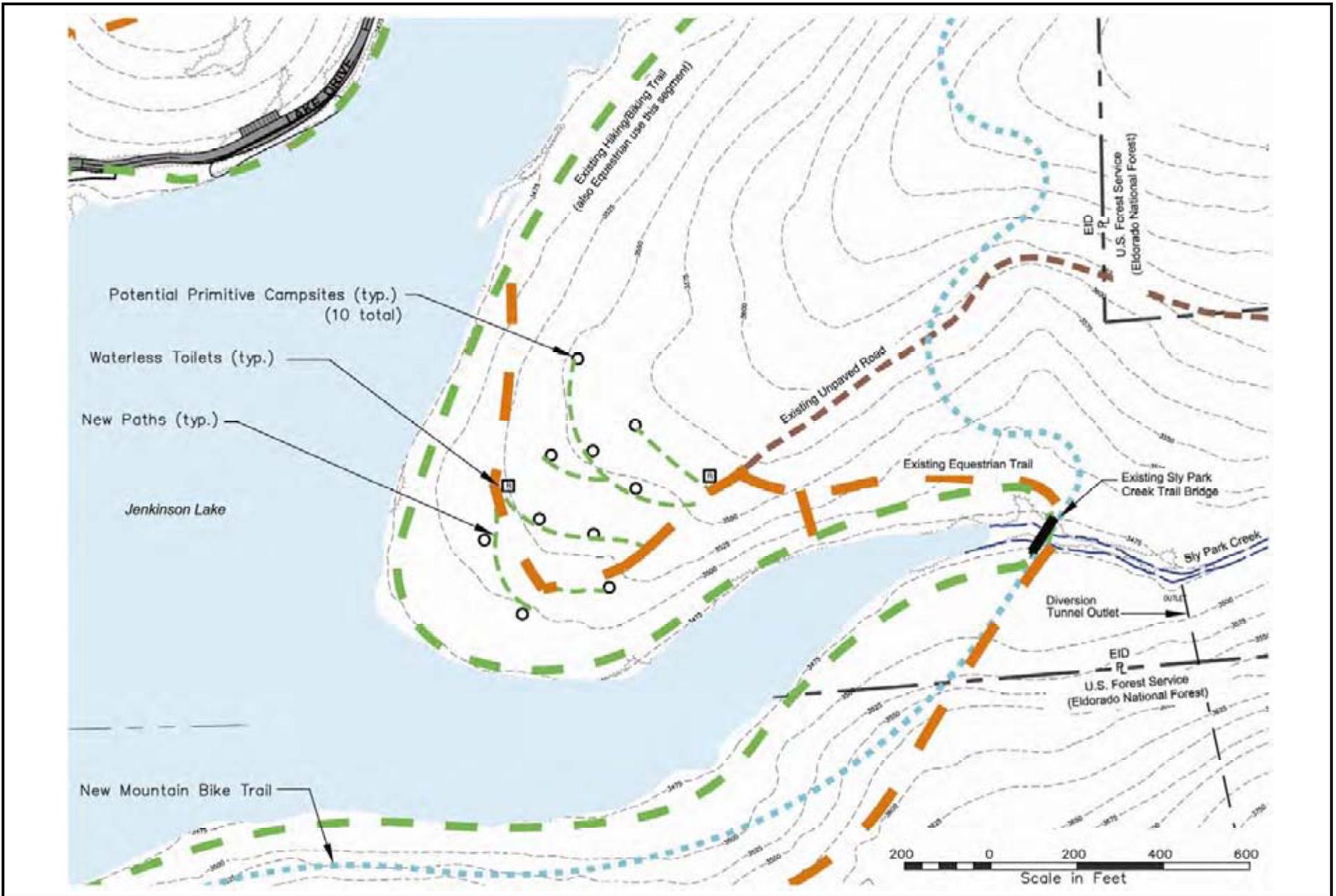
- Primitive campsites should be designed for walk-in access by small parties of one to six individuals.
- Primitive campsites should be at least 200 square feet and separated to the greatest extent possible within the area designated for this use. These sites should have a minimum separation distance of 40 to 50 feet for privacy and quiet.
- For a primitive campground, the water tap would be located at the trailhead leading to the campground.
- At primitive campsites, all trash should be carried out by the campers; a refuse container should be provided at the trailhead.

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**SCOUT/YOUTH GROUP CAMP - NORTH AREA**





**NEW PRIMITIVE CAMP AREA**



#### **3.3.1.4 Dog Park**

County Ordinance (9.12.070) currently requires that all dogs remain on a leash any time they are removed from an enclosed private area. The SPRA Master Plan proposes to provide a designated dog park to allow visitors to exercise their dogs off-leash in an effort to reduce the incidence of off-leash dogs in other areas of the park. The recommended location for the dog park is on the south shore in an area removed from most of the other campgrounds and accessible from Mormon Emigrant Trail (Figure 3-9). The Master Plan provides the following design direction.

- The facility should be divided into two separate enclosed areas, one each for small and large dogs.
- The approximate areas should be up to one-quarter acre and one-half acre in size respectively.
- Benches, potable water, and dog sanitary stations should be available in both areas.
- Parking for up to 12 cars and access from the Old Scaling Loop should also be provided (see Section 3.3.3.2 for parking area Design Standards and Guidelines).
- The dog park should be sited to avoid removing native trees greater than six inches DBH.

#### **3.3.1.5 Retreat/Events Center**

The SPRA family and group campgrounds are heavily used for family reunions and other group events, and additional capacity for such uses is needed. The existing Retreat House Complex would be expanded to serve as a multifunction facility for retreats, group meetings, small conferences, family events, and weddings (Figure 3-10). The proposed Retreat/Event Center would be specifically designed with these uses in mind, while the group campgrounds are primarily set up for camping uses.

There is sufficient area surrounding the complex, including the Flash Mountain area, on which up to 19 duplex cabins could be built to house conference attendees. Design and implementation of these cabins would be subject to the same Design Standards and Guidelines described above (see Section 3.3.1.1). An outdoor covered pavilion and lawn area would be developed east of the existing buildings and the parking expanded to allow parking for up to 75 vehicles (see Section 3.3.3.2 for parking area Design Standards and Guidelines). When available, the Girl Scout day camp would be relocated to the new Youth/Group Camp proposed for Scout Hill to take advantage of the larger space and improved facilities in that location.

The revenue potential from such a facility would be significant and would help off-set capital improvement and operations costs. The Retreat/Event Center would be reserved for multiple-day conferences, meetings, retreats, or one-day events. Depending on the size of the group, some events would be held in the “shoulder season” when visitation to SPRA is low. When the cabins are not being used for a conference, they would be rented individually on a first-come/first-serve basis.

The Retreat House Complex would be linked to the modular building with decking, which would provide access between the buildings for meetings and also provide handicap accessibility to the facilities. The existing shop and maintenance buildings would be used for classes taught as part of a seminar or workshop for programs such as arts, crafts, and a wood and/or metal shop. With the addition of air conditioning, they would also be used as additional classroom space. Composting or waterless toilets would also be provided.

It is not anticipated that the development of the Retreat/Events Center would add substantially more traffic to the U.S. 50 eastbound exit at Sly Park Road. However, in an effort to ensure that no adverse traffic impacts occur as a result of the Retreat/Event Center, all events would be scheduled to avoid the peak hour traffic periods for Sly Park Road, Mormon Emigrant Trail, and the U.S. 50 and Sly Park Road interchange.

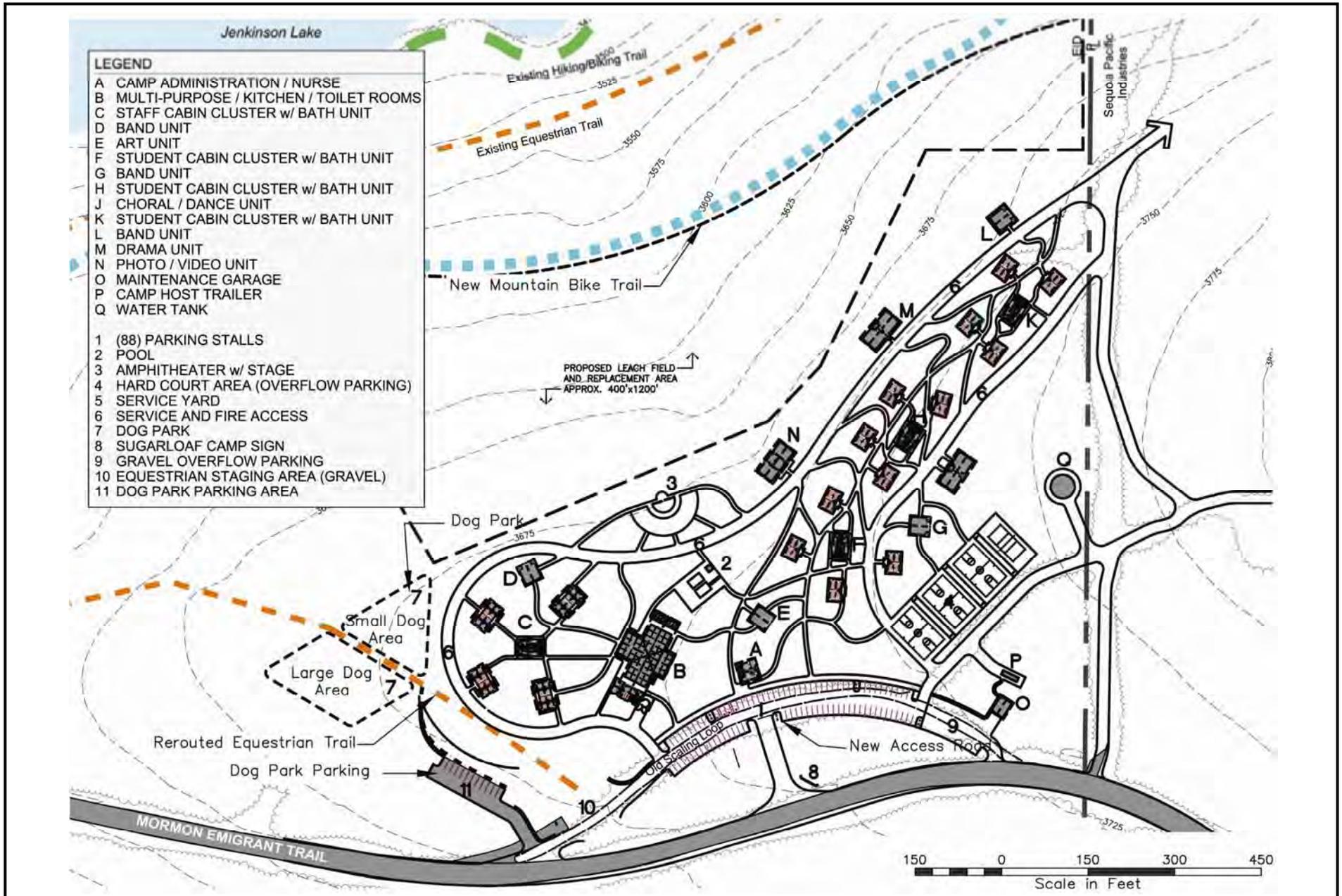
### **3.3.1.6 Black Oak Equestrian Camp**

Black Oak Equestrian campground receives very heavy use and suffers from similar impacts as those described for the family and group campgrounds. The campground would be reconfigured to provide better definition of the campsites, parking areas, and circulation (Figure 3-11). A number of undesignated pull-throughs have been created within the campground over time, and these would be eliminated as part of the reconfiguration. Vegetation rehabilitation is needed in these locations and the areas between sites. Recommended improvements include:

- Adjust access road alignment to reduce radius of curve located at the north end of the campground and chip and seal road surface (see Section 3.3.3.2 for road Design Standards and Guidelines).
- Designate and surface parking spaces for each site (see Section 3.3.3.2 for parking area Design Standards and Guidelines).
- Construct low retaining walls as needed to create level sites and prevent erosion.
- Define campsite boundaries (see Section 3.3.1.1 for campsite Design Standards and Guidelines).
- Rehabilitate vegetation (see Section 3.3.4.3 Vegetation Restoration for discussion).
- Fence bedding/manure dump area.
- Define and contain trail to the main corral (see Section 3.3.3.4 Trails for discussion).
- Add a secure self-service fee collection station.

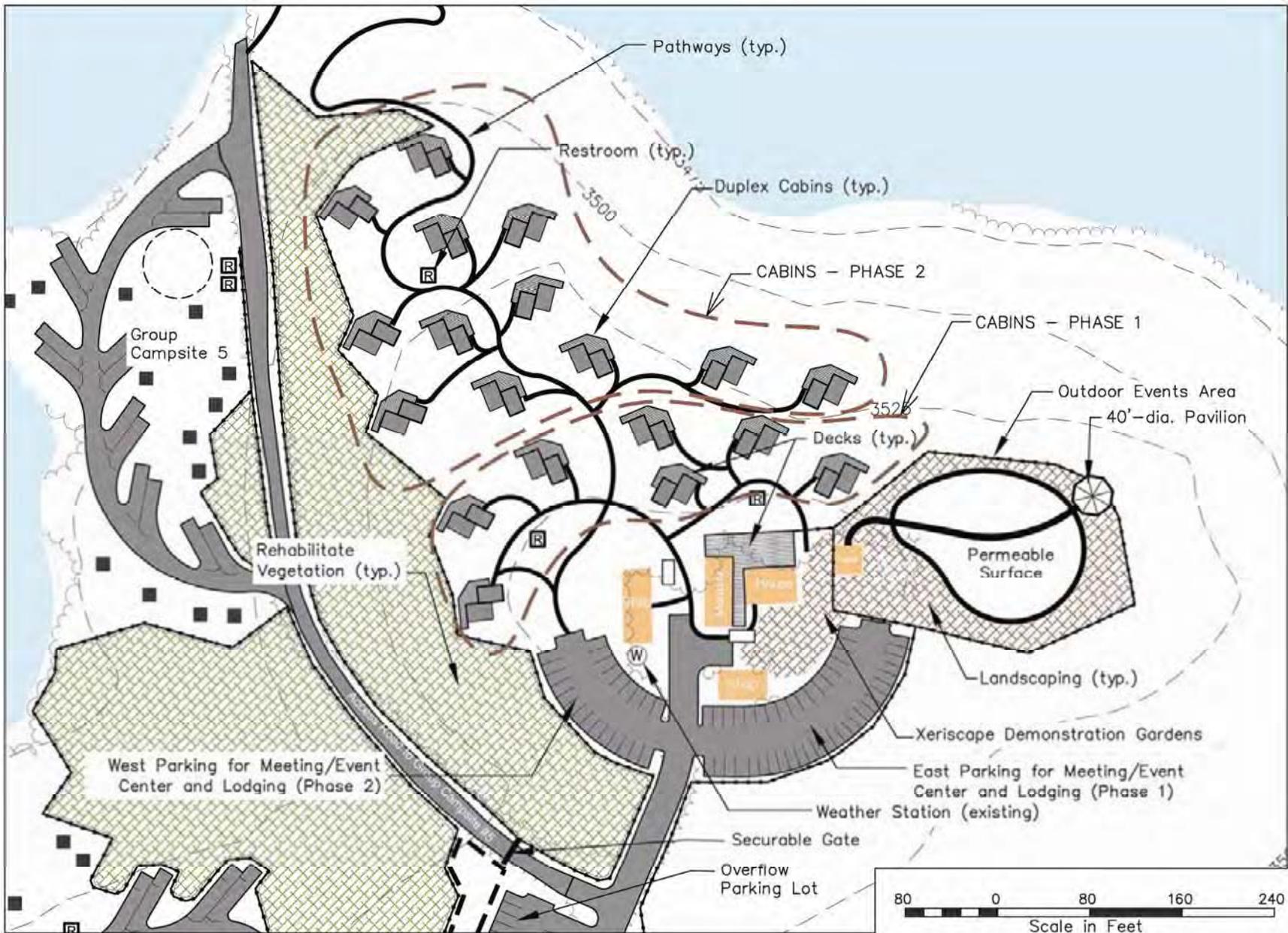
### **3.3.1.7 Stonebraker Boat Rentals**

A variety of small non-motorized and motorized boats are currently available to rent on a first-come, first served basis from May through September at the facility adjacent to the Stonebraker boat ramp. Figure 3-1 provides the location of the Stonebraker boat ramp and rentals. Additional rentals would be accommodated with an expansion of the existing floating dock. Additional parking would not be needed because many of the renters walk to the existing boat rental facility from the nearby campgrounds.



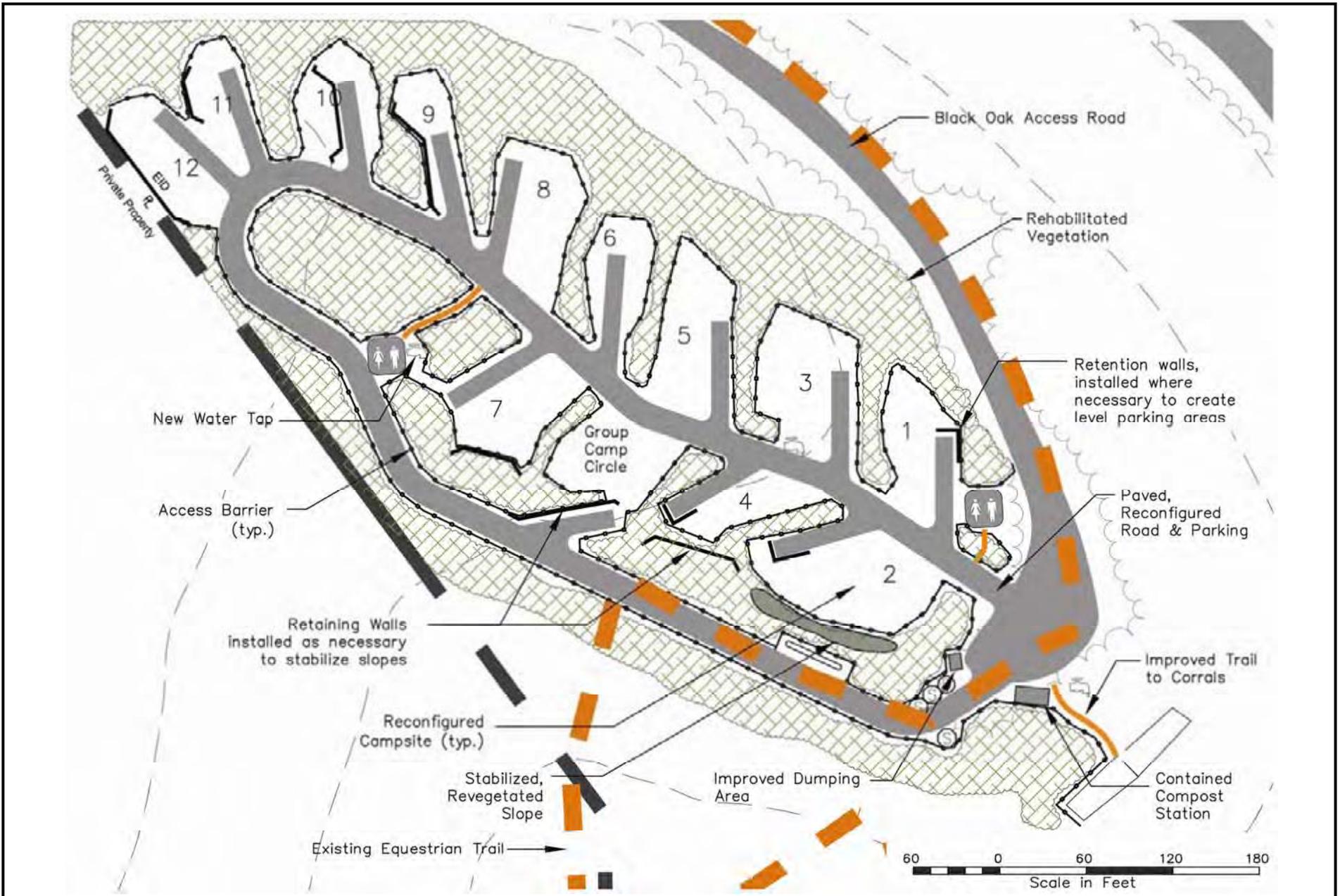
**SUGARLOAF FINE ARTS CENTER AND DOG PARK**





**RETREAT/EVENT CENTER & CABINS**





**BLACK OAK EQUESTRIAN CAMPGROUND**



### **3.3.2 Educational Elements**

The SPRA Master Plan proposes several improvements aimed at enhancing the educational opportunities at the park, including a Visitor Center, the Sugarloaf Fine Arts Camp, interpretive displays, and interpretive and educational programs. A summary of the SPRA Master Plan projects proposed as part of the Education Element is included in Table 3-2.

#### **3.3.2.1 Visitor Center**

A new Visitor Center is proposed that would provide displays and information to teach visitors about SPRA's resources and help them understand how to use SPRA in a manner that preserves those resources. Interpretive topics could feature water supply, treatment, and conservation; natural history; environmental stewardship; and regional history. The proposed location for the Visitor Center is at the SPRA entrance, which would allow people to access the center without needing to enter the park proper (Figure 3-12). The facility could include display areas, SPRA administrative staff offices and storage, restrooms, telephones, parking and access for school buses, and an observation deck. The proposed facility could also include a small gift shop that could generate additional revenue through the sale of environmental and cultural education materials and souvenirs such as trail maps, field guides, and books on local history.

One small existing building currently used for park offices would be replaced by the new facility. The proposed facility would be approximately 94 feet by 60 feet in size.

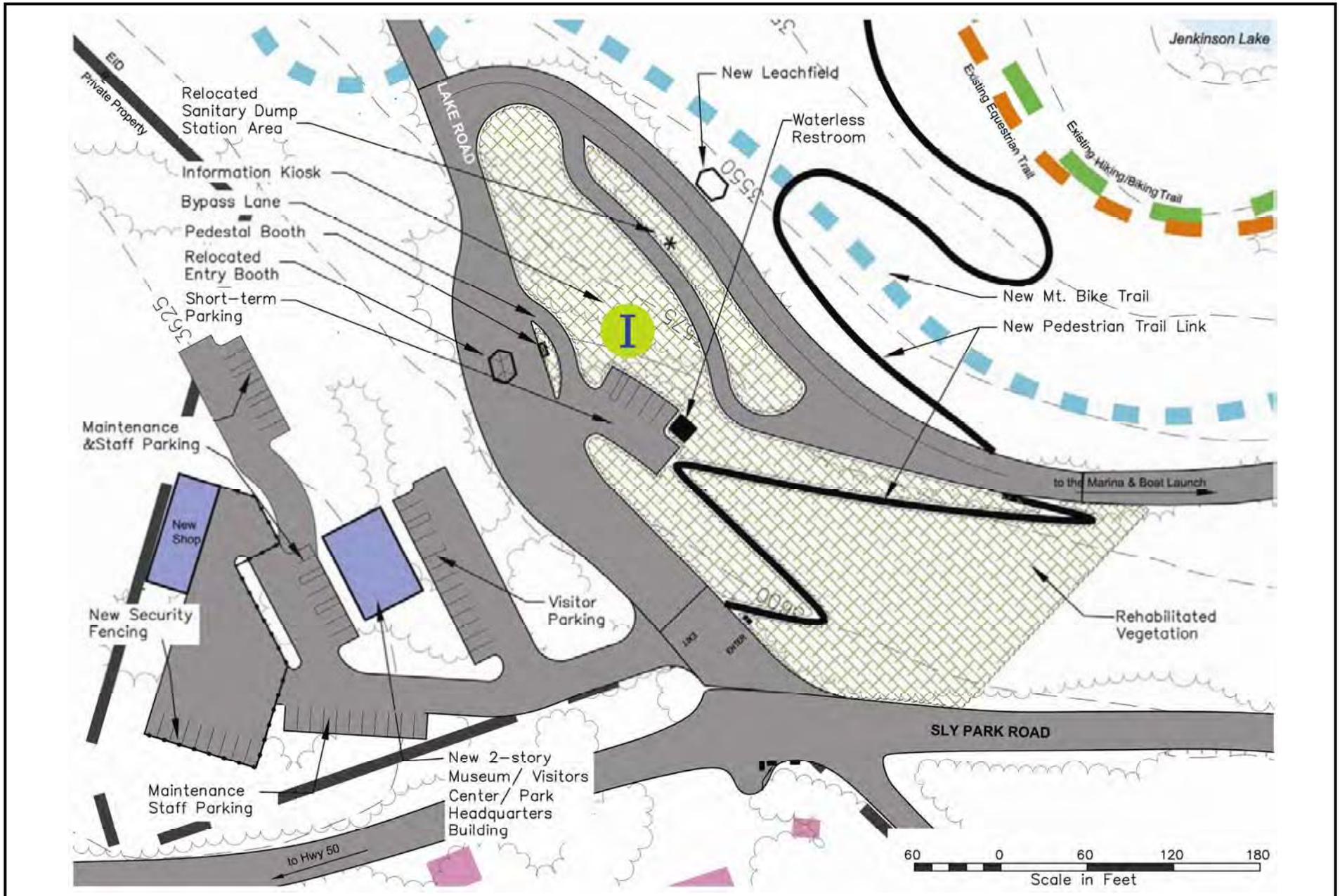
#### **3.3.2.2 Sugarloaf Fine Arts Camp**

The Sugarloaf Fine Arts Camp program has operated in El Dorado County for more than 40 years. The program provides youth the opportunity to explore and pursue their interests and talents in the arts in two one-week sessions held in July. An extensive arts curriculum is offered including fine art, drama, three levels of band, jazz band, guitar, black and white photography, slide shows, video technology, dance, crafts, and chorus. The camp is currently held at the Sly Park Environmental Education Center, located two miles west of SPRA at facilities that are not adequate for the camp's activities and number of participants.

In May 2004, the Sugarloaf Station Foundation (SSF), partnering with the El Dorado County Office of Education (EDCOE), presented information to the EID Board of Directors about their desire to create a permanent home for the camp at SPRA through the mechanism of a long-term lease agreement. It is the intent of the SSF and EDCOE to host other programs, in cooperation with the El Dorado Community Foundation and other non-profit county organizations, such as educational programs and retreats for El Dorado County schools; heritage camps for adopted children and their families; camps for the disabled; camps for survivors of serious illnesses; sports and band camps; and camps for Boys and Girls clubs.

The primary role of the EDCOE would be to provide ongoing administration and maintenance for the facility and to employ camp staff. The SSF would, in addition to leasing the land, provide leadership for development of the facility. In return for supplying a long-term land lease, EID would have priority scheduling opportunities for use of the facilities after Sugarloaf.

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**MAIN PARK ENTRANCE - PARK HEADQUARTERS/MUSEUM VISITORS CENTER - MAINTENANCE FACILITIES**

**Table 3-2 — Proposed Projects Identified under the Sly Park Recreation Area Master Plan Education Element**

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
1	Main Park Entrance	1.06	Informational Kiosk	Install informational kiosk with changeable display panels and roof.	2	A
		1.07	New Visitor Center and Headquarters	Add 2-story Visitor/Headquarters building approx. 94'- X 60') with visitor parking to replace 2 existing buildings.	4	B
3	Miwok Trailhead	3.04	Interpretive and Trail Signage	Install interpretive panels at trailhead parking and trail control signage at convergence of pedestrian, bike, and equestrian trails east and west of parking area.	2	A
7	Stonebraker Camp	7.05	Trailhead Signage	Provide directional and interpretive signage at trailhead.	2	A
12	Hazel Creek Camp	12.10	Informational and Interpretive Kiosk	Add kiosk structure or panel signage at trailhead to provide park information and interpretation of natural resources.	2	A
17	Sugarloaf Fine Arts Camp	17.01	Full Implementation	Open classroom structures, cabins/yurts for staff and campers, showers, rest rooms, enclosed classroom, multi-purpose building, maintenance building, RV camp host site, water tank, AC paved lot for 150 Vehicles, 20'-0" AC fire access road, service yard, amphitheater/fire pit, pool complex, basketball and volleyball courts, walkways.	4	B
19	Bumpy Meadow Trailhead	19.05	Kiosk	Install interpretive kiosk with roof.	1	A

Notes:

Phase: 1 – Proposed 3-Year Improvement Plan; 2 – Proposed 5-Year Improvement Plan;

3 – Proposed 10-Year Improvement Plan; 4 – Proposed Greater than 10-Year Improvement Plan

Priority: A – Highest priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

B – Lower priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

The proposed design of the facility would accommodate up to 300 visitors at a time (Figure 3-9). This use level is consistent with the level of use the camp is already experiencing at its current location, and it is not anticipated that the relocation of use to SPRA would add more traffic to the Highway 50 eastbound exit at Sly Park Road. In an effort to ensure that no adverse traffic impacts occur as a result of the Sugarloaf Fine Arts Camp, all events would be scheduled to avoid the peak hour traffic periods for Sly Park Road, Mormon Emigrant Trail, and the U.S. 50 and Sly Park Road interchange.

The camp would be used for similar activities as those conducted at the Sly Park Environmental Education Center. Outdoor performances and concerts would be held with restrictions on noise levels and timing to minimize impacts to other campers in the park and adjoining private residences. The site and building program proposes the development of the following facilities:

- Six open classroom structures with storage and water
- Enclosed video/photography classroom
- Multi-purpose building with restrooms and kitchen facilities
- Amphitheater and stage
- Camp administration/nurse's office
- Staff cabin cluster with shower and toilet unit
- Three student cabin clusters with showers and toilet units
- Pool, shade structure, equipment building, and surrounding deck
- Three basketball courts
- Volleyball court (permeable surface)
- Maintenance garage
- RV site for camp host
- Large-capacity water storage tank
- Asphaltic concrete (AC) paved lot for 88 vehicles
- Service yard
- AC paved, 20-foot-wide service and fire access road
- Four-foot-wide walkways (permeable surface)
- Gravel overflow parking
- Equestrian staging area (gravel)
- Sugarloaf Fine Arts Camp sign

### **3.3.2.3 Interpretive Displays**

Displays that describe SPRA's natural, historical, cultural, and water resources are proposed for the Main Park Entrance, Stonebraker Trailhead, Hazel Creek Trailhead, Miwok Trailhead, and

Bumpy Meadows Trailhead. These displays include covered kiosks and/or signs explaining the resources in the area as well as rules about trail and campground use. Contents of the displays may be changed periodically if the display covers can be opened and locked.

The SPRA Master Plan also suggests that interpretive signage should be installed along the various park trails where unique or interesting resources are visible. The design of all interpretive displays and signage is to be compatible with the character of the park and suitable for the park's winter/summer climate extremes

### **3.3.2.4 Interpretive and Educational Programs**

Interpretive programs would be provided at SPRA throughout the year to enhance the visitor experience and foster a sense of resource stewardship. A variety of formats would be used including ranger-guided walks, campfire programs, living history programs, speakers, slide-shows, demonstrations, and workshops. The SPRA internet web site would also be expanded to include interpretive information that visitors can preview to learn more about the park's resources before arriving. Topics for interpretation are diverse, and include environmental resources, water quality, cultural and historical resources, and watershed management. Other educational programs might include visitor safety and techniques for camping, hiking, and boating.

Programs may be conducted by EID staff or in partnership with other interested agencies or groups. For example, Pacific Gas & Electric (PG&E), Sacramento Municipal Utility District (SMUD), and Sierra Pacific Industries (SPI) might partner with EID to provide a high-quality watershed education program. Local organizations and special interest groups may also want to volunteer program coordination and/or sponsorship. Potential educational partners are numerous and include the Boy Scouts or Girl Scouts; the various federal and state resource agencies; local schools; regional universities; fishing, boating, and mountain bike clubs; and local tribes.

Programs scheduled for prime season weekends would be oriented mainly for SPRA camping or day use visitors. Some programs, such as field trips for local school children, could be scheduled for mid-week or off-season times and opened to the public because traffic and parking are not problematic at these times.

### **3.3.3 Access Element**

The SPRA Master Plan proposes various improvements to better manage access to the park and its facilities so that visitors can enjoy a safe, high-quality recreation experience. The proposed projects include improvements to roads and vehicle circulation, parking, trails, and trailheads. A summary of the SPRA Master Plan projects proposed as part of the Access Element is included in Table 3-4.

#### **3.3.3.1 Roads and Vehicle Circulation**

The proposed changes to SPRA roads and circulation include a reconfiguration of the Main Park Entrance and improvements to Lake Drive and various campground access roads. All development and redevelopment affecting SPRA roads would be in accordance with the following Design Standards and Guidelines to facilitate traffic and ensure public safety. Recommended road widths and surfaces for the three general types of roads at SPRA are

included in Table 3-3. These are 1) major access roads such as Lake Drive, the main road that connects the park entry with other facilities; 2) collector roads that connect the main road to campgrounds, service or administrative areas, trailer dump stations, or other site amenities such as boat launching ramps; and 3) campground access roads that provide internal circulation to individual campsites.

- Adjustments to alignments or siting for new roads should be planned carefully to preserve major trees and clumps of vegetation, while considering safety factors such as visibility.
- Slope should be no greater than 15 percent to accommodate emergency access vehicles and travel in winter conditions.
- All roads should be signed for speed limits, intersections, and trail/pedestrian crossings.
- Circulation should be designed to minimize use of campground roads to access day use facilities.
- Where two-way road widths do not meet guidelines, pull-out areas should be designated to allow passing for large vehicles.
- When road improvements require surface water flow to pass under the road, culverts shall be properly sized and armored to prevent washouts and undercutting.
- Vehicular access should be controlled and natural needle and leaf mulching maintained on lesser used, unpaved roads to minimize erosion and protect road surface.
- When speed bumps are installed on paved roads within campground areas, they should be angled to divert surface runoff into areas with sediment filtration capacity.

**Table 3-3 — Road Design Guidelines**

	<b>Major Access</b>	<b>Connector</b>	<b>Campground Access</b>
<b>Road Width</b>	24 feet	12 feet	10 feet
<b>Road Surface</b>	Asphalt	Chip/seal, pervious geo-block w/gravel, or asphalt	Chip/seal, pervious geo-block w/gravel, or asphalt
<b>Shoulder Width</b>	2 feet	1 foot	1 foot
<b>Shoulder Surface</b>	Compacted gravel or better	Compacted gravel or better	Compacted gravel or better
<b>Traffic Flow</b>	2-way	1- or 2-way	1-way loop

Source: Foothill Associates, 2005.

### **Main Park Entrance**

Traffic congestion at the Main Park Entrance on summer weekends causes delays in park admission and can affect travel on Sly Park Road as well as the U.S. 50 eastbound exit to Sly Park Road. The proposed reconfiguration of the entrance (Figure 3-12) includes widening the entrance road to incorporate the existing dump station and adding a bypass lane, short-term

parking, and directional signage. The entrance booth would be relocated to allow a longer stacking distance between the booth and the Sly Park Road intersection. The portable restroom would also be relocated along with these changes. The existing dump station would be removed from the main existing travel lane. The existing dirt road southeast of Lake Drive intersection would be paved to a width of 24-feet and striped for 2-way travel. A 12-foot bypass lane, new dump station, and leach field would be added.

The following Design Standards and Guidelines would be implemented for the proposed modifications to the Main Entrance, as well as any other modifications to campgrounds that affect campground entrances. (See Section 3.3.1 for descriptions of proposed recreation element improvements that would be subject to these Design Standards and Guidelines).

- Park and campground entrances should be distinct and easy to identify from a distance of at least 500 feet.
- Traffic control signage shall be posted as needed to direct ingress/egress and to warn approaching traffic of the potential for pedestrians or slowing traffic.
- Vegetation shall be managed to maintain visibility of vehicles, pedestrians, and signage.

### **Lake Drive Improvements**

Improvements to Lake Drive such as signage, increased width, and resurfacing are needed at various points from the entrance to the road's end to allow safe passing of larger RVs and vehicles towing boat trailers. Where topography permits, the road would be widened to two-lanes to allow passing. At a minimum, designated pull-outs would be created at locations where vehicles are routinely pulling off the road already to allow for passing. Barriers would be placed along shoulders to prohibit parking so that parked vehicles do not interfere with road traffic. Resurfacing is needed in some areas to prevent erosion and damage to vehicles.

A comprehensive Lake Drive Improvement Plan would be developed to identify specific areas needing improvements and the priorities for implementation. This plan would be developed in coordination with an Emergency Preparedness Plan as described in Section 3.3.6.2 of this Draft Master EIR.

### **Campground Access Roads**

Many of the campground access roads need improvements to make them safer, more passable, and to clearly demarcate the travel lane. At a minimum, all campground access roads would have a chipped and sealed surface, directional signage, and signage clearly identifying the campground and individual site numbers. Improvements would minimize impacts to healthy native trees greater than 6 inches DBH and retain and/or stabilize cut and fill slopes as necessary, per the Master Plan Design Standards and Guidelines. Access road improvements are proposed for the following areas: Scout/Youth Group Camp, Jenkinson Camp, Sierra Camp, Stonebraker Camp, Hilltop Camp, Chimney/Hilltop Host Site, Hazel Creek Camp, Dogwood Camp, Main Group Campground, and the Black Oak Equestrian Camp. Access road improvements recommended for specific campgrounds are described in Table 3-4.

**Table 3-4 — Proposed Projects Identified under the Sly Park Recreation Area Master Plan Access Element**

Project ID	Project Name	Component ID	Project Component	Component Description	Phase	Component Priority
1	Main Park Entrance	1.01	Reconfigure Main Entry	Move existing booth, remove existing dump station, widen road to incorporate existing dump station, add bypass lane, new pedestal booth, short-term parking and directional signage, and relocate portable restroom.	2	A
		1.02	Relocate Dump Station	Pave existing dirt road to 24' and stripe for 2-way travel, add 12' bypass lane, new dump station and leach field.	2	A
		1.03	Pedestrian Trail Link	Replace existing informal trail with 3' wide unpaved (DG) pedestrian trail from Lake Drive entry to connect with existing pedestrian trail (approx. 1,020 feet) with crosswalks and signage at roads. Route trail to minimize grade, erosion and impacts to trees >6" DBH. Trail will not be designed for ADA access.	2	A
2	Scout/Youth Group Camp	2.01	Improve Access Loop Road	Regrade and pave existing alignment (2 lanes from Lake Drive north to new drop off area at top, 1 lane east of drop off to Lake Drive). Use existing unpaved alignment. Sign for 2-way traffic on west and 1-way traffic from north to south on east.	1	A
		2.02	Move North Drop Off and Add Parking Lots	Construct paved one-way, 10' wide drop-off loop approx. 300' long, southwest of main and summit access road intersection, and 2 parking lots approx. 225' x 75' each, one in existing drop-off location and one southeast of main and summit access road intersection.	2	A
		2.03	Realign/Improve North Summit Access Road	Shift north summit access road to east 0'-75', widen to standard 20' and surface, add turnaround/drop-off loop.	2	A
		2.04	Realign/Improve South Summit Access Road	Widen to standard 20' and surface, add turnaround/drop-off loop, and use existing alignment.	4	B

Project ID	Project Name	Component ID	Project Component	Component Description	Phase	Component Priority
		2.05	Pedestrian Trail Connection to Lake Drive	Add 3' wide DG pedestrian trail to connect end of South Summit access road with existing loop access road. Trail will not be ADA compliant.	4	B
		2.06	South Drop-off and Pedestrian Access Trail	Add one-way drop-off loop (approx. 175') to east of access road and pedestrian trail (4' wide, DG) to connect to end of South Summit Access Road. Trail will combine switchbacks and steps, will not be ADA compliant, and will use new bridge (2.20) to cross creek.	4	B
3	Miwok Trailhead	3.01	Expanded Trailhead Parking Area	Demolish existing museum structure and expand existing parking into existing equipment staging area to accommodate 4 vehicles. Designate 3 parking spaces in existing parking area south of Lake Drive.	2	A
		3.02	Access Control Bollards	Remove existing gate at end of loop road and replace with bollards to permit pedestrian and bicycle access.	2	A
		3.03	Pedestrian Road Crossing	Stripe and sign pedestrian road crossing at intersection of Lake Drive and loop road.	2	A
4	Pine Cone Camp	4.01	Day Use Parking	Reconfigure existing day use parking for 15 spaces.	1	A
		4.02	Parallel Parking	Establish up to 9 parallel parking bays (approx. 80' each) at intervals along land side of shoreline road by cutting and retaining slope. See Section 3.3.3.3 of this Draft Master EIR for a discussion of Parking Areas.	2	A
5	Jenkinson Camp	5.01	Improve Road to Cabin Site	Pave existing dirt road to 10' (one-way travel) connecting Jenkinson Camp with Stonebraker.	3	A
6	Sierra Camp	6.01	Additional Day Use Parking	Add designated day use parking areas on either side of existing road, including 2 ADA compliant spaces.	2	A
		6.02	Realign West Entry and Loop Road	Align west entry with Jenkinson Camp west entry and shift loop road away from shoreline.	2	A
		6.03	Reconfigure East Entry	Align east entry with Jenkinson Camp east entry.	2	A

Project ID	Project Name	Component ID	Project Component	Component Description	Phase	Component Priority
		6.07	Shower/laundry Parking Lot	Add parking for 8 vehicles at shower/laundry facility north of Lake Drive.	2	A
7	Stonebraker Camp	7.01	Replace Lake Access Trail	Reroute and existing lake access trail from end of parking lot to reduce erosion and gradient. Trail will not be ADA compliant.	1	A
		7.02	Improve Entry	Widen entry to improve ingress/egress visibility and turn radius.	2	A
8	Hilltop Camp	8.01	Resurface Road	Resurface existing road (approx. 3,100 ft. by 15' wide).	3	A
		8.02	Directional Signage	Install signage to direct traffic to right of entry island.	3	A
9	Chimney/Hilltop Host Site	9.01	Realign Road Curve	Reduce road curve radius to improve travel safety.	1	A
10	Chimney Camp	10.01	Reconfigure Day Use Parking	Improve and designate 10 spaces at existing day use parking area.	1	A
11	Lake Drive Stabilization	11.02	Add New Day Use Parking	Extend cut into bank to add head-in day use parking area. Revegetate and use bioengineering techniques to stabilize cut face. Minimize cut. <i>Note: This project was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i>	1	A
12	Hazel Creek Camp	12.02	Improve Loop Road	Regrade and surface loop road as needed to uniform 12' width.	2	A
		12.03	Day Use and Trailhead Parking	Add new day use and trailhead parking area (approx. 18 spaces w/4 ADA compliant).	2	A
		12.04	Relocate Pedestrian/Bike and Equestrian Trails	Shift trail alignments to north and out of meadow. Add hitching posts.	2	A
13	Dogwood Camp	13.03	Add New Access Road	Add approx. 250' of new access road (10' wide) west of existing sites and roughly parallel to Lake Drive.	3	A

Project ID	Project Name	Component ID	Project Component	Component Description	Phase	Component Priority
16	Primitive Camp Area	16.01	Access Trails	Create and sign access trails to designated sites limiting impacts to trees >6" DBH and minimizing erosion. See Section 3.3.3.7 of this Draft Master EIR for a discussion of trail development guidelines.	3	B
18	Dog Park	18.01	Dog Park Access and Parking	Provide parking for up to 12 vehicles along existing road and designate trail from end of road to dog park.	2	B
19	Bumpy Meadows Trailhead	19.01	Access road and parking lot	Install paved access road and parking lot for up to 18 vehicles.	1	A
		19.02	Rest Room	Install waterless rest room	1	A
		19.03	Day Use Area	Establish day use area approx. 50' x 50' with picnic tables.	1	A
		19.04	Self-serve Fee Station	Install a secure fee collection station for first-come, first-serve visitors to pay fees at the parking area without having to go to the Main Entrance. Include signage at parking entrance explaining procedure.	1	A
20	Retreat and Event Center	20.01	Event Center Parking Lot - East	Build approx. 45 parking spaces with 6 ADA compliant spaces.	2	A
		20.02	Event Center Parking Lot - West	Expand parking to west to accommodate another 30 parking spaces.	3	B
21	Main Group Campground	21.03	Shower/Laundry Facility Parking	Build parking for approximately 30 vehicles at shower/laundry facility. Lot will provide some overflow capacity for Event Center.	2	A
		21.04	Group Site #1 Access Road and Parking	Complete loop road and designate back-in parking bays suitable for RVs. Retain cut slopes as necessary and minimize impacts to trees > 6" DBH.	2	A
		21.05	Group Site #5 Access Road and Parking	Pave loop road and designate back-in parking bays suitable for RVs. Balance cut/fill as much as possible and spoil excess cut from Site #1 as possible. Retain cut/fill slopes as necessary and minimize impacts to trees > 6" DBH.	2	A

Project ID	Project Name	Component ID	Project Component	Component Description	Phase	Component Priority
		21.08	Group Site #2 Access Road and Parking	Pave loop road and designate back-in parking bays suitable for RVs. Balance cut/fill as much as possible and spoil excess cut from Site #1 as possible. Retain cut/fill slopes as necessary and minimize impacts to trees > 6" DBH.	3	A
		21.11	Group Site #3 and #4 Access Road and Parking	Chip and seal loop road for Site #4 and designate back-in parking bays suitable for RVs for both Sites #3 and #4. Balance cut/fill as much as possible and spoil excess cut from Site #1 as possible. Retain cut/fill slopes as necessary and minimize impacts to trees > 6" DBH.	3	A
22	Mountain Bike Trail	22.01	Mountain Bike Trail	Designate new 4' wide unpaved mountain bike trail alignment around Park (approx. distance 10 miles). Secure special use permits as required for crossing USFS land. Sign trail for safety and all crossings. Avoid creating erosion opportunities and impacts to trees >6" DBH. All creek crossings to be bridged.	2	A
23	Black Oak Equestrian Camp	23.02	Realign Access Road	Improve alignment and reduce sharp bend in access road. Chip and seal surface.	2	A
		23.05	Define Trail to Corral	Define and contain trail to corral to keep campers on path.	2	A
24	Marina Parking Expansion	24.01	Parking Lot	Add new parking area.	1	A
		24.02	Rest Rooms	Add new rest rooms.	1	A
25	Lake Drive Access Improvements	25.01	Access Improvements	Develop comprehensive Lake Drive Improvement Plan to identify strategy to install traffic control signage, increase width, create pull-outs, and resurface where needed to improve safety and accessibility.	1	B

Notes:

Phase: 1 – Proposed 3-Year Improvement Plan; 2 – Proposed 5-Year Improvement Plan;

3 – Proposed 10-Year Improvement Plan; 4 – Proposed Greater than 10-Year Improvement Plan

Priority: A – Highest priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

B – Lower priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

### **3.3.3.2 Parking**

Additional parking is recommended in the SPRA Master Plan for the Marina, several day use areas, and within specific campgrounds beyond parking associated with individual sites. Parking Design Standards and Guidelines would include the following.

- All paved parking spaces should be delineated with 2- to 3-inch-wide white lines painted on the surface between the spaces. This will help to more efficiently use available space, thereby maximizing the number of vehicles that can be accommodated.
- Drive aisles should be 24 feet wide for two-way traffic and 12 feet wide for one-way traffic.
- Parking areas should be defined with split-rail fencing, boulders, post and cable, or large diameter logs to “contain” vehicles in designated areas.
- Large trees in and around parking areas should be saved to break up paved areas and to provide shade and screening. Where trees are to be saved, parking surfaces shall not be located where they adversely affect tree health.
- All head-in parking spaces shall be a minimum of 9 feet wide by 18 feet long.
- Parallel parking spaces shall be a minimum of 9 feet wide by 20 feet long.
- Handicap spaces shall comply with ADA/Title 24 standards for placement, dimensions, and signage.
- Bumper or wheel stops should be used to define the front edge of the spaces.
- Parking spaces should at a minimum be surfaced with compacted gravel. Permeable materials are preferred but asphalt may be used where needed for durability and to reduce dust.
- The ratio of parking spaces to campsites in each campground should be at least 1.5:1 with at least one parking space clearly designated for each campground.
- Unless an internal campground road is at least 22 feet wide, no on-road parking should be permitted.

### **Marina Boat Trailer Parking Area**

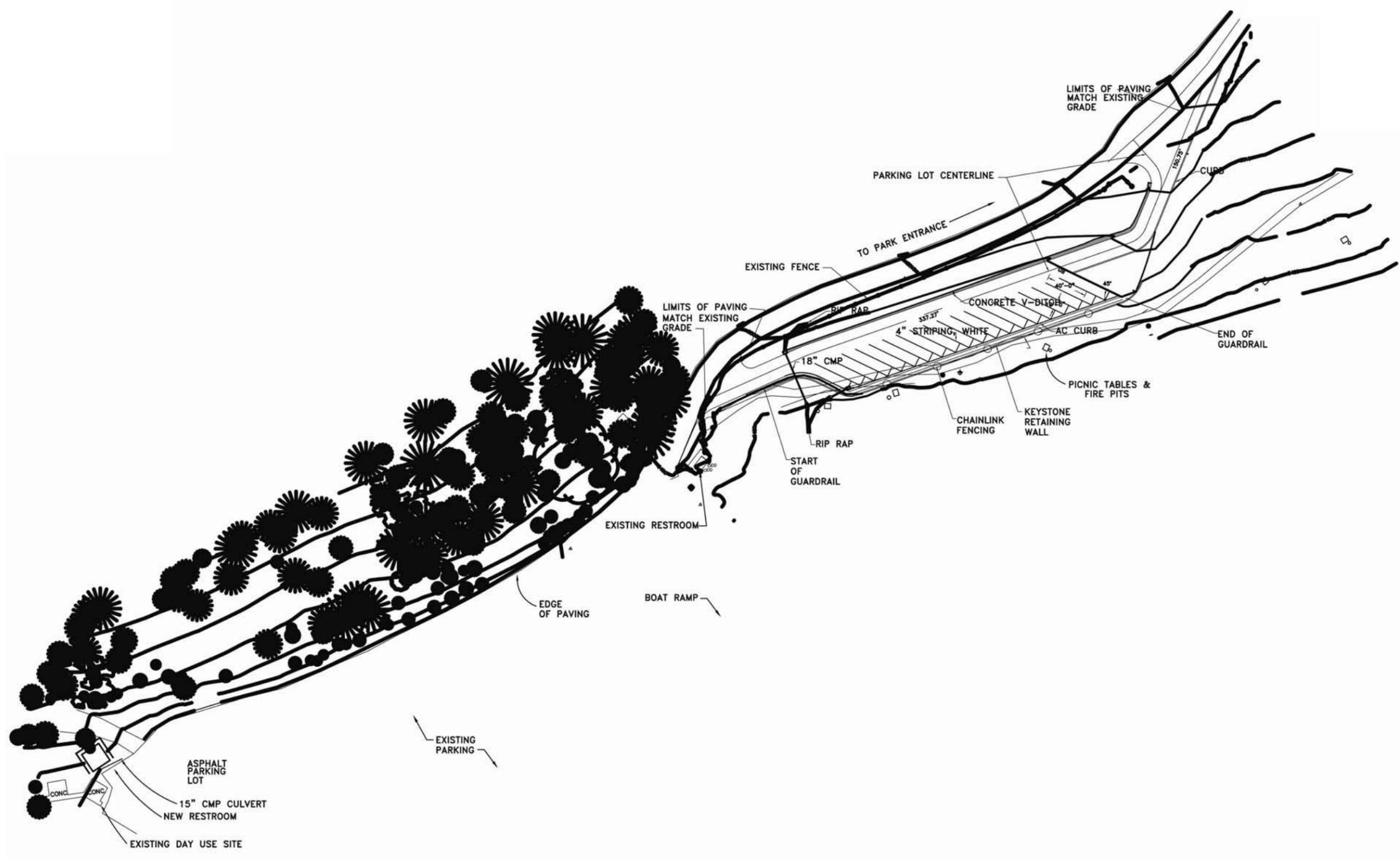
EID has applied for a California Department of Boating & Waterways (CBW) grant to partially fund a new boat trailer parking area to help meet the demand for Marina parking. Construction of the new facility is contingent on completion of the CEQA process, availability of additional funding, and EID Board approval. The project would be located northeast of the existing Marina and situated between the shore and the existing Marina access road (Figure 3-13). Traffic through the lot would be one-way to minimize the required lot width. The facility would be designed in compliance with CBW design and construction standards. The project would require grading the slope below the existing Marina access road and installation of a keystone wall to retain the fill required to create the parking lot. The regrading of the site would require the removal of many mature trees between the shore and the access road, as well as relocation of the existing hiking/biking trail.

As part of this project, a new pit rest room would be added to the existing day use facility. There would be no waste water discharge from either improvement.

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# MARINA PARKING EXPANSION AND AREA IMPROVEMENTS

## SLY PARK RECREATION AREA MASTER PLAN MASTER EIR



PROPOSED GRADING PLAN  
provided by  
Owen Engineering and  
Management Consultants

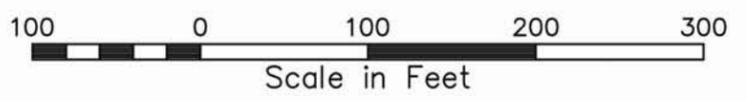


FIGURE 3-13

### **Day Use Area Parking**

Many of the SPRA day use areas are in need of additional or improved parking. Individual parking spaces would be clearly marked to limit impacts to surrounding vegetation. For identification purposes, names would be assigned and posted for all day use areas. Day use area parking improvements are proposed for the following areas: Pine Cone Camp, Sierra Camp, Chimney Camp, Hazel Camp, and the Lake Drive Stabilization Site. Proposed day use area parking improvements for each of these locations are described in Table 3-4. New day use parking would be added in conjunction with development of the proposed Bumpy Meadows Trailhead and Day Use Area (see Section 3.3.3.4).

### **General Parking**

Parking improvements for individual sites are described above (Section 3.3.1.1) as part of the general reconfiguration of specific campgrounds. However, the following SPRA facilities need additional parking capacity and related access features beyond that associated with individual sites. General parking improvements are proposed for the following areas: Scout/Youth Group Camp, Pinecone Camp, Sierra Camp, Dog Park, Retreat/Event Center, and the Main Group Campground. See Table 3-4 for detailed descriptions of the improvements for each facility.

#### **3.3.3.3 Trails**

Currently there are two primary trails at SPRA: an equestrian trail and a multiuse trail for bicyclists and hikers. Conflicts occur between the various trail users due to incompatibility of the multiple uses, lack of adequate signage, and a perceived lack of trail etiquette. The SPRA Master Plan proposes improvements to address these issues including on-trail signage, a new mountain bike trail, and improvements to trails. (Maintenance of the trail network is addressed in see Section 3.3.5.2.) The following Design Standards and Guidelines would be applied to the proposed trail projects.

- Where feasible, maintenance should improve pedestrian trail accessibility as defined by ADA/Title 24 accessibility standards. Such improvements are subject to limitations of the terrain, staff, and funding and shall not cause damage to significant natural resources.
- Where site conditions and funding allow, new pedestrian trails that are used to connect facilities should be designed to satisfy the ADA/Title 24 accessibility standards.
- Any designated trail should have at least 3-foot-clear width if intended for pedestrian use, at least 4-foot-clear width for bicycle use, and at least 6-foot-clear width for equestrian use.
- Multiuse trails should provide periodic turnouts at least 4 feet wide to allow users to pass without disturbance to horses or people.
- Any trail designated for multiple uses should have signage that clearly describes which users have the right of way, rules for safety, and proper trail etiquette.
- Trails should have out-sloping waterbreaks and dips as needed to shed storm runoff into adjacent vegetated areas.

### **On-trail Signage**

The SPRA Master Plan recommends the use of signage at trail intersections and at key points along the trails to provide education about trail etiquette and rights-of-way. Trailhead signage is also recommended to help address this problem (see Sections 3.3.2.3 and 3.3.3.4).

### **Mountain Bike Trail**

The SPRA Master Plan proposed that a new mountain bike trail would be constructed up-slope of existing trails to separate bikers from equestrians and pedestrians and to offer more diversity and challenge (Figure 3-1). The development of a competition-level mountain bike trail could be constructed and maintained in partnership with a mountain biking organization or corporate sponsor.

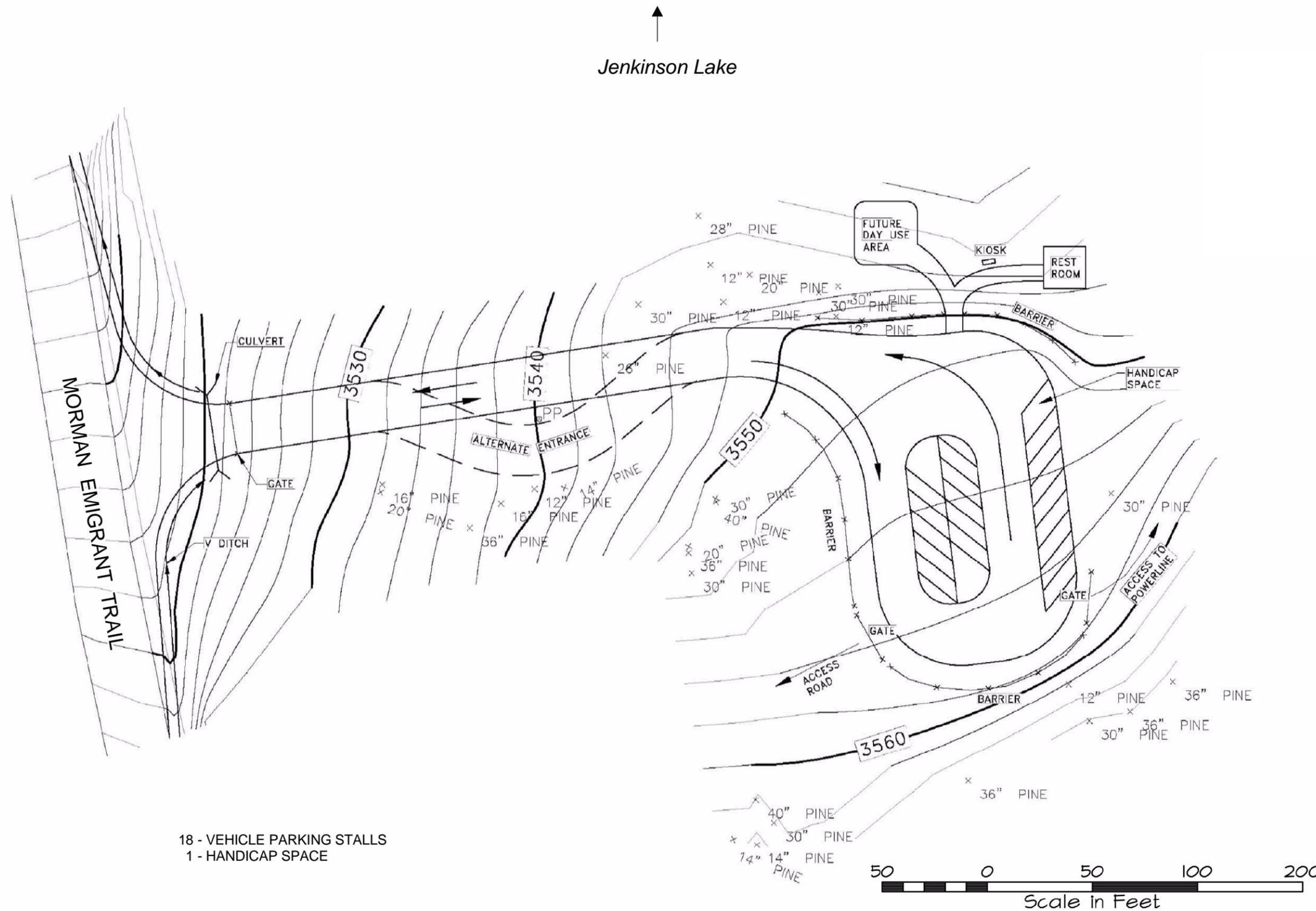
The specific alignment and features of the mountain bike trail would be determined through careful site analysis and in collaboration with future trail users. The Master Plan directs that the mountain bike trail alignment should avoid impacts to native trees greater than 6-inches DBH and must not result in destabilization of slope or erosion. Any drainage through which water is conveyed at any time of the year must be bridged to keep cyclists out of the channel. Trailheads would be identified at several locations and could include parking, secure fee collection stations, and interpretive and directional signage. The trail would be 3 feet wide and signed for safety at all road, trail, or creek crossings. A Special Use Permit from the USFS would be required for trail encroachments onto USFS land.

### **Other Trail Improvements**

Trail renovations or additions are recommended at several specific locations: the Main Entrance, Scout/Youth Group Camp, Stonebraker Camp, Hazel Creek Camp, the proposed primitive camp, and the Black Oak Equestrian Camp. These improvements are recommended 1) to address areas where informal trail use has resulted in alignments with unsafe gradients and/or potential for erosion, or 2) where designated trails will be needed to provide safe access to other improvements. Table 3-4 includes a detailed listing of these proposed trail improvements.

#### **3.3.3.4 Trailheads**

Trailheads provide controlled and managed entry to SPRA trails and offer opportunities to present interpretive information about park resources. The SPRA Master Plan proposes new trailheads at Hazel Creek and Bumpy Meadows. The new trailhead at Hazel Creek Camp (Figure 3-4) is proposed in conjunction with the development of a day use parking area (see Section 3.3.3.2). The Bumpy Meadows trailhead and day use area is proposed for the Bumpy Meadows area on the south side of the lake just east of the second dam to provide access to the west end of the south shore trail (Figure 3-14). Improvements are also proposed to the existing Miwok Trailhead. Interpretive elements for these trailheads are described in Section 3.3.2.3 and associated day use parking is described in Section 3.3.3.2. Table 3-4 includes a detailed listing of these proposed trailhead improvements.



18 - VEHICLE PARKING STALLS  
1 - HANDICAP SPACE

### BUMPY MEADOWS TRAILHEAD & DAY USE AREA

### SLY PARK RECREATION AREA MASTER PLAN MASTER EIR



FIGURE 3-14

### **3.3.4 Natural Resource Protection and Restoration Elements**

The SPRA Master Plan proposes multiple projects aimed at protection and/or restoration of the park's natural resources (Table 3-5). These include creek corridors, the Jenkinson Lake shoreline, campground area vegetation, and the surrounding forest. The Master Plan also includes Design Standards and Guidelines that address a variety of natural resource management issues and provide direction for the implementation of all the proposed Master Plan improvements.

#### **3.3.4.1 Creek Corridor Protection**

Under the SPRA Master Plan, onsite drainages that flow into Jenkinson Lake would be protected to prevent the degradation of their associated sensitive riparian habitat and to avoid erosion and water quality impacts. Improvements to the following areas within SPRA are proposed.

#### **Bridges**

Two new bridges are proposed by the Master Plan to provide creek corridor protection. A clear span bridge with an 8-foot wide deck is proposed over the unnamed creek at the equestrian trail crossing west of the Scout/Youth Group camp north of Lake Drive. The bridge would also serve the new pedestrian trail that would connect the new drop-off the south end of the camp. At Hazel Creek Camp, a clear span bridge with a minimum 10-foot wide deck would be constructed over Hazel Creek at the existing pedestrian/bike/equestrian trail crossing (Figure 3-4). This bridge would also accommodate emergency access vehicles including fire trucks and maintenance vehicles traveling to the new primitive camp area. The following Design Standards and Guidelines would be applied to when designing and implementing bridges.

- Bridges should be provided at all trail drainage crossings to minimize disturbances to riparian areas.
- Width of bridges on designated handicap accessible trails shall be at least 4 feet to accommodate wheel chairs.
- All bridges shall have handrails 42 to 54 inches high if the deck is 30 inches or more above grade.
- Bridges should be designed and finished to visually integrate with the natural setting of SPRA.
- Width and bearing capacity of bridges shall be adequate to safely allow all anticipated uses.
- Impacts to drainage corridors shall be minimized by using clear span bridges where feasible.

**Table 3-5 — Proposed Projects Identified under the Sly Park Recreation Area Master Plan Natural Resource Protection and Restoration Elements**

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
1	Main Park Entrance	1.08	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	2	A
2	Scout/Youth Group Camp	2.20	Bridge at Trail Crossing	Install a bridge to span creek at equestrian trail crossing. Minimum 10' wide deck with clear span.	1	A
4	Pinecone Camp	4.06	Shore Access Control	Designate up to 8 shore access points and install barriers, such as boulders or post and cable fencing to limit access to only these points. Use steps as needed to provide access. Sign access points.	1	A
		4.07	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	1	A
6	Sierra Camp	6.08	Point Revegetation	Install tree protection around existing trees. Restore native grasses to areas between day use picnic tables and trails, and prevent access to restoration areas with post and cable or other suitable barriers.	2	A
		6.09	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	2	A
7	Stonebraker Camp	7.06	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	2	A
8	Hilltop Camp	8.04	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	3	A
10	Chimney Camp	10.03	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	2	A
11	Lake Drive Stabilization	11.01	Realign/Stabilize Lake Drive	Stabilize approx. 500' of Lake Drive immediately northeast of Chimney Camp through a combination of moving road back from shore and reinforcing bank to prevent undercutting. Revegetate and use bioengineering techniques to stabilize shoreline. Minimize cut. Note: <i>This project was initiated during preparation of this final Master Plan as an emergency response to</i>	1	A

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
				<i>accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i>		
12	Hazel Creek Camp	12.05	Remove Spur Road and Campsites in Creek Buffer Zone	Demolish spur road and sites encroaching on 50' creek buffer zone.	1	A
		12.06	Revegetate Creek Corridor and Spur Road Alignment	Restore native plantings and bank contours to disturbed 50' creek buffer zone, and use barriers and signage to prevent access. Revegetate old spur road alignment.	1	A
		12.07	Bridge at Trail Crossing	Install a bridge to span Hazel Creek at existing pedestrian/bike/equestrian trail crossing. Bridge will also serve maintenance vehicles to Primitive Camp area. Minimum 10' wide deck with clear span over channel.	1	A
		12.08	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	2	A
		12.09	Meadow Restoration	Distribute/remove spoils mound to restore natural meadow grade. Restore meadow with native plant species.	2	A
13	Dogwood Camp	13.01	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	3	A
14	Rainbow Camp	14.01	Creek Access Controls	Install signage and barriers to limit access to creek buffer zone.	1	A
		14.02	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	1	A
15	Kamloop Camp	15.01	Creek Access Controls	Install signage and barriers to limit access to creek buffer zone.	1	A
		15.02	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	1	A
21	Main Group Campground	21.07	Rehabilitate Vegetation Group Sites #1 and #5	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	2	A
		21.10	Rehabilitate Vegetation Group Sites #2	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	3	A

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
		21.13	Rehabilitate Vegetation Group Sites #3 and #4	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	3	A
23	Black Oak Equestrian Camp	23.03	Rehabilitate Vegetation	See Section 3.3.4.3 of this Draft Master EIR for a discussion of Vegetation Restoration.	2	A

Notes:

Phase: 1 – Proposed 3-Year Improvement Plan; 2 – Proposed 5-Year Improvement Plan;  
 3 – Proposed 10-Year Improvement Plan; 4 – Proposed Greater than 10-Year Improvement Plan

Priority: A – Highest priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.  
 B – Lower priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

### **Creek Buffer Zone**

Recreation improvements would be excluded from a buffer zone of at least 50 feet from the ordinary high-water mark to protect these sensitive areas. Signage and barriers would be installed to limit access to the creek buffer zone at Rainbow, Kamloop, and Hazel Creek camps. At Hazel Creek Camp, the spur road and several sites encroaching on the 50 foot creek buffer zone would be demolished. The old spur road alignment would then be restored. Native plantings and bank contours would be restored in disturbed areas within the 50 foot creek buffer zone.

#### **3.3.4.2 Shoreline Protection**

The following improvements are proposed under the SPRA Master Plan to address shoreline erosion related to ongoing recreational uses.

### **Lake Drive Stabilization**

The SPRA Master Plan proposes to stabilize approximately 500 feet of shoreline located immediately northeast of Chimney Camp through the realignment of Lake Drive away from the shore and reinforcement of the bank to prevent undercutting (Figure 3-1). Revegetation of disturbed areas and the use of bioengineering techniques, such as placement of boulders or straw wattles interplanted with willow cuttings, are also proposed to stabilize the shoreline and provide additional habitat for birds and other wildlife. *Note: This project was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.*

### **Pine Cone Camp Shoreline Access Controls**

The SPRA Master Plan would designate up to eight shore access points and install barriers, such as boulders or post and cable fencing, to limit access. Stairs and signage would be used as needed.

#### **3.3.4.3 Vegetation Restoration**

Native vegetation in the vicinity of established campgrounds and heavily used areas has suffered from soil compaction and damage related to visitor activities. The SPRA Master Plan proposes to restore the vegetation in these areas to prevent erosion, improve the habitat value, and improve the quality of the recreation experience. Improvements are proposed at the following locations within SPRA.

### **Campground Vegetation Rehabilitation**

Following the reconfiguration of campgrounds and the definition of individual campsites as described in the Recreation Element (Section 3.3.1), vegetation in areas between sites including areas disturbed by improvements would be rehabilitated. This process includes removing dead plants and invasive non-native species; loosening compacted soils; incorporating new topsoil and amendments as needed; replanting a variety of native tree, shrub, and groundcover species; and providing temporary irrigation during the establishment period. Signage would be placed throughout the campgrounds to educate visitors about the restoration and to control access.

Rehabilitation of vegetation using this process is needed at the following twelve locations: (1) Main Park Entrance, (2) Pinecone Camp, (3) Sierra Camp, (4) Stonebraker Camp, (5) Hilltop Camp, (6) Chimney Camp, (7) Hazel Creek Camp, (8) Dogwood Camp, (9) Rainbow Camp, (10) Kamloop Camp, (11) Main Group Campground, and (12) Black Oak Equestrian Camp.

### **Sierra Camp Peninsula**

The existing trees and associated vegetation of the peninsula at the Sierra Camp day use area has been seriously affected by ongoing unrestricted access of visitors. Tree protection would be installed around existing trees with plantings of native grasses in areas between the day use picnic tables and the trails (Figure 3-2). Post and cable or other suitable barriers would be used to prevent access by park visitors into these restored areas.

### **Hazel Camp Meadow**

Following the realignment of the existing trail away from the meadow, a meadow restoration project would be undertaken (Figure 3-4). The project would include distributing and/or removing the existing spoils mound to restore the natural grade, followed by the planting of suitable native plant species. Information on the meadow restoration would be included in the interpretive materials available at the kiosk proposed near the parking area.

#### **3.3.4.4 Forest Management Plan**

The SPRA Master Plan includes a Forest Management Plan (FMP) that provides recommendations to address fire hazards, increase stand health, preserve habitat, and harvest timber as a by-product of these practices. The FMP identifies management units based on similar forest characteristics, productivity, and land uses. Management alternatives that use conifer growth projections for each unit are provided, incorporating long-term practices as well as small, interim forest maintenance measures, commercial timber harvest opportunities, and fire hazard reduction/management measures.

Road maintenance recommendations are included in the FMP that address road surface drainage, dust abatement, and watercourse crossings consistent with CDF requirements. The FMP also identifies opportunities to enhance recreational and environmental values through timber management practices, such as increasing nesting, foraging, and perching habitat for raptors and increasing species diversity.

The recommendations in the FMP may be classified as either involving harvest actions or not. Implementing any harvest action will require the approval of a Timber Harvest Plan (THP) by the California Department of Forestry and Fire Protection (CDF), or a CDF approved exception to a THP. The THP is an environmental review document that fulfills the requirements of CEQA for CDF. The THP identifies the proposed project, when it will occur, methods to be used, and treatments to minimize impacts to the environment such as water quality protection and erosion prevention.

The FMP recommendations that are not subject to a THP include measures to improve fire safety and preserve water quality. The fire safety measures in the FMP are repeated in the Master Plan Design Standards and Guidelines for fuel load management, the proposed Emergency Preparedness Plan (see Section 3.3.6.2), and the Fire Prevention measures (see Section 3.3.6.3). The water quality measures in the FMP are repeated in the Master Plan proposed Trail

Maintenance Plan (see Section 3.3.5.2) and the Design Standards and Guidelines for trails and roads.

The FMP also recommends improving forest health by 1) inter-planting conifer and black oak seedlings in sparsely forested areas suitable for these species, and 2) removing grass and brush around ponderosa pine seedlings in understory burn areas to reduce competition for light, water, and nutrients. These practices do not include timber harvesting and are therefore not subject to a THP.

### **3.3.4.5 Design Standards and Guidelines for Environmental Resource Management**

The following standards and guidelines address a variety of natural resource management issues aimed at preserving Jenkinson Lake water quality and ensuring the continued success of SPRA as a recreation resource. These standards and guidelines would be applied to the implementation of the projects proposed in the SPRA Master Plan

#### **Fuel Load Management**

- Fuel load management practices shall be implemented to reduce combustible materials within 100 feet of permanent buildings.
- Ladder fuels shall be eliminated and lower branches shall be removed from trees approximately half the distance of their total height to a maximum of 12 feet from the ground on trees within 100 feet of permanent buildings.
- Vegetation management near power lines shall be implemented to prevent fire hazards.
- Excess dead vegetation and organic debris should be removed from campground and day use areas at the start of the summer season.
- Trees in improved areas should be thinned to approximately 15 foot spacing by removing dead or diseased trees and those growing too close together. Spacing may be greater on steep slopes.
- Aesthetics, design intent, and tree health shall be considered when selecting trees to remain when thinning.
- Use of controlled burns should be continued every three years or as needed to remove highly flammable underbrush species such as mountain misery (*Chamaebatia foliolosa*).

#### **Shore and Creek Protection**

- Bioengineering methods shall be used whenever feasible to armor and stabilize shoreline or creek banks that show significant evidence of erosion and cutting.
- The conditions influencing erosion, including wave action and soil cohesion, shall be thoroughly evaluated before determining how best to address shore and creek erosion.

- Shoreline/creek bank stabilization techniques that also serve to provide additional habitat for birds and other wildlife should be encouraged.
- Shoreline/creek restoration projects shall consider overall ecological function, including hydrology, hydraulics, vegetation, and habitat value.
- Healthy native vegetation along shoreline and creek banks should be maintained to prevent erosion.
- Specific access points and interpretive signage should be provided at the shoreline and creeks to educate campers and foster stewardship.

### **Vegetation Management and Restoration**

- Ornamental planting designs should favor species native to the SPRA region because these species are well-adapted to climate and soil conditions.
- Ornamental and restoration vegetation should be grouped to reflect the geometry, frequency, and groupings found in nature to maintain the aesthetic of SPRA.
- New restoration vegetation shall be planted in accordance with methods used for native vegetation restoration, not commercial landscaping standards.
- Stakes and rubber ties used to support young trees shall not restrict movement and should be removed after two to three seasons.
- Restoration planting shall be timed to take advantage of natural rainfall or be provided with supplemental water-efficient irrigation as needed during the establishment period.
- Fencing and/or signage shall be installed to exclude campers from revegetation areas.
- To facilitate the re-establishment of native vegetation in affected areas of campgrounds as well as other areas, paths should be clearly defined and visitors should be encouraged to stay on paths.
- Uses should be limited within areas immediately around the base of existing trees, especially the inner half of the dripline, to prevent soil compaction and tree mortality.
- As areas are decommissioned or restricted from use, compacted soil outside of the driplines of existing trees and within the outer third of the dripline should be aerated to the extent feasible using mechanical aerators or hand tools. No rototilling or ripping should be allowed within the driplines of existing trees.
- A 4- to 6-inch layer of wood chips or other natural mulch should be placed over the entire area after aeration has been completed. This keeps soil in place, improves moisture retention, and protects against recompaction.

- Soil samples should be analyzed before implementation of any intensive revegetation program, including an analysis of nutrients and organic matter. Soil supplements, particularly mycorrhizae and humic acids, can improve the chance of successful establishment.
- Maintenance crews should be trained on how to identify, remove, and control invasive, non-native plant species.
- Revegetation areas specifically, and the park in general, should be monitored for invasive, non-native plant species.
- Non-native, invasive plants should be removed from campgrounds and day use areas and replaced with native species.

### **Construction Management**

- Management of on-site drainage during any construction activity shall be implemented to keep sediment and other pollutants from entering creeks and the lake.
- Trees 6 inches and greater DBH in construction areas shall be protected with hazard fencing located at the driplines of trees.
- No storage of material or parking shall be allowed within the dripline of existing trees.
- New services and utilities should be underground and away from mature trees where possible.
- Stormwater Best Management Practices shall be implemented to reduce erosion and protect water quality during construction disturbance per the NPDES General Stormwater Construction Permit.
- Topsoil shall be removed and stockpiled for reuse when construction improvements will disturb existing native soil.
- Planting of disturbed areas and stabilization of disturbed soils should occur within 30 days of final grading. Consideration shall be given to soil environment, species suitability, availability of irrigation, and planting times. Native species shall be used when feasible.
- Vegetative material removed for construction should be chipped and used as trail surfacing.

### **3.3.5 Park Operations and Maintenance Elements**

The effective operations and maintenance of SPRA are critical to maintaining visitor satisfaction as well as the quality of SPRA's resources. Park operations include planning, administrative, and management duties executed by staff and volunteers to meet the expectations of both EID and park visitors, and to keep the park functioning in a fiscally-sound manner. Maintenance includes the tasks required to protect the asset value of SPRA's facilities, onsite resources, and to ensure

visitor safety. The following operations and maintenance activities are proposed under the SPRA Master Plan. A summary of the proposed Operations and Maintenance Elements is found in Table 3-7.

### **3.3.5.1 Operations**

#### **Staffing Levels**

The most significant operational issue for SPRA is the shortage of staff. This is a serious problem that is fundamental to the continued viability of SPRA as a recreation area. The current staffing levels are not adequate to keep pace with the existing baseline operational tasks, much less any new programs or facilities described in the Master Plan. The SPRA Master Plan proposes additional full-time positions that are described below and shown in.

#### ***Ranger and Maintenance***

Based on the existing number of visitors and the configuration of facilities, six new permanent staff positions are proposed to meet the existing demand for ranger and/or maintenance duties. While the Master Plan does not propose increased visitation at peak use times, overall visitation may increase during the non-peak times. New facilities proposed under the SPRA Master Plan that would require maintenance and/or patrolling include the Scout/Youth Group Camp, the Primitive Camp, and the Retreat/Events Center. These increased use levels and facilities warrant the addition of another two full-time positions. The addition of another administrative staff person is also recommended to support the increased number of park staff and visitors.

**Table 3-6 — Proposed Staff Levels**

Staff Title	Current Staffing	Proposed Staffing
Director of Recreation	1	1
Assistant Recreation Director	1	1
Park Ranger/Maintenance I	1	2
Park Ranger/Maintenance II	0	2
Park Ranger/Maintenance III	0	2
Lead Park Ranger	1	1
Park Maintenance I	1	1
Park Maintenance II	0	1
Park Maintenance III	0	1
Park Maintenance Specialist	1	1
Administrative Assistant/ Reservations	1	1
Administrative Tech I	0	1
Grants/Funding Specialist	0	1
Volunteer Coordinator	0	1
Education/Events Coordinator	0	1
<b>TOTAL</b>	<b>7</b>	<b>18</b>

Source: Foothill Associates 2006.

***Grants/Funding Specialist***

Grants would continue to be an important source of capital improvement and possibly program funding at SPRA. Other funding options are also needed if EID is to fully implement the proposed Master Plan. A full-time Grant/Funding Specialist position would be established with the following responsibilities:

- Identify grant sources.
- Write grants.
- Administer grants.
- Coordinate in-kind contributions.
- Develop funding through a variety of community events and partnerships.

The costs associated with this position could be offset by the value of secured grants and other funding. This Grants/Funding Specialist would work closely with the Board, Recreation Director, and Assistant Recreation Director to identify grant funding priorities and to oversee grant reporting and compliance.

### ***Volunteer Coordinator***

Some volunteers are already working at SPRA to help with a variety of tasks such as trail maintenance, shoreline cleanup, and simple campground upkeep. This valuable resource could be expanded with the creation of a Volunteer Coordinator position. The cost of funding this position could be offset by the value of volunteer services generated by the position. The responsibilities of this position could include the following:

- Develop a volunteer recruitment plan and screening process.
- Make outreach visits to local schools, community organizations, businesses, and individuals to introduce the SPRA volunteer program and recruit volunteers.
- Develop and manage an internship program.
- Schedule volunteer staff coverage in coordination with permanent staff.
- Maintain a database of volunteers and volunteer opportunities, and post volunteer recruitment material on the website.
- Organize volunteer welcome/orientation events, end-of-the-year appreciation events, and conduct training.

### ***Education and Events Coordinator***

The capacity of SPRA as an educational resource has not been fully realized because staff is not available to execute the necessary planning, outreach, and coordination. Educational and special events programs could have many benefits such as attracting visitors during off-peak times and generating additional revenue. The visitor stewardship fostered by such a program could also help reduce park maintenance, user conflicts, and environmental impacts. A full-time Education/Events Coordinator would be responsible for the following tasks:

- Design and implement interpretive facilities and programs.
- Work with local groups to develop sponsorship for events such as fishing derbies or triathlons that would generate additional revenues.
- Coordinate with local schools, environmental groups, and cultural resource organizations interested in using SPRA as an outdoor classroom.
- Coordinate event scheduling with SPRA reservations to manage traffic and user conflicts.
- Promote the use of the various group facilities to maximize revenues.

### **Staff Training**

The SPRA Master Plan recommends that professional training be provided for all permanent staff to ensure they acquire and upgrade the skills needed to effectively and efficiently perform their jobs, including management and maintenance training. Such training is offered by the Park Rangers Association of California (PRAC), a professional organization of park rangers and other

uniformed park employees of municipal, county, special district, state, and federal agencies. This organization has helped to establish statewide professional standards for rangers with an emphasis on management of parks, open space areas, and natural resources, through legislation and interagency cooperation.

Maintenance personnel would be provided with opportunities for professional training similar to that offered by the Pacific Southwest Maintenance Management School, which is sponsored by the National Recreation and Park Association (NRPA) jointly with the California Parks & Recreation Society (CPRS). Training needs and opportunities would be identified as part of the regular performance review process.

### **Reservation Systems Software**

The reservation system software (RSS) currently used by SPRA staff has limited functionality and does not provide enough visitor tracking and facility demand information to optimally monitor and improve park operations. Another shortfall of the existing system is that online reservations are not available in real-time because they cannot be concluded without staff involvement.

The Master Plan proposes that the current RSS be evaluated to identify areas in which it is not meeting the needs of staff and EID for managing reservations and reporting on park use. Options to address deficiencies include working with the software vendor to implement improvements, developing RSS in-house with EID information technology staff, or purchasing a new product. An evaluation of these options would be undertaken to identify the costs and operational benefits related to each.

### **Day Use Carrying Capacity**

The Master Plan calls for the establishment of a formal limit for day use admission to SPRA along with better methods for tracking availability of day use parking. Currently, gate staff rely on the subjective assessment of experienced staff to determine if the park's day use facilities are approaching carrying capacity, and then make the decision as to allow entry or not. Visitors who are admitted are then on their own to find parking in one of the designated day use areas. These visitors may need to drive around to several areas before finding a space or might decide to park in an undesignated place if they cannot easily find a space.

These issues would be addressed by identifying the day use visitor limit and then issuing parking passes for specific day use parking sites. The exception would be Bumpy Meadows, which would operate on a first-come, first-served basis because visitors access the area from Mormon Emigrant Trail. This day use reservation capability could be integrated with the effort to update the RSS, and would require completion of the Main Park Entry modifications.

### **Web Site Development**

The internet is rapidly becoming the standard for providing information about recreation facilities to prospective visitors. As specified under the SPRA Master Plan, the web site would be expanded to provide information on special events, facility improvements, changes in policies and fees, interpretive elements and programs, volunteer opportunities, and fund development. The web site would be managed as an important public relations and marketing resource with the

goals of increasing non-peak demand, better managing peak demand, promoting visitor stewardship, and improving the quality of the visitor experience.

### **3.3.5.2 Maintenance**

Maintenance includes care of visitor use areas and facilities including grounds, landscapes, trails, roads and buildings, trash removal, and waste management. Maintenance is also a vital aspect of providing visitors with a safe recreation experience. The ability of SPRA to attract visitors, and thus revenues, is proportional to how well facilities are maintained. The following activities are proposed under the SPRA Master Plan in an effort to improve the current SPRA maintenance program.

#### **Proactive Maintenance**

Proactive maintenance, such as performing inspections on a regular schedule and making repairs as soon as problems are noted, would be encouraged to help extend the life of park assets and minimize capital replacement costs. Implementing a proactive maintenance strategy would require hiring more maintenance staff as described above (Section 3.3.5.1 Staffing Levels).

#### **Annual Maintenance Work Plan**

An annual assessment of SPRA facilities (including trails) would be conducted to establish maintenance priorities for the coming year. Once conducted, the assessment would be used to establish an annual maintenance work plan. The assessment would look at the current condition of facilities and anticipated level and duration of use to determine how much maintenance resources would be needed and to schedule work. Such an assessment can help identify the most effective use of funds and staff to avoid costly deferred maintenance or replacement, and evaluate the need for additional seasonal staff. This plan would also help identify facilities that may need to be closed either temporarily or permanently if maintenance resources are not available to make the necessary repairs. The activities identified in the work plan could be loaded to EID's Hanson work order system to generate work orders for SPRA maintenance staff.

#### **Maintenance Facilities**

The existing maintenance facilities adjacent to park headquarters would be consolidated and reorganized to improve function and efficiency. Equipment and maintenance operations currently located at the Retreat House Complex would be moved to this central maintenance yard. Specific capital improvements needed to facilitate this consolidation include the following:

- Demolish two existing maintenance buildings and replace them with one new larger building (approximately 35 feet by 70 feet).
- Add four new parking areas for staff and maintenance vehicles/equipment parking in existing open areas.
- Add security fencing around the maintenance yard and equipment parking area.

#### **Trail Maintenance Plan**

The SPRA Master Plan recommends that a comprehensive trail maintenance plan be developed that includes an assessment of the condition of all trails and prioritized recommendations for

maintenance. Trail maintenance would include repairs to the trail surface, cutting back encroaching vegetation, adding signage, minor trail realignments, and erosion repair and prevention.

It is also recommended that designated trails be clearly defined and barriers be provided to discourage use of, or minimize confusion about, non-designated trails. Extraneous trails that are not a part of the designated trail system and/or those contributing to drainage and erosion problems would be eliminated; these old trails would be revegetated to discourage their use while enhancing habitat values.

### **Volunteer Maintenance Events**

Working in collaboration with the Volunteer Coordinator, maintenance staff would identify projects that are suitable for volunteer workers. Such projects would be intended to reduce maintenance costs, instill a sense of stewardship for the park in the volunteers, and provide community service opportunities for local students and clubs. Volunteers could be used in a variety of capacities such as trails maintenance, light campground maintenance, and small improvement projects. Some suggested volunteer maintenance activities are described below.

#### ***Annual Events***

Many parks celebrate Earth Day in April with cleanups and one-day projects. National Trails Day, the first Saturday in June, offers a chance to help with restoring and improving trails. These once-a-year maintenance events can be very effective in getting a large number of people involved with volunteer maintenance.

#### ***Group Volunteers***

Clubs and organizations can help with specific park improvements: trail renovation, tree planting, stream restoration, litter cleanup, minor repairs, and more. Such tasks are perfect for Scout service projects or corporate team-building efforts.

#### ***Adopt-a-Park Program***

Groups can “adopt” a park, or a favorite part of it, and offer it longer-term care. Volunteer groups can be asked to commit to two service projects in a given year or to a single annual service project for two consecutive years.

**Table 3-7 — Proposed Projects Identified under the Sly Park Recreation Area Master Plan Operations and Maintenance Elements**

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
1	Main Park Entrance	1.04	New Shop Building	Demolish 2 small existing buildings and replace with one new building approx. 35' x 70'.	3	B
		1.05	Reconfigure Shop Parking and Maintenance Yard	Add 4 new parking areas for staff and maintenance vehicles/equipment parking in existing open areas, add security fencing around maintenance yard and equipment parking area.	3	B
SPRA	Increased Staffing	SPRA01	Increased Staffing	Add 6 FTE ranger and / or maintenance staff and 3 FTE for Volunteer Coordinator, Grants/Funding Coordinator, and Education/Events Coordinator.	1	A
	Staff Training	SPRA02	Staff Training	Ongoing training for all permanent staff to maintain professional level of competence.	2	A
	Reservation Systems Software	SPRA03	Reservation Systems Software	Evaluate and upgrade existing RSS functionality.	2	B
	Day Use Carrying Capacity	SPRA04	Day Use Carrying Capacity	Establish day use are carrying capacity and implement through parking passes.	1	A
	Website Development	SPRA05	Website Development	Expand website presence to promote events, resources, inform visitors, outreach for volunteers, etc.	2	B
	Proactive Maintenance	SPRA06	Proactive Maintenance	With additional staff implement proactive maintenance protocols.	2	A
	Annual Maintenance Work Plan	SPRA07	Annual Maintenance Work Plan	Develop and implement annual maintenance work plan; integrate with Hanson work order system.	2	A
	Volunteer Maintenance Events	SPRA08	Volunteer Maintenance Events	Expand and promote a variety of volunteer maintenance opportunities.	2	A

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
	Trail Maintenance Plan	SPRA09	Trail Maintenance Plan	Develop and implement a comprehensive trail maintenance plan.	2	A

Notes:

Phase: 1 – Proposed 3-Year Improvement Plan; 2 – Proposed 5-Year Improvement Plan;  
 3 – Proposed 10-Year Improvement Plan; 4 – Proposed Greater than 10-Year Improvement Plan

Priority: A – Highest priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.  
 B – Lower priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

### **3.3.6 Public Safety Elements**

A sense of personal safety and security is important to maintaining a high quality recreation experience for SPRA visitors. The following safety improvements are proposed as part of the SPRA Master Plan. A summary of the SPRA Master Plan projects proposed as part of the Public Safety Element is included in Table 3-8.

#### **3.3.6.1 Law Enforcement**

Because of budget constraints, only a limited number of El Dorado County Sheriff's Deputies are available to respond to calls at SPRA. This often leaves untrained park personnel and volunteer camp hosts to work out conflicts between park visitors. The SPRA staffing shortage also constrains their ability to respond in a timely manner.

The SPRA Master Plan proposes the addition of several full-time ranger positions to SPRA (see above Section 3.3.5.1) and to provide appropriate training to help address the issue. However, additional availability of County Sheriff's resources is also recommended at the park on the weekends from May through September. It is proposed that approximately one-quarter FTE (full-time equivalent) be added to the County Sheriff's Department as a resource dedicated to SPRA.

#### **3.3.6.2 Emergency Preparedness Plan**

Getting emergency vehicles into SPRA and evacuating visitors in the event of a catastrophe, such as a wildfire or major earthquake, is constrained by the limited number and size of roads that access SPRA. The Master Plan recommends that a comprehensive Emergency Preparedness Plan (EPP) be developed that addresses at least the following issues and concerns:

- Primary and alternate evacuation routes
- Specific response strategies based on the various types of potential emergencies
- Preemptive public education about emergency procedures
- Procedures for notifying visitors and coordinating evacuations
- Procedures for removing or securing EID equipment and information from the park headquarters
- Coordination with adjacent private property owners
- Responsibilities of SPRA, county, state, and federal staff in the event of an emergency
- Location of staging areas for responders and evacuees
- Communications protocols for the various responding agencies
- Designated emergency medical facilities

- Notification of the media
- Procedures for closing and reopening the park
- Alternate locations for setting up temporary park operations

This plan would be updated on a regular basis to reflect the implementation of any major improvements, as well as changes in responder duties and emergency procedures. All SPRA staff would receive annual training to review the EPP, and similar training would be made available to staff of other responding agencies.

Development of the EPP would be undertaken as a cooperative effort involving EID, the County, El Dorado County Fire Safe Council (EDCFSC), City of Placerville, California Department of Forestry, Eldorado National Forest, Sierra Pacific Industries, and other adjacent private property owners.

### **3.3.6.3 Fire Prevention**

The SPRA Forest Management Plan provides specific recommendations for managing fuel and controlled burns in the non-improved acreage of SPRA. The Master Plan further specifies that precautions must also be taken to manage fuel load in areas with improved facilities. This would include removing vegetation near structures, eliminating ladder fuels, removing dead vegetation and debris, providing adequate clearance around fire rings, and keeping fire rings and barbecues in good working condition. These practices would be standardized as part of facility maintenance.

Fire management in adjoining properties is also a concern. The El Dorado County Fire Safe Council (EDCFSC) is currently working to develop a Sly Park Corridor Community Action Plan that would provide suggestions for private property fuel load management and owner education. EID representatives are to participate in development of this plan to make sure that it adequately addresses these concerns.

The fire safe education of SPRA visitors is the final critical element of fire prevention for SPRA. Many of the visitors to SPRA are not from forested areas and have a limited understanding about the threat of wild land fire. Visitors should understand basic fire safe camping practices such as keeping buckets of water and sand near campfires, stacking firewood a safe distance from fires, limiting size of fires, appropriate materials to burn, and proper techniques for putting a fire out. Educational efforts would be pursued by EID in cooperation with the EDCFSC, Sierra Pacific Industries, and the Eldorado National Forest. Fire wise education could include distribution of printed materials as well as campground talks and demonstrations.

**Table 3-8 — Proposed Projects Identified under the Sly Park Recreation Area Master Plan**

<b>Project ID</b>	<b>Project Name</b>	<b>Component ID</b>	<b>Component Name</b>	<b>Description</b>	<b>Phase</b>	<b>Component Priority</b>
SPRA	Fire Prevention	SPRA10	Fire Prevention	Implement fuel load management strategies throughout park and provide fire wise education to visitors and neighbors.	1	A
	Emergency Preparedness Plan	SPRA11	Emergency Preparedness Plan	Prepare a comprehensive Emergency Preparedness Plan in collaboration with other partners, including emergency access/egress routes.	2	A
	Law Enforcement	SPRA12	Law Enforcement	Add 1/4 FTE Deputy Sheriff resource in addition to new ranger staff.	2	A

Notes:

Phase: 1 – Proposed 3-Year Improvement Plan; 2 – Proposed 5-Year Improvement Plan;

3 – Proposed 10-Year Improvement Plan; 4 – Proposed Greater than 10-Year Improvement Plan

Priority: A – Highest priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

B – Lower priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

### **3.3.7 Facilities Infrastructure Elements**

Implementation of the Master Plan Program Elements will require upgrading and expanding water and phone utilities to SRPA.

#### **3.3.7.1 Water Services**

A new water line will be provided within the next year or two that extends along the entire north shore up to Hazel Creek Camp. This new service will greatly enhance water supply and water pressure and provide for enhanced fire suppression capabilities with the installation of fire hydrants. This new water line was approved under a previous CEQA action (Quad-Knopf, 2003). Once the new mainline is in place, new/replacement waterline laterals could be installed to provide spigots as needed during campground reconfiguration.

Two other new waterline projects are proposed under the SPRA Master Plan. One project would bring water to the Scout/Youth Group Camp facility from a main line in Lakewood Sierra via the existing road alignment. The first phase would extend to the north turnaround and the second phase would extend to the end of the South Summit Access Road. These segments would be located within the road alignment. Both phases may be implemented together depending on availability of funding.

The second project would extend a water line from Jenkinson Camp to the new pilot cabin site between Jenkinson Camp and Stonebraker Camp. This line would also be located in the existing unimproved road alignment.

Proposed and existing facilities along Mormon Emigrant Trail would be restricted to the capacity of the existing water service along that road until such time as a water line replacement is required. Because the existing water line only extends up to the second dam, development of the Sugarloaf Fine Arts Camp would be dependent on drilling a well. That well will be required to meet County standards and provide adequate water for the facility and its users, including fire suppression equipment. More than one well may be needed, depending on the flow available.

#### **3.3.7.2 Phone Services**

Phone service is not available anywhere within the park, with the exception of park headquarters. Public safety would be enhanced with access to either additional land lines or reliable cellular service. Any new land lines would be installed underground in existing road alignments and/or by trenching under roots to avoid damage to trees. Additionally, cellular phone companies could be solicited for interest in providing cellular relays or towers within the park. Leases from such facilities could be a source of revenue for SPRA. However, such facilities would only be allowed if the selected site and design of the structure do not unduly affect the visual quality of the park for visitors as well as adjacent property owners.

A summary of the SPRA Master Plan projects proposed as part of the Facilities Infrastructure Element is included in Table 3-9.

**Table 3-9 — Proposed Projects Identified under the Sly Park Recreation Area Master Plan Facilities Element**

Project ID	Project Name	Component ID	Component Name	Description	Phase	Component Priority
2	Scout/Youth Group Camp	2.18	North Water Infrastructure	Bring water to site from main line in Lakewood Sierra via existing road alignment to end of North Summit Access Road.	1	A
		2.19	South Water Infrastructure	Extend water main from site from North turnaround to end of South Summit Access Road via existing road alignment.	4	B
5	Jenkinson Camp	5.04	Water Infrastructure	Extend water from Jenkinson Camp to Cabin site in road alignment.	3	A
SPRA	Increased Phone Service	SPRA13	Increased Phone Service	Evaluate and implement land line and/or cellular service improvements using techniques to avoid impacts such as working in existing road alignments, below ground trenching, and screening.	2	B

Notes:

Phase: 1 – Proposed 3-Year Improvement Plan; 2 – Proposed 5-Year Improvement Plan;  
 3 – Proposed 10-Year Improvement Plan; 4 – Proposed Greater than 10-Year Improvement Plan

Priority: A – Highest priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.  
 B – Lower priority improvement relating to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience.

## **3.4 Phasing of Proposed SPRA Master Plan Projects**

### **3.4.1 Phasing Considerations**

The SPRA Master Plan includes comprehensive suggestions for improving facilities, programs, and operations at SPRA over the next 20 years. The following factors were considered during the development of the proposed phasing for each of the SPRA Master Plan component projects.

#### **3.4.1.1 Natural Resource Protection**

Protection of the habitat and water resources at SPRA is critical to the ongoing use of the facility as a recreation area and Jenkinson Lake as a water source. Improvements that contribute to this goal should be implemented as soon as feasible, given financial constraints.

#### **3.4.1.2 Quality of Recreation Experience**

Maintaining the viability of SPRA as a recreation resource depends on certain improvements that address the provision of services needed to remain competitive with other recreation venues. The failure to provide these services could make SPRA a less attractive recreation choice and reduce fee revenues.

#### **3.4.1.3 Functionality**

Some suggested improvements are necessary to enhance overall functionality of SPRA by addressing safety concerns, visitor behavior, and operational efficiency. Phasing must also reflect functional dependencies between individual facility features. For example, provision of parking needs to be coordinated with implementation of the facilities the parking is intended to serve.

#### **3.4.1.4 Construction Phasing**

The sequencing of certain facility improvements should be phased to reflect construction methods and cost saving opportunities.

#### **3.4.1.5 Revenue Generation**

Most recommended improvements will affect park revenues through direct capital or operational costs and/or by creating opportunities for new revenues. These impacts need to be balanced as much as possible in the phasing plan.

#### **3.4.1.6 Financing**

The single most critical consideration for improvement phasing is the availability of financial resources needed to fund the improvements. Because the SPRA revenue stream includes variable sources (grants, taxes, etc.), the phasing plan needs to recognize that certain improvements may be delayed if supporting revenues cannot be secured.

### **3.4.2 Implementation Priorities**

The recommended improvements in the proposed Master Plan are categorized as either an “A” or a “B” priority depending on how directly the improvement relates to maintaining water quality, public safety, environmental enhancement and protection, and the recreation experience. Priority “A” improvements are generally recommended for earlier implementation than “B”

improvements, because they are considered more critical to meeting these baseline goals of EID for SPRA.

Most of the proposed projects include multiple components. Each component is considered individually for purposes of assigning a priority and phasing since it is not likely that revenue would always be adequate to support full implementation of entire projects at once. In addition, some components in a project are more essential than other components in the same project, and thus warrant a higher priority. The overall priority (“A” or “B”) for each project component as well as the sequencing for each component as it relates to the total project is shown in Table 3-1 through Table 3-9.

### **3.4.3 Proposed Phasing**

Based on the prioritization of various projects and their components, all of the recommendations in the SPRA Master Plan are targeted for implementation in 3, 5, 10, or greater than 10 years. The unpredictability of revenues to support SPRA is such that providing more specificity about phasing at this time beyond a 10-year horizon is probably not meaningful. Table 3-1 through Table 3-9 provides the recommended 3, 5, 10, and greater than 10-year phasing plans for each of the proposed SPRA Master Plan projects.

### **3.4.4 Phasing Flexibility**

The phasing plans are provided as a recommended guide to implementing improvements. However, it is important to acknowledge that over the 20-year life of this Master Plan a number of variables could potentially warrant revisions to the phasing plans. Revenue sources such as fees, grants, and donations are not guaranteed from year to year and unanticipated differences in projected versus actual revenues may result in postponing or accelerating certain improvements. Other factors that influence phasing and priorities, such as availability of volunteer labor, demand for recreation resources, trends in recreation preferences, and the local economy are also variable.

An annual review of the 3, 5, and 10-year phasing plans would be undertaken by SPRA staff in collaboration with representatives from other EID departments and the Board of Directors. The purpose of such a review would be to revise and update the phasing plans to reflect changes in priorities and availability of resources. The phasing plans would then be coordinated with capital improvement plans for the same time horizons. This annual review process could be facilitated by maintaining a simple database of recommended Master Plan improvements showing the implementation priority and status.

## **4.0 ENVIRONMENTAL ANALYSIS**

### **4.1 Land Use and Planning**

#### **4.1.1 Existing Conditions**

SPRA offers fishing, boating, camping, picnicking, biking, and hiking activities within and around Jenkinson Lake. Jenkinson Lake, impounded by Sly Park Dam, is a significant part of EID's water supply, storage, and conveyance infrastructure. More information regarding recreational amenities and uses at SPRA can be found in Chapter 2 and Section 4.13, of this Draft Master EIR.

##### **4.1.1.1 Sly Park Recreation Area Existing Land Use Designations and Zoning**

###### **El Dorado County General Plan**

SPRA is designated "Natural Resource" under the El Dorado County General Plan (General Plan) (El Dorado County, 2004). As stated in the General Plan, the purpose of the Natural Resource designation is to identify areas that contain economically viable natural resources and to protect the economic viability of those resources and those engaged in harvesting/processing of those resources, including water resources development, from interests that are in opposition to the managed conservation; and economic, beneficial use of those resources.

Important natural resources identified by the General Plan include: forested areas, mineral resources, important watersheds, lakes and ponds, river corridors, grazing lands, and areas where the encroachment of development would compromise these natural resource values. Lands under both private and public ownership are included within this designation (El Dorado County, 2004).

Existing County General Plan land use designations for areas within and surrounding SPRA are shown on Figure 4.1-1. Compatible uses identified in the General Plan for the Natural Resource land use designation include: agriculture, rangeland, forestry, wildlife management, recreation, water resources development, and support single-family dwellings.

###### **Zoning**

That portion of SPRA surrounding Jenkinson Lake is zoned "RF"- Recreational Facilities, except for an area bordering the southwest corner of the lake at its western end, as described below. The purpose of this zoning district is to provide for the orderly development and maintenance of lands and areas suitable and desirable for recreational activities as well as to protect these lands and potential uses from encroachment of unrelated and potentially conflicting land uses.

Permitted uses by right within this zoning district include: (A) raising and grazing of domestic farm animals and the cultivation of tree and field crops; (B) any structure or use incidental or accessory to any of the aforementioned uses; (C) drilling of wells and excavation of earth exclusively for authorized purposes subject to the county grading ordinance; and (D) local underground distribution lines for public utilities. All other proposed uses would require either a site plan approval or a special use permit.

The southwest portion of SPRA, from Mormon Emigrant Trail to the southern and western boundaries, is zoned “RA-20”- Residential Agricultural. The Residential Agricultural zoning district is designed to provide for the orderly and timely development of residential and agricultural uses. Minimum parcel sizes are 20 acres. Uses permitted by right within the Residential Agricultural zoning district include: (A) one single-family detached dwelling with accessory uses and structures, the renting of one room within the dwelling, one guest house not for rent or lease and not to exceed 400 sq ft, and home occupations; (B) agricultural uses including raising and grazing of livestock and other animals, growing of trees, fruits, vegetables, flowers, grain and other crops, packing and processing of agricultural products produced on the premises (without changing the nature of the products), on-site sale of products produced on-site, any structures or use incidental or accessory to the foregoing uses; (C) one unlighted sign not to exceed 12 square feet of message area and 12 feet in height advertising authorized on-site activities; (D) drilling of wells and excavation of earth exclusively for authorized residential and agricultural purposes; and (E) local distribution lines for public utilities.

Land at the northernmost boundary of SPRA is zoned “RA-80”- Residential Agriculture, which specifies land uses consistent with those discussed above for the “RA-20” zoning district. However, minimum parcel size within this zoning district is 80 acres.

#### **4.1.1.2 Adjacent Land Use Designations and Zoning**

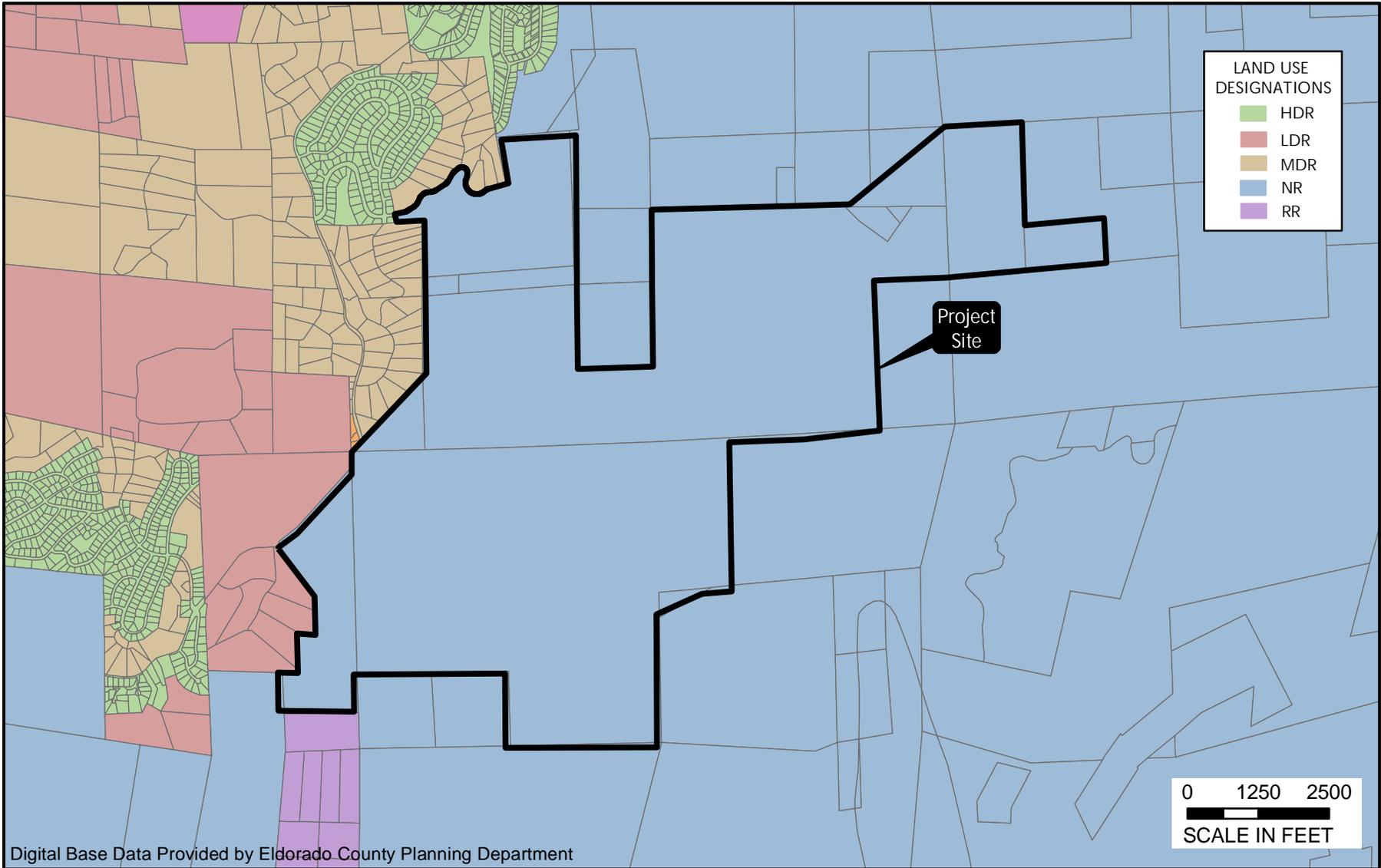
##### **El Dorado County General Plan**

The General Plan designates most lands adjacent to SPRA (to the north, east, and south) as Natural Resource. Lands to the west and southwest include a combination of residential land use designations including: “High Density Residential,” “Medium Density Residential,” “Low Density Residential,” and “Rural Residential.” Existing land uses within the above designations include residential development adjacent to the western boundary of SPRA and to the north and the south of the Main Park Entrance, as well as undeveloped land, including forested timberlands.

##### **Zoning**

Zoning districts for lands surrounding SPRA include: Residential Agricultural, Estate Residential, and Timberland Preserve zoning districts. Regulations for lands within the Timberland Preserve Zoning District apply only to those subject to the Forest Taxation Reform Act of 1976, with primary uses restricted to timber harvesting and ancillary uses. These lands are owned by the USFS and Sierra Pacific Industries. Uses permitted by right within the Timberland Preserve zoning district include: (A) growing and harvesting forest products; (B) uses (excluding residences) internally related to growing, harvesting, and processing of forest products; (C) maintenance and repair facilities (timber-related); (D) gas, electric, water, or communication facilities; (E) management for watershed; (F) management for fish and wildlife habitat; and (G) non-commercial recreation uses (hunting, fishing, day use for picnicking, riding, hiking, and temporary camping).

The Estate Residential zoning district is intended to provide for the orderly development of land having sufficient space and natural conditions compatible with residential and accessory agricultural and horticultural pursuits, as well as to provide protection from encroachment of incompatible land uses. Uses permitted by right include: (A) one single-family detached



EL DORADO COUNTY GENERAL PLAN DESIGNATIONS



dwelling and ancillaries uses and structure as specified by Section 17.28.190 A(1-3) of the El Dorado County Zoning Ordinance; (B) barns and other agricultural structures; (C) home occupations as specified by Section 17.28.190 (D); one unlighted sign with six square feet of message area, eight feet high, advertising authorized on-site activities; (E) the raising and grazing of domestic farm animals and the cultivation of tree and field crops, as well as the sale of goods when produced on-site; (F) packing and processing of agricultural products; (G) excavation for authorized agricultural and residential purposes; (H) drilling of wells and excavation of earth exclusively for authorized agricultural and residential purposes; (I) local distribution lines for public utilities; and (J) the real estate sales office as specified by Section 17.28.190 J (1-9) of the El Dorado County Zoning Ordinance. Zoning Districts for SPRA and surrounding lands are shown on Figure 4.1-2.

## **4.1.2 Regulatory Setting**

### **4.1.2.1 Federal**

#### **Code of Federal Regulations**

Some recreational improvements proposed for SPRA as components of the Master Plan would encroach onto adjacent USFS lands. Pursuant to Title 36, Part 251, Subpart B (1)(6) of the Code of Federal Regulations, a special use permit is required for Forest Service land uses other than timber harvesting, grazing, and mineral extraction. The USFS special use program authorizes uses on forest land that offer an overall benefit to the general public while also protecting the public and natural resource values. Activities proposed on USFS lands must be consistent with the Eldorado National Forest Plan.

The Eldorado National Forest Land and Resource Management Plan was adopted by the USFS in 1989. The Plan identifies the lands that would be encroached upon by the SPRA Master Plan as being management areas for the spotted owl and the goshawk. These management area designations allow such uses as pest management, limited use of off-road vehicles, grazing under existing allotments, mineral exploration and development, and fire protection (USFS 1989). Although it is not specifically stated in the Plan that recreational trails would be an allowable use, it would be a less intensive use than other allowed uses. As a result, it is anticipated that the USFS would consider it to be a consistent use under the Eldorado National Forest Land and Resource Management Plan.

### **4.1.2.2 State**

#### **California Government Code**

California Government Code Section 53091, subdivisions (d) and (e), generally exempts construction of facilities for the production, generation, storage, treatment, or transmission of water, wastewater, or electrical energy by a local agency from local agency building and zoning ordinances. The SPRA Master Plan proposes recreational improvements surrounding Jenkinson Lake. Therefore, implementation of the Master Plan, including development and operation of the individually proposed projects, are not exempt from the regulatory land use jurisdiction of the County of El Dorado.

#### **4.1.2.3 County of El Dorado**

Land uses within the Master Plan area fall under the regulatory authority of the County of El Dorado; therefore, proposed uses are subject to consistency with the County General Plan and the Zoning Ordinance.

#### **El Dorado County General Plan**

SPRA is covered by the El Dorado County General Plan, adopted by the El Dorado County Board of Supervisors in July 2004 and upheld by the voters in March 2005. In September 2005, the Sacramento County Superior Court ruled that the 2004 General Plan and its environmental document were legally adequate and had remedied certain legal defects of the prior General Plan's environmental review. Although this ruling has been appealed, the 2004 General Plan is now legally in effect.

The General Plan identifies the goals and policies that will guide development decisions that maintain a rural character and quality of life, maintain adequate infrastructure, and conserve agricultural lands, forest and woodlands, and other natural resources.

Goals, Objectives, and Policies from the 2004 El Dorado County General Plan applicable to the Proposed Project are included in Table 4.1-1.

The County of El Dorado provided comments to EID on November 3, 2004 in response to the circulation of the Notice of Preparation and Initial Study. The comment letter from the County stated that many of the uses contemplated by the SPRA Master Plan would require a General Plan amendment to modify the Natural Resource (NR) land use designation to Tourist Recreational (TR). The County stated that the existing NR land use designation allows for more passive, less intensive recreational uses than those allowed under TR. A complete discussion is provided in Table 4.1-1.

#### **El Dorado County Zoning Ordinance**

The El Dorado County Zoning Ordinance is adopted to promote and protect the public health, safety, peace, morals, comfort, convenience, and general welfare. The Zoning Ordinance establishes land use districts by which permitted uses are established, consistent with the General Plan land use designation.

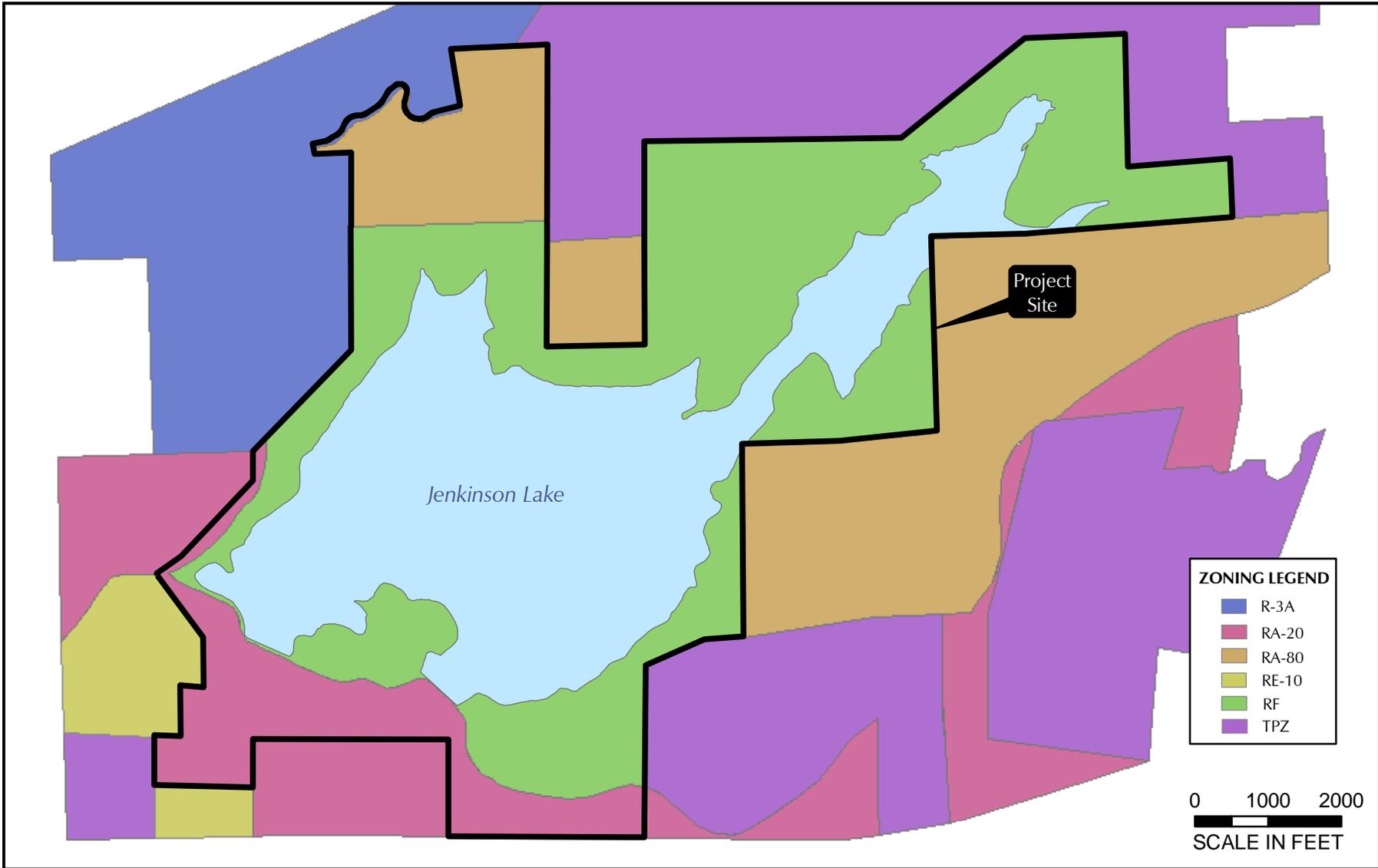
#### **4.1.3 Environmental Impact Thresholds/Criteria for Evaluation**

For the purposes of this Draft Master EIR, impacts are considered significant if they would:

- Physically divide an established community;
- Conflict with the El Dorado County General Plan or Zoning Ordinance; or
- Conflict with a habitat conservation plan or natural community conservation plan prepared for the project area.
- Conflict with the Eldorado National Forest Land and Resource Management Plan

Potential impacts related to agricultural resources are discussed in Section 4.2 of this Draft Master EIR. The physical effects of implementation of the Master Plan and development of individually proposed projects are discussed as appropriate within Sections 4.2 through 4.14 of this document.

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**EL DORADO COUNTY ZONING DISTRICTS**



**Table 4.1-1 — Comparison of the SPRA Master Plan Goals, Objectives and Policies with the 2004 El Dorado County General Plan**

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
<b>LAND USE</b>	
<p><b>Goal 2.1: Land Use.</b> Protection and conservation of existing communities and rural centers; creation of new sustainable communities; curtailment of urban/suburban sprawl; location and intensity of future development consistent with the availability of adequate infrastructure; and mixed and balanced uses that promote use of alternate transportation systems.</p>	<p>The Master Plan and associated components propose a natural resource-oriented management strategy to benefit continued recreational use and environmental quality of SPRA. This proposed strategy emphasizes preservation of the outdoor recreational potential of the area, while simultaneously maintaining the rural character and environmental quality of SPRA and surrounding lands. Land uses proposed by EID within the Master Plan area are intended to decrease the density and intensity of recreational use, while conserving natural resources within the plan area.</p>
<p><b>Objective 2.1.3: Rural Regions.</b> Provide a land use pattern that maintains the open character of the County, preserves its natural resources, recognizes the constraints of the land and the limited availability of infrastructure and public services, and preserves the agricultural and forest/timber area to ensure its long-term viability for agriculture and timber operations.</p>	<p>Proposed Master Plan Activities would identify and rehabilitate degraded natural conditions and provide for future organized management to preserve the long-term viability of SPRA natural resources.</p>
<b>Objective 2.2.5: General Policy Section</b>	
<p><b>Policy 2.2.5.2:</b> All applications for discretionary projects or permits including, but not limited to, General Plan amendments, zoning boundary amendments, tentative maps for major and minor land divisions, and special use permits shall be reviewed to determine consistency with the policies of the General Plan. No approvals shall be granted unless a finding is made that the project or permit is consistent with the General Plan. In the case of General Plan amendments, such amendments can be rendered consistent with the General Plan by modifying or deleting the General Plan provisions, including both the land use map and any relevant textual policies, with which the proposed amendments would be inconsistent.</p>	<p>Recreation, forestry, and water resources development are considered compatible land uses under the Natural Resource General Plan designation.</p> <p>The SPRA MP is not consistent with the Natural Resource land Use designation and implementation would require a General Plan Amendment.</p>
<p><b>Policy 2.2.5.11:</b> This policy recognizes the need and importance of managing forest products and natural resources. This policy further recognizes that it is important to provide for an efficient and cost effective means of harvesting and using forest lands. It is further recognized that the forested areas have a need for certain commercial support uses which should be allowed in a manner which is consistent with the forest use and outdoor recreation areas. Uses which are consistent here may include the processing of forest products and natural resources, overnight individual and group outdoor accommodations, outdoor recreation activities, including ski resorts, hunting and fishing clubs, equestrian facilities, and interpretive centers and conference/convention centers. These special support uses shall only be allowed to be established with the approval of a special use permit.</p>	<p>A FMP has been prepared as a component of the SPRA Master Plan. Master Plan Goals and Objectives, as well as individually proposed projects are intended to be consistent with forest management as proposed by the FMP. As stated by General Plan Policy 2.2.5.11, activities proposed by the SPRA MP, including individual and group outdoor accommodations, interpretive centers, and conference/convention centers are considered consistent with County policies for support uses on forested lands.</p>

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
<p><b>Policy 2.2.5.14:</b> Buffers shall be established around future water supplies and other public facilities to protect them from incompatible land uses. Such buffer lands should be contained on-site where possible.</p>	<p>The SPRA Master Plan has established 50-foot wide buffers adjacent to all creeks and streams located within the Park. However no buffer is required for Jenkinson Lake. It is currently used for recreation and bodily contact is allowed. Proposed SPRA Master Plan Goals 3.0, 5.0 and Objectives 1.1.5.11 maintain compatibility with adjacent land uses. Conceptually, the SPRA Master Plan is designed to preserve the rural, alpine character of the lands, while protecting the existing water supply, storage and treatment facilities and simultaneously providing regional recreational opportunities.</p>
<p><b>Policy 2.2.5.20:</b> Development involving any structure greater than 120 square feet in size or requiring a grading permit shall be permitted only upon a finding that the development is consistent with this General Plan and the requirements of all applicable County ordinances, policies, and regulations. For projects that do not require approval of the Planning Commission or Board of Supervisors, this requirement shall be satisfied by information supplied by the applicant demonstrating compliance.</p>	<p>In conjunction with the proposed General Plan Amendment from Natural Resources to Tourist Recreation, the finding of consistency with the General Plan would be accomplished through County review of an application for a special use permit. A discussion of land Use and potential conflicts with the General Plan is included within the analysis included within this section of the Draft Master EIR.</p>
<p><b>Policy 2.2.5.21:</b> Development projects shall be located and designed in a manner that avoids incompatibility with adjoining land uses that are permitted by the policies in effect at the time the development project is proposed. Development projects that are potentially incompatible with existing adjoining uses shall be designed in a manner that avoids any incompatibility or shall be located on a different site.</p>	<p>SPRA Master Plan Goals 3.0 and 5.0 identify the importance of maintaining compatibility with surrounding communities and the general character of the region. The SPRA MP has been designed in accordance with these goals and input received during public outreach programs and activities.</p>
<p><b>Policy 2.2.5.22:</b> Schools and other public buildings and facilities shall be directed to Community Regions and Rural Centers where feasible and shall be considered compatible outside of Community Regions and Rural Centers when facilities will be located and designed in a manner that avoids any substantial incompatibility with land uses permitted on adjoining lands.</p>	<p>SPRA Master Plan Goal 3.0 identifies the importance of maintaining compatibility with the surrounding communities. The SPRA MP has been designed in accordance with these goals and input received during public outreach programs and activities.</p>
<p><b>Goal 2.3: Natural Landscape Features.</b> Maintain the characteristic natural landscape features unique to each area of the County.</p>	<p>SPRA Master Plan Goals 1.0, 4.0, and 5.0 establish the natural environment and landscape features within SPRA as priorities. To achieve these goals, the SPRA Master Plan proposes Objectives 1.1, 1.2, 1.3, 1.4,1.5, 1.6, 1.7, 1.10, 4.1, 5.2, 5.11 and 5.12 to conserve and rehabilitate natural resources within SPRA. Design Standards and Guidelines include specific provisions for maintaining characteristic natural landscape features when designing, siting, and constructing facilities.</p>
<p><b>Objective 2.3.1: Topography and Native Vegetation.</b> Provide for the retention of distinct topographical features and conservation of the native vegetation of the County.</p>	<p>Proposed Goal 1.0 and Objectives 1.0 through 1.12 address natural resources and environmental quality. Individual actions proposed in conjunction within the plan identify specific locations within SPRA targeted for retention and rehabilitation of native vegetation.</p>
<p><b>Objective 2.3.2: Hillsides and Ridge Lines.</b> Maintain the visual integrity of hillsides and ridge lines.</p>	<p>Goal 1.0 addresses the protection and enhancement of natural resources. Objective 1.5 prioritizes the consideration of visual impacts. The proposed design standards and guidelines include specific provisions for grading activities, including maintaining the natural characteristics of the surrounding area by minimizing the</p>

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
	footprint of proposed development. However, development of the proposed new Marina Parking Lot would result in impacts to visual resources to the existing hillside at this location.
<p><b>Policy 2.3.2.1:</b> Disturbance of slopes thirty (30) percent or greater shall be discouraged to minimize the visual impacts of grading and vegetation removal.</p>	<p>Objectives 1.1, 1.5, and 1.7 address the consideration of visual impacts and erosion prevention and the preservation of native vegetation. Goal 5.0 establishes the importance of resource protection when maintaining and developing Park facilities. Objectives 5.1, 5.2, and 5.11 prioritize the conservation of natural resources in site design, location, and construction of recreational facilities. Individually proposed projects are proposed targeting the removal of existing recreational facilities in areas of steep slopes. Access barriers are proposed for recreational access areas within SPRA on slopes historically subjected to unauthorized public access and subsequent erosion. The exception to this would be the proposed new Marina Parking Lot. It would result in impacts to areas of steep slopes (greater than 30 percent slope) and aesthetics.</p>
<p><b>Goal 2.8:</b> Lighting. Elimination of high intensity lighting and glare consistent with prudent safety practices.</p>	<p>Goal 1.0 establishes the importance of scenic quality. Objective 1.5 identifies the importance of visual impacts consideration for proposed development and redevelopment projects.</p>
<b>LIGHTING STANDARDS</b>	
<p><b>Objective 2.8.1: Lighting Standards.</b> Provide standards, consistent with prudent safety practices, for the elimination of high intensity lighting and glare.</p>	<p>In addition to the policies established through Goal 1.0 and Objective 1.5, the Design Standards and Guidelines emphasize the use of non-reflective building materials. Where feasible, motion and light sensitive light fixtures should be provided at the entrances of restrooms, showers, and laundry facilities. Lighting should be low intensity and illuminate only the doorway and nearby ground surface. Any lighting associated with the amphitheaters and the Sugarloaf Fine Arts Camp improvements (e.g., amphitheater/fire pit, pool complex, basketball and volleyball courts, walkways, etc.) shall not cause a significant visual impact on adjacent property owners or detract from the camping experience of other Park visitors.</p>
<p><b>Policy 2.8.1.1:</b> Development shall limit excess nighttime light and glare from parking area lighting, signage, and buildings. Consideration will be given to design features, namely directional shielding for street lighting, parking lot lighting, sport field lighting, and other significant light sources, that could reduce effects from nighttime lighting. In addition, consideration will be given to the use of automatic shutoffs or motion sensors for lighting features in rural areas to further reduce excess nighttime light.</p>	
<b>SERVICES AND UTILITIES</b>	
<p><b>Goal 5.1:</b> Provide and maintain a system of safe, adequate, and cost-effective public utilities and services; maintain an adequate level of service to existing development while allowing for additional growth in an efficient manner; and, ensure a safe and adequate water supply, wastewater disposal, and appropriate public services for rural areas.</p>	<p>SPRA Master Plan Goals 1.0, 3.0 and 4.0 and Objectives 1.1, 1.8, 1.9, 3.4, 3.5, 3.7, 3.12, 4.1, 4.2, and 4.9 address SPRA public services and utilities. Public Services are discussed in Section 4.12 of and Utilities and Service Systems are discussed in Section 4.14 of this Draft Master EIR.</p>
<p><b>Objective 5.1.1: Planning.</b> Ensure that public infrastructure needs are anticipated and planned for in an orderly and cost effective manner.</p>	<p>See discussion for Goal 5.1 above.</p>
<p><b>Objective 5.1.2: Concurrency.</b> Ensure through consultation with responsible service and utility purveyors that adequate public services and utilities, including water supply wastewater treatment and disposal, solid waste disposal capacity, storm drainage,</p>	<p>Discretionary approval of a special use permit by the County of El Dorado would be required to implement the SPRA Master Plan, and would include consultation with utility and service providers. Utilities and Services are discussed in Sections 4.11, 4.12 and 4.14 of this Draft</p>

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
<p>fire protection, police protection, and ambulance service are provided concurrent with discretionary development or through other mitigation measures provided, and ensure that adequate school facilities are provided concurrent with discretionary development to the maximum extent permitted by State law. It shall be the policy of the County to cooperate with responsible service and utility purveyors in ensuring the adequate provision of service. Absent evidence beyond a reasonable doubt, the County will rely on the information received from such purveyors and shall not substitute its judgment for that of the responsible purveyors on questions of capacity or levels of service.</p>	<p>Master EIR.</p>
<p><b>Goal 5.3.1: Wastewater Capacity.</b> An adequate and safe system of wastewater collection, treatment, and disposal to serve current and future County residents.</p>	<p>SPRA Master Plan Goal 3.0, 4.0, and 5.0, and Objectives 3.5, 4.9, and 5.1 address wastewater within SPRA.</p>
<p><b>Objective 5.3.2: Rural Sewage Disposal/Alternative Wastewater Systems.</b> Ensure the development of efficient and environmentally safe individual sewage disposal systems in rural areas while encouraging and promoting alternative and innovative wastewater treatment.</p>	<p>On-site septic systems and wastewater disposal systems would be required to be developed consistent with the regulations and standards specified by the El Dorado County Environmental Health Division.</p>
<p><b>Policy 5.3.2.2:</b> Alternative rural wastewater systems should be reviewed by Environmental Management to determine applicability in El Dorado County. Any applicable systems shall be included in the County Zoning Ordinance.</p>	<p>See discussion for Objective 5.3.2 above.</p>
<p><b>Goal 5.7: Emergency Services.</b> Adequate and comprehensive emergency services, including fire protection, law enforcement, and emergency medical services.</p>	<p>Goal 3.0 addresses the health, property and safety of Park visitors, staff and the surrounding communities. Objectives 3.1, 3.2, 3.6, 3.7, 3.8, 3.11, 3.12 address access, emergency ingress and egress, evacuation and response times, Park patrols by law enforcement, enforcement personnel, and the reduction of crime potential and vandalism.</p>
<p><b>Objective 5.7.2: Fire Protection (Rural Regions and Rural Centers).</b> Sufficient emergency water supply, storage, and conveyance facilities for fire protection, together with adequate access are available, or are provided for, concurrent with development.</p>	<p>Objectives 3.1, 3.2, 3.8, address emergency access. The proposed Design Guidelines and Standards address construction building materials as well as site design. Recent upgrades to the water service within SPRA have been implemented to provide adequate fire flows throughout the area and also involved the installation of fire hydrants.</p>
<p><b>Policy 5.7.2.1:</b> Before approval of new development, the responsible fire protection district shall be requested to review all applications to determine the ability of the district to provide protection services. The ability to provide fire protection to existing development shall not be reduced below acceptable levels as a consequence of new development.</p>	<p>As part of the use permit process, local fire agencies will review and approves site plans for all proposed facilities.</p>
<p><b>Objective 5.7.3: Law Enforcement.</b> An adequate, comprehensive, coordinated law enforcement system consistent with the needs of the community.</p>	<p>Goal 3.0 identifies the importance of protecting the health and safety of Park visitors, staff and the surrounding communities.</p>
<p><b>Policy 5.7.3.1:</b> Before approval of new development, the Sheriff's Department shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide</p>	<p>Objectives 3.4, 3.6, 3.7, 3.11, and 3.12 identify strategies for adequate staffing levels, management of parking areas, and coordination with local law enforcement agencies to ensure adequate law enforcement and</p>

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.	response times within SPRA. The Public Safety Element of the SPRA Master Plan includes increased staffing of law enforcement personnel within SPRA.
<b>Objective 5.7.4: Medical Emergency Services.</b> Adequate medical emergency services available to serve existing and new development recognizing that levels of service may differ between Community Regions, and Rural Centers and Regions.	The Access Element of the SPRA Master Plan includes upgrades of existing access routes for public safety, including provisions for emergency access vehicles.
<b>Policy 5.7.4.1:</b> Before approval of new development, the applicant shall be required to demonstrate that adequate medical emergency services are available and that adequate emergency vehicle access will be provided concurrent with development.	See above discussion for Objective 5.7.4.
<b>Policy 5.7.4.2:</b> Before approval of new development, the Emergency Medical Services Agency shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.	Public Services are analyzed in Section 4.12 of this Draft Master EIR.
<b>Implementation Measure PS-A:</b> Establish a means, either through formal agreement or through the identification of formal contacts, for various County agencies and departments to communicate with the following non-County public service and utility providers regarding planning for the provision of services and its relationship to the General Plan and the County's long range or capital improvement programs: <ul style="list-style-type: none"> <li>A. Water Providers</li> <li>B. Wastewater Treatment Providers</li> <li>C. Solid Waste Disposal and Recycling Providers</li> <li>D. Private Emergency Service Providers</li> <li>E. Arts and Cultural Activity Providers</li> <li>F. Public School Districts</li> <li>G. Utility Providers (e.g., electricity)</li> </ul>	EID proposes cooperation and coordination with other agencies and members of the public. See Goal 6.0 and Objectives 6.1 through 6.5 of the SPRA Master Plan.
<b>Implementation Measure PS-D:</b> Develop a program to improve and promote appropriate sewage disposal systems in areas of the county that do not have public sewage disposal service available	Proposed sewage facilities would be required to be developed in accordance with the regulatory requirements and standards as specified by the El Dorado County Environmental Health Division.
<b>Implementation Measure PS-E:</b> Work with the Water Agency and public water providers to establish a water resources development and management program.	Water resources are discussed in Section 4.11 of this Draft Master EIR.

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
<b>HEALTH AND SAFETY</b>	
<b>Goal 6.2: Fire Hazards.</b> Minimize fire hazards and risks in both wildland and developed areas.	Located entirely within an area of forestlands, the SPRA Master Plan identifies the need for minimizing risks related to wildland fire. The FMP prepared concurrent with the SPRA Master Plan identifies fuel reduction management techniques as well as other hazard reduction methods.
<b>Objective 6.2.1: Defensible Space.</b> All new development and structures shall meet “defensible space” requirements and adhere to fire code building requirements to minimize wildland fire hazards.	Design standards for recreational facilities within the SPRA Master Plan specify a 30-foot defensible space be maintained surrounding all structures.
<b>Policy 6.2.1.2:</b> Coordinate with the local Fire Safe Councils, California Department of Forestry and Fire Protection, and federal and state agencies having land use jurisdiction in El Dorado County in the development of a countywide fuels management strategy.	The El Dorado County Fire Safe Council is currently preparing a Sly Park Corridor Community Action Plan to address wildfire public safety issues and evacuation planning. Fire protection is analyzed in Public Services, Section 4.12, and wildland fire hazards are addressed in the Hazards and Hazardous Materials, Section 4.10, of this DRAFT MASTER.
<b>Objective 6.2.2: Limitations to Development.</b> Regulate development in areas of high and very high fire hazard as designated by the California Department of Forestry and Fire Prevention Fire Hazard Severity Zone Maps.	SPRA is located within a State Responsibility Area under jurisdiction of CDF. Improvements and development would be subject to review and approval by CDF pursuant to Section 4290 of the PRC.
<b>Policy 6.2.2.1:</b> Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.	Due to the location of SPRA in a very high fire hazard area, the FMP addresses wildland fire protection. Goal 3.0 identified by the SPRA Master Plan identifies the protection of safety for visitors, staff and the surrounding community.
<b>Policy 6.2.2.2:</b> The County shall preclude development in areas of high and very high wildland fire hazard or in areas identified as “urban wildland interface communities within the vicinity of Federal lands that are a high risk for wildfire,” as listed in the Federal Register of August 17, 2001, unless such development can be adequately protected from wildland fire hazard, as demonstrated in a Fire Safe Plan prepared by a Registered Professional Forester (RPF) and approved by the local Fire Protection District and/or California Department of Forestry and Fire Protection.	A FMP has been prepared by an RPF concurrent with the SPRA Master Plan. The FMP includes an analysis of wildland fire potential and hazard reduction.  Proposed development would be subject to review and approval by CDF in accordance with PRC Sections 4290 and 4291.  Fire hazard management at the SPRA help reduce fire hazards in the area for other land uses.
<b>Objective 6.2.3: Adequate Fire Protection.</b> Application of uniform fire protection standards to development projects by fire districts.	Implementation of uniform fire protection standards for proposed development projects would be required pursuant to the County Ordinance Code as a condition of approval for issuance of any building permit or as specified within the County Special Use Permit.  Fire protection is analyzed in Public Services, Section 4.12, and wildland fire risk is addressed in Hazards and Hazardous Materials, Section 4.10, of this Draft Master EIR.

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
<p><b>Policy 6.2.3.1:</b> As a requirement for approving new development, the County must find, based on information provided by the applicant and the responsible fire protection district that, concurrent with development, adequate emergency water flow, fire access, and fire fighting personnel and equipment will be available in accordance with applicable State and local fire district standards.</p>	<p>See above discussion for Objective 6.2.3.</p>
<p><b>Policy 6.2.3.2:</b> As a requirement of new development, the applicant must demonstrate that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.</p>	<p>Objectives 3.1, 3.2, 3.8, address emergency access in support of Goal 3.0 which identifies the protection of health, property, and safety of Park visitors, staff and the surrounding communities. The Access Element of the SPRA Master Plan proposes individual projects to increase access and circulation within SPRA for emergency vehicle access and evacuation.</p>
<p><b>Policy 6.2.3.4:</b> All new development and public works projects shall be consistent with applicable State Wild land Fire Standards and other relevant State and federal fire requirements.</p>	<p>SPRA is located within a State Responsibility Area under jurisdiction of CDF. Improvements and development would be subject to review and approval by CDF in accordance with PRC 4290.</p>
<p><b>Objective 6.2.4: Area-Wide Fuel Management Program.</b> Reduce fire hazard through cooperative fuel management activities.</p>	<p>The FMP includes a provision for fuel management strategies within SPRA. The FMP also identifies wildland fire potential and hazard reduction. Additionally, the El Dorado Fire Safe Council is currently preparing a fire safe plan for the Sly Park area.</p>
<p><b>Policy 6.2.4.1:</b> Discretionary development within high and very high fire hazard areas shall be conditioned to designate fuel break zones that comply with fire safe requirements to benefit the new and, where possible, existing development.</p>	<p>See discussion above for Objective 6.2.4.</p>
<p><b>Goal 6.3: Geologic and Seismic Hazards:</b> Minimize the threat to life and property from seismic and geologic hazards.</p>	<p>A Geotechnical study was prepared for the Master Plan and Master EIR for SPRA. Seismic Hazards, including the potential for fault hazards, liquefaction, and landslides are discussed in Section 4.9 of this Draft Master EIR.</p>
<p><b>Objective 6.3.2: County-Wide Seismic Hazards.</b> Continue to evaluate seismic related hazards such as liquefaction, landslides, and avalanche, particularly in the Tahoe Basin.</p>	<p>See discussion above for Goal 6.3.</p>
<p><b>Policy 6.3.2.5:</b> Applications for development of habitable structures shall be reviewed for potential hazards associated with steep or unstable slopes, areas susceptible to high erosion, and avalanche risk. Geotechnical studies shall be required when development may be subject to geological hazards. If hazards are identified, applicants shall be required to mitigate or avoid identified hazards as a condition of approval. If no mitigation is feasible, the project will not be approved.</p>	<p>A geotechnical study was prepared for the specific purpose of addressing existing geology and soils issues for discussion in the SPRA Master Plan. Subsequent geologic studies would be conducted as required on a project by project basis.</p>

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
<p><b>Goal 6.5: Acceptable Noise Levels:</b> Ensure that County residents are not subjected to noise beyond acceptable levels.</p>	<p>The SPRA Master Plan prioritizes facility development consistent with the rural character of the region as well as consistent with adjacent land uses, including residential development in Goal 5.0, which specifies that design and placement of facilities and structures should be subordinate to the natural landscape setting (Objective 5.11) and that the concerns of adjacent residents and property owners should be considered in considering the location for Park facilities.</p>
<p><b>Objective 6.5.1: Protection of Noise-Sensitive Development.</b> Protect existing noise-sensitive developments (e.g., hospitals, schools, churches and residential) from new uses that would generate noise levels incompatible with those uses and, conversely, discourage noise-sensitive uses from locating near sources of high noise levels.</p>	<p>See previous discussion.</p>
<p><b>Policy 6.5.1.2:</b> Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 6-2 at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.</p>	<p>An initial assessment of issues, opportunities and constraints related to noise at Sly Park has been prepared for the SPRA Master Plan EIR. Noise is discussed in Section 4.6 of this Draft Master EIR. Mitigation measures have been proposed for significant impacts associated with implementation of the SPRA Master Plan.</p>
<p><b>Policy 6.5.1.3:</b> Where noise mitigation measures are required to achieve the standards of Tables 6-1 and 6-2, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project and the noise barriers are not incompatible with the surroundings.</p>	<p>Noise is discussed within Section 4.6 of this Draft Master EIR. Site design and construction would be reviewed by the County of El Dorado as part of the approval process for a special use permit.</p>
<p><b>Policy 6.5.1.7:</b> Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 6-2 for noise-sensitive uses.</p>	<p>See discussion above for Policy 6.5.1.2 and 6.5.1.3.</p>
<p><b>Policy 6.5.1.13:</b> When determining the significance of impacts and appropriate mitigation to reduce those impacts for new development projects, including ministerial development, the following criteria shall be taken into consideration:</p> <p>In areas in which ambient noise levels are in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new non-transportation noise sources that exceed 5 dBA shall be considered significant; and</p> <p>In areas in which ambient noise levels are not in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new non-transportation noise sources that exceed 3 dBA shall be considered significant.</p>	<p>Noise is discussed within Section 4.6 of this Draft Master EIR. Site design and construction would be reviewed by the County of El Dorado as part of the approval process for a special use permit.</p>

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<b>CONSERVATION</b>	
<b>Goal 7.1: Soil Conservation.</b> Conserve and protect the County's soil resources.	Goal 1.0 addresses the protection of SPRA natural resources. Objectives 1.7, 1.10 address soil conservation and erosion reduction.
<b>Objective 7.1.2: Erosion/Sedimentation</b> Minimize soil erosion and sedimentation.	See discussion above for Goal 7.1.
<p><b>Policy 7.1.2.1:</b> Development or disturbance shall be prohibited on slopes exceeding 30 percent unless necessary for access. The County may consider and allow development or disturbance on slopes 30 percent and greater when:</p> <ul style="list-style-type: none"> <li>• Reasonable use of the property would otherwise be denied.</li> <li>• The project is necessary for the repair of existing infrastructure to avoid and mitigate hazards to the public, as determined by a California registered civil engineer or a registered engineering geologist.</li> <li>• The project is necessary for the repair of existing infrastructure to avoid and mitigate hazards to the public, as determined by a California-registered civil engineer or an engineering geologist.</li> <li>• Replacement or repair of existing structures would occur in substantially the same footprint.</li> <li>• The use is a horticultural or grazing use that uses "best management practices (BMPs)" recommended by the County Agricultural Commission and adopted by the Board of Supervisors.</li> </ul> <p>Access corridors on slopes 30 percent and greater shall have a site specific review of soil type, vegetation, drainage contour, and site placement to encourage proper site selection and mitigation. Septic systems may only be located on slopes under 30 percent. Roads needed to complete circulation/access and for emergency access may be constructed on such cross slopes if all other standards are met.</p>	<p>Erosion control is one of the primary emphasized components and management strategies of the SPRA Master Plan and associated activities to maintain water quality mandated by State drinking water standards.</p> <p>The SPRA Master Plan Design Standards and Guidelines define the general approach for reducing soil erosion and sedimentation within SPRA. Individual Elements proposed by the SPRA Master Plan target problem areas within SPRA currently subject to unauthorized use and access, that are contributing to ongoing area-wide erosion problems. Master Plan elements as well as individual projects propose erosion control through a number of proposed management activities, including the implementation of BMPs. Individually proposed projects have been designed to target problem areas within SPRA, and place emphasis on soil stabilization through the surfacing of access routes and trails, revegetation of exposed areas of soil, as well as access limitations by reconfiguring campgrounds and designating formal camp sites and trail routes throughout SPRA. The plan also proposes barriers to limit unauthorized access and the decommissioning or reconfiguration of campsites and access routes in erosion-prone areas and areas of unsuitably steep slopes.</p> <p>The proposed new Marina Parking Lot has undergone the County-required studies to include site-specific review of the soil type, vegetation, and drainage contour due to the presence of steep slopes within the project area.</p>
<b>Policy 7.1.2.2:</b> Discretionary and ministerial projects that require earthwork and grading, including cut and fill for roads, shall be required to minimize erosion and sedimentation, conform to natural contours, maintain natural drainage patterns, minimize impervious surfaces, and maximize the retention of natural vegetation. Specific standards for minimizing erosion and sedimentation shall be incorporated into the Zoning Ordinance.	The Design Standards and Guidelines include provisions for minimizing the potential for erosion and sedimentation including: minimizing development footprints, minimizing cut and fills, maintaining natural drainage patterns and minimizing construction access routes. Master Plan elements and individually proposed project emphasis erosion control throughout SPRA.
<b>Goal 7.3: Water Quality and Quantity.</b> Conserve, enhance, and manage water resources and protect their quality from degradation.	Goal 1.0 identifies natural resource protection and enhancement, including water quality. Objectives 1.8, 1.9, 1.10 identify specific implementation measures to achieve the goal to protect and enhance water quality within SPRA.

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<p><b>Objective 7.3.1: Water Resource Protection.</b> Preserve and protect the supply and quality of the County's water resources including the protection of critical watersheds, riparian zones, and aquifers.</p>	<p>The SPRA Management Plan is designed as a resource conservation strategy intended to conserve area natural resources as well as recreational opportunities, with emphasis on erosion control. SPRA Master Plan goals and objectives emphasize natural resource conservation priorities through implementation of management strategies and individually proposed projects targeting degraded areas within SPRA as well as proposing the construction of new facilities to better manage and accommodate recreational use within SPRA. Goal 5.0 identifies the importance of maintaining and developing facilities consistent with the objectives for Park resource protection including Objective 5.1 which identifies water quality protection.</p>
<p><b>Policy 7.3.1.1:</b> Encourage the use of Best Management Practices, as identified by the Soil Conservation Service, in watershed lands as a means to prevent erosion, siltation, and flooding.</p>	<p>SPRA Master Plan Design Standards and Guidelines propose BMP implementation, as well as site design and construction standards, for erosion prevention and sediment control.</p>
<p><b>Objective 7.3.2: Water Quality.</b> Maintenance of and, where possible, improvement of the quality of underground and surface water.</p>	<p>The SPRA Master Plan identifies a series of management approaches and individually proposed projects specifically targeting water quality within the watershed as well as for Jenkinson Lake as a water supply reservoir.</p>
<p><b>Policy 7.3.2.1:</b> Stream and lake embankments shall be protected from erosion, and streams and lakes shall be protected from excessive turbidity.</p>	<p>SPRA Master Plan objectives under Goal 1.0 address the protection and enhancement of natural resources within SPRA. Objective 1.1 specifies that natural elements, including intermittent and perennial streams, aquatic habitats, and shoreline and water quality shall be protected through proper site design and development. The Design Guidelines and Standards specify individual criteria for siting and developing recreational facilities within SPRA in accordance with these objectives. Objective 1.10 identifies improving and stabilizing shoreline trails.</p>
<p><b>Policy 7.3.2.2:</b> Projects requiring a grading permit shall have an erosion control program approved, where necessary.</p>	<p>See discussion under soil conservation.</p>
<p><b>Policy 7.3.2.3:</b> Where practical and when warranted by the size of the project, parking lot storm drainage shall include facilities to separate oils and salts from storm water in accordance with the recommendations of the Storm Water Quality Task Force's California Storm Water Best Management Practices Handbooks (1993).</p>	<p>Hydrology and Water Quality are discussed in Section 4.11 of this Draft Master EIR.</p> <p>Development of parking facilities would be required to be designed and constructed in compliance with county standards as part of the special use permit approval process.</p>
<p><b>Policy 7.3.2.5:</b> As a means to improve the water quality affecting the County's recreational waters, enhanced and increased detailed analytical water quality studies and monitoring should be implemented to identify and reduce point and non-point pollutants and contaminants. Where such studies or monitoring reports have identified sources of pollution, the County shall propose means to prevent, control, or treat identified pollutants and contaminants.</p>	<p>Jenkinson Lake, as a drinking water supply reservoir, is subject to drinking water quality standards and testing requirements specified by the State Water Quality Control Board. In addition, a risk assessment study of Jenkinson Lake conducted in 2004 collected lake profile water quality data at three locations. The data collected through August 2004 was provided by Hydroikos Associates. The SPRA Master Plan also specifies that a creek drainage study shall be prepared for bridged trail crossings.</p>

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<p><b>Objective 7.3.3: Wetlands.</b> Protection of natural and man-made wetlands, vernal pools, wet meadows, and riparian areas from impacts related to development for their importance to wildlife habitat, water purification, scenic values, and unique and sensitive plant life.</p>	<p>Goal 1.0 identifies the protection and enhancement of natural resources, including wetlands. Goal 5.0 specifies that maintenance and development of recreational facilities shall occur in a manner consistent with Park resource protection.</p>
<p><b>Policy 7.3.3.1:</b> For projects that would result in the discharge of material to or that may affect the function and value of river, stream, lake, pond, or wetland features, the application shall include a delineation of all such features. For wetlands, the delineation shall be conducted using the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual.</p>	<p>A biological resource assessment has been prepared for SPRA. Biological Resources, including wetlands are discussed in Section 4.7 of this Draft Master EIR.</p>
<p><b>Policy 7.3.3.4:</b> The Zoning Ordinance shall be amended to provide buffers and special setbacks for the protection of riparian areas and wetlands. The County shall encourage the incorporation of protected areas into conservation easements or natural resource protection areas. Exceptions to riparian and wetland buffer and setback requirements shall be provided to permit necessary road and bridge repair and construction, trail construction, and other recreational access structures such as docks and piers, or where such buffers deny reasonable use of the property, but only when appropriate mitigation measures and Best Management Practices are incorporated into the project. Exceptions shall also be provided for horticultural and grazing activities on agriculturally zoned lands that use “best management practices (BMPs)” as recommended by the County Agricultural Commission and adopted by the Board of Supervisors. Until standards for buffers and special setbacks are established in the Zoning Ordinance, the County shall apply a minimum setback of 100 feet from all perennial streams, rivers, lakes, and 50 feet from intermittent streams and wetlands. These interim standards may be modified in a particular instance if more detailed information relating to slope, soil stability, vegetation, habitat, or other site- or project-specific conditions supplied as part of the review for a specific project demonstrates that a different setback is necessary or would be sufficient to protect the particular riparian area at issue. For projects where the County allows an exception to wetland and riparian buffers, development in or immediately adjacent to such features shall be planned so that impacts on the resources are minimized. If avoidance and minimization are not feasible, the County shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible.</p>	<p>The SPRA Master Plan proposes the implementation of a 50-foot setback for recreational facilities adjacent to streams. Individually proposed projects include decommissioning of campsites and access routes as well as the construction of bridges to support Objective 1.1, which specifies that aquatic habitats, perennial and intermittent streams, shorelines and water quality shall be maintained through site design and development.</p>
<p><b>Objective 7.3.4: Drainage.</b> Protection and utilization of natural drainage patterns.</p>	<p>SPRA Master Plan Design Standards and Guidelines specify the retention of natural drainage patterns to the maximum extent practicable.</p>

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<p><b>Goal 7.4: Wildlife and Vegetation Resources.</b> Identify, conserve, and manage wildlife, wildlife habitat, fisheries, and vegetation resources of significant biological, ecological, and recreational value.</p>	<p>Goal 1.0 specifies that the natural resources within SPRA shall be protected and enhanced. Objective 1.1 identifies that natural elements within SPRA, including: wildlife and aquatic habitats, forests, perennial and intermittent streams, riparian vegetation, wildlife, shoreline and water quality shall be protected through appropriate site design and development. Biological resources are discussed in detail in Section 4.7 of this Master EIR. Appropriate site design and development are specified in the proposed design standards and guidelines.</p>
<p><b>Objective 7.4.2: Identify and Protect Resources.</b> Identification and protection, where feasible, of critical fish and wildlife habitat including deer winter, summer, and fawning ranges; deer migration routes; stream and river riparian habitat; lake shore habitat; fish spawning areas; wetlands; wildlife corridors; and diverse wildlife habitat.</p>	<p>A Biological Assessment was completed for SPRA.</p> <p>Biological resources are discussed in Section 4.7 of this Draft Master EIR.</p>
<p><b>Policy 7.4.2.3:</b> Consistent with Policy 9.1.3.1 of the Parks and Recreation Element, low impact uses such as trails and linear parks may be provided within river and stream buffers if all applicable mitigation measures are incorporated into the design.</p>	<p>The SPRA Master Plan includes provisions for trail development and rehabilitation adjacent to streams. Proposed individual projects would involve stabilization and development of trails to minimize habitat damage and erosion.</p>
<p><b>Policy 7.4.2.4:</b> Establish and manage wildlife habitat corridors within public parks and natural resource protection areas to allow for wildlife use. Recreational uses within these areas shall be limited to those activities that do not require grading or vegetation removal.</p>	<p>Proposed grading activities within the SPRA Master Plan are designed as a management strategy to restore degraded areas within SPRA subject to erosion and sediment loss and loss of natural vegetative cover. As specified by the design standards and guidelines, tree removal would be minimized and revegetation with native replantings would occur as necessary.</p>
<p><b>Policy 7.4.2.5:</b> Setbacks from all rivers, streams, and lakes shall be included in the Zoning Ordinance for all ministerial and discretionary development projects.</p>	<p>The SPRA Master Plan includes provisions for setbacks from stream courses as well as lake shoreline. Individually proposed project include management activities to reconfigure or decommission existing campsites, parking areas, access routes and trails encroaching into watercourse setback areas.</p>
<p><b>Objective 7.4.4: Forest and Oak Woodland Resources.</b> Protect and conserve forest and woodland resources for their wildlife habitat, recreation, water production, domestic livestock grazing, production of a sustainable flow of wood products, and aesthetic values.</p>	<p>A FMP was prepared concurrent with the SPRA Master Plan. It is the intent for the Master Plan to be consistent with the forest resource management strategy identified in the FMP.</p>
<p><b>Policy 7.4.4.1:</b> The Natural Resource land use designation shall be used to protect important forest resources from uses incompatible with timber harvesting.</p>	<p>Recreation and timber harvesting are compatible land uses. The goals of the SPRA Master Plan include provision for the protection of forest resources within Goals 1.0 and 5.0, and Objectives 1.1, 5.1, and 5.11.</p>
<p><b>Policy 7.4.4.2:</b> Through the review of discretionary projects, the County, consistent with any limitations imposed by State law, shall encourage the protection, planting, restoration, and regeneration of native trees in new developments and within existing communities.</p>	<p>Objective 5.12 specifies that indigenous plant materials shall be used for landscaping when appropriate. Design standards and guidelines specified within the SPRA Master Plan include minimizing tree removal.</p>

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<p><b>Policy 7.4.4.3:</b> Use the clustering of development to retain the largest contiguous areas possible in wildland (undeveloped) status.</p>	<p>The SPRA Master Plan prioritizes retaining the rural, alpine character of SPRA. Master Plan elements and individually proposed projects propose clustering design concepts in new construction as well as the rehabilitation/reconfiguration of existing recreational facilities.</p>
<p><b>Policy 7.4.4.4:</b> For all new development projects (not including agricultural cultivation and actions pursuant to an approved Fire Safe Plan necessary to protect existing structures, both of which are exempt from this policy) that would result in soil disturbance on parcels that (1) are over an acre and have at least 1 percent total canopy cover or (2) are less than an acre and have at least 10 percent total canopy cover by woodlands habitats as defined in this General Plan and determined from base line aerial photography or by site survey performed by a qualified biologist or licensed arborist, the County shall require one of two mitigation options: (1) the project applicant shall adhere to the tree canopy retention and replacement standards described below; or (2) the project applicant shall contribute to the County's Integrated Natural Resources Management Plan (INRMP) conservation fund described in Policy 7.4.2.8.</p>	<p>The FMP proposes forest management activities including fuel load reduction and timber management for increased forest health related to fire protection.</p>
<p><b>Policy 7.4.4.5:</b> Where existing individual or a group of oak trees are lost within a stand, a corridor of oak trees shall be retained that maintains continuity between all portions of the stand. The retained corridor shall have a tree density that is equal to the density of the stand.</p>	<p>See above discussion for Policy 7.4.4.4. Goal 1.0 of the SPRA Master Plan intends to protect and enhance Sly Park's natural resources, scenic quality, water quality, and historical and cultural resources. In addition, Objective 1.1 intends to protect natural elements, including wildlife and aquatic habitats, forest, perennial and intermittent streams, riparian vegetation, wildlife, shoreline, and water quality, through appropriate site design and development.</p>
<p><b>Objective 7.4.5: Native Vegetation and Landmark Trees.</b> Protect and maintain native trees including oaks and landmark and heritage trees.</p>	<p>An FMP has been prepared concurrent with the Master Plan. Objective 1.1 intends to protect natural elements, including wildlife and aquatic habitats, forest, perennial and intermittent streams, riparian vegetation, wildlife, shoreline, and water quality, through appropriate site design and development.</p>

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<p><b>Policy 7.4.5.2:</b> It shall be the policy of the County to preserve native oaks wherever feasible, through the review of all proposed development activities where such trees are present on either public or private property, while at the same time recognizing individual rights to develop private property in a reasonable manner. To ensure that oak tree loss is reduced to reasonable acceptable levels, the County shall develop and implement an Oak Tree Preservation Ordinance that includes the following components:</p> <p>A. Oak Tree Removal Permit Process. Except under special exemptions, a tree removal permit shall be required by the County for removal of any native oak tree with a single main trunk of at least 6 inches diameter at breast height (dbh), or a multiple trunk with an aggregate of at least 10 inches dbh. Special exemptions when a tree removal permit is not needed shall include removal of trees less than 36 inches dbh on 1) lands in Williamson Act Contracts, Farmland Security Zone Programs, Timber Production Zones, Agricultural Districts, designated Agricultural Land (AL), and actions pursuant to a Fire Safe plan; 2) all single family residential lots of one acre or less that cannot be further subdivided; 3) when a native oak tree is cut down on the owner's property for the owner's personal use; and 4) when written approval has been received from the County Planning Services. In passing judgment upon tree removal permit applications, the County may impose such reasonable conditions of approval as are necessary to protect the health of existing oak trees, the public and the surrounding property, or sensitive habitats. The County Planning Services may condition any removal of native oaks upon the replacement of trees in kind. The replacement requirement shall be calculated based upon an inch for inch replacement of removed oaks. The total of replacement trees shall have a combined diameter of the tree(s) removed. Replacement trees may be planted onsite or in other areas to the satisfaction of the County Planning Services. The County may also condition any tree removal permit that would affect sensitive habitat (e.g., valley oak woodland), on preparation of a Biological Resources Study and an Important Habitat Mitigation Program as described in Policy 7.4.1.6. If an application is denied, the County shall provide written notification, including the reasons for denial, to the applicant.</p> <p>B. Tree Removal Associated with Discretionary Project. Any person desiring to remove a native oak shall provide the County with the following as part of the project application:</p> <ul style="list-style-type: none"> <li>• A written statement by the applicant or an arborist stating the justification for the</li> </ul>	<p>As part of the FMP, A forest inventory was conducted to assess and describe the current forest stand characteristics such as species composition, age classes, present stocking level, present volume per acre, size class distribution, forest pests and diseases, and presence of hazard trees. The FMP includes a strategy for retaining and generating large tree forest structure.</p> <p>The FMP identifies opportunities for enhancing recreational and environmental values through timber management practices. This may include interpretive educational opportunities related to forest ecology and management, and opportunities for fish and wildlife enhancement such as increasing nesting, foraging, and perching habitat for raptors or increasing relative percentage of hardwoods (e.g., black oaks).</p>

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<p>development activity, identifying how trees in the vicinity of the project or construction site will be protected and stating that all construction activity will follow approved preservation methods;</p> <ul style="list-style-type: none"> <li>• A site map plan that identifies all native oaks on the project site; and</li> <li>• A report by a certified arborist that provides specific information for all native oak trees on the project site.</li> </ul>	
<p><b>Goal 7.5: Cultural Resources.</b> Ensure the preservation of the County's important cultural resources.</p>	<p>Goal 1.0 specifies that natural resources, including cultural resources shall be protected and enhanced.</p>
<p><b>Objective 7.5.1: Protection of Cultural Heritage.</b> Creation of an identification and preservation program for the County's cultural resources.</p>	<p>A Historic Properties Management Plan is being prepared concurrent with the current Master Plan for SPRA.</p>
<p><b>Policy 7.5.1.3:</b> Cultural resource studies (historic, prehistoric, and paleontological resources) shall be conducted before approval of discretionary projects. Studies may include, but are not limited to, record searches through the North Central Information Center at California State University, Sacramento, the Museum of Paleontology, University of California, Berkeley, field surveys, subsurface testing, and/or salvage excavations. The avoidance and protection of sites shall be encouraged.</p>	<p>A Historical and Archaeological Resources Analysis was conducted for SPRA as part of the facility transfer process. This document will be submitted to and reviewed by the California State Historic Preservation Office (SHPO).</p> <p>Objective 1.11 specifies that significant historical resources shall be preserved, restored or recreated where appropriate.</p>
<p><b>Policy 7.5.1.4:</b> Promote the registration of historic districts, sites, buildings, structures, and objects in the National Register of Historic Places and inclusion in the California State Office of Historic Preservation's California Points of Historic Interest and California Inventory of Historic Resources.</p>	<p>Goal 1.0 of the SPRA Master Plan intends to protect and enhance Sly Park's natural resources, scenic quality, water quality, and historical and cultural resources.</p>
<p><b>Policy 7.5.1.6:</b> The County shall treat any significant cultural resources (i.e., those determined California Register of Historical Resources/National Register of Historic Places eligible and unique paleontological resources), documented as a result of a conformity review for ministerial development, in accordance with CEQA standards.</p>	<p>Cultural Resources are discussed in Section 4.8 of this document.</p>
<p><b>Objective 7.5.2: Visual Integrity.</b> Maintenance of the visual integrity of historic resources.</p>	<p>The protection and enhancement of natural resources as identified by Goals 1.0 and 5.0 includes the scenic quality of SPRA. Objectives 1.5 and 5.11 directly relate to minimizing visual impacts.</p>
<p><b>Policy 7.5.2.4:</b> The County shall prohibit the modification of all National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) listed properties that would alter their integrity, historic setting, and appearance to a degree that would preclude their continued listing on these registers. If avoidance of such modifications on privately owned listed properties is deemed infeasible, mitigation measures commensurate with NRHP/CRHR standards shall be formulated in cooperation with the property owner.</p>	<p>Objective 1.11 specifies that significant historical resources shall be preserved, restored or recreated where appropriate.</p>

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<p><b>Objective 7.5.3: Recognition of Prehistoric/Historic Resources.</b> Recognition of the value of the County's prehistoric and historic resources to residents, tourists, and the economy of the County, and promotion of public access and enjoyment of prehistoric and historic resources where appropriate.</p>	<p>The SPRA Master Plan includes educational components proposed to fulfill goals of natural resource protection and enhancement. Objective 1.12 identifies the development of a facility to facilitate public education regarding concerning sensitive resources within SPRA.</p> <p>Cultural Resource education would be facilitated by Elements of the SPRA Master Plan as well as individually proposed projects specifically targeting education and interpretive displays.</p>
<p><b>Goal 7.6: Open Space Conservation.</b> Conserve open space land for the continuation of the County's rural character, commercial agriculture, forestry and other productive uses, the enjoyment of scenic beauty and recreation, the protection of natural resources, for protection from natural hazards, and for wildlife habitat.</p>	<p>Goal 1.0 states that natural resources within SPRA shall be protected and enhanced. Goal 5.0 states that facility maintenance and development shall occur in a manner consistent with the character of the area and Park resource protection. Objectives 1.1 through 1.12 and 5.1, 5.2, 5.11 and 5.12 directly related to natural resource conservation within SPRA.</p>
<p><b>Policy 7.6.1.4:</b> The creation of new open space areas, including Ecological Preserves, common areas of new subdivisions, and recreational areas, shall include wildfire safety planning.</p>	<p>The FMP includes an analysis of wildland fire potential and a plan for fire hazard reduction. A description of current vegetative characteristics is included with respect to vertical and horizontal connectivity and ground fuels, as well as description of fire hazard reduction methods, including fuel load reduction and forest health management</p>
<p><b>Goal 8.1: Agricultural Land Conservation.</b> Long-term conservation and use of existing and potential agricultural lands within the County and limiting the intrusion of incompatible uses into agricultural lands.</p>	<p>Agricultural Resources are discussed in Section 4.2 of this Draft Master EIR. Project design and construction would be required to implement a 200-foot setback where implementation of the SPRA Master Plan proposes the development of noncompatible land uses adjacent to TPZ land.</p>
<p><b>Goal 8.3: Forest Land Conservation.</b> Maintain healthy sustainable forests that provide for raw materials while limiting the intrusion of incompatible uses into important forest lands.</p>	<p>Agricultural Resources are discussed in Section 4.2 of this Draft Master EIR. Project design and construction would be required to implement a 200-foot setback where implementation of the SPRA Master Plan proposes the development of non-compatible land uses adjacent to TPZ land.</p>
<p><b>Objective 8.3.1: Identification of Timber Production Lands.</b> Identification of existing and potential timber production lands for commercial timber production.</p>	<p>The FMP prepared for SPRA includes an inventory of forestlands and the potential for commercial timber production.</p>
<p><b>Policy 8.3.1.2:</b> The procedures set forth in The Procedure for Evaluating the Suitability of Land for Timber Production shall be used for evaluating the suitability of forest lands for timber production. The procedure shall be developed and maintained by the Agricultural Commission and approved by the Board of Supervisors. Revisions to said procedure shall not constitute a General Plan amendment. These provisions shall be used in the following instances:</p> <ul style="list-style-type: none"> <li>A. To evaluate commercial forestry and timber lands within areas designated Natural Resource (NR) and/or lands zoned Timber Production Zone (TPZ) for their timber production value;</li> <li>B. To evaluate lands outside of areas designated Natural Resource (NR) and/or</li> </ul>	<p>The SPRA Master Plan includes a FMP that provides recommendations to address fire hazards, increase stand health, preserve habitat, and harvest timber as a by-product of these practices. The FMP identifies management units based on similar forest characteristics, productivity, and land uses. Management alternatives that use conifer growth projections for each unit are provided, incorporating long-term practices as well as small, interim forest maintenance measures, commercial timber harvest opportunities, and fire hazard reduction/management measures.</p>

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<p>zoned Timber Production Zone (TPZ) for their timber production values for recommendation to the approving authority for inclusion within the Natural Resource designation and/or Timber Production Zone zoning district; and</p> <p>C. To evaluate lands designated NR and/or zoned TPZ generally located below 3,000 feet elevation for their timber production value.</p>	
<p><b>Objective 8.3.3: Long-Term Forest Resources:</b> Ensure long-term viability of forest resources and timber production.</p>	<p>See discussion above for Policy 8.3.1.2.</p>
<p><b>Policy 8.3.3.1</b> Forest lands are reserved for multiple use purposes directly related to timber production, mineral resource extraction, wildlife, grazing, and recreation.</p>	<p>See discussion above for Policy 8.3.1.2.</p>
<p><b>Objective 8.4.2: Development Entitlements</b></p>	
<p><b>Policy 8.4.2.1:</b> The County Agricultural Commission shall evaluate all discretionary development applications involving identified timber production lands which are designated Natural Resource or lands zoned Timberland Production Zone (TPZ) or lands adjacent to the same and shall make recommendations to the approving authority. Before granting an approval, the approving authority shall make the following findings:</p> <ul style="list-style-type: none"> <li>A. The proposed use will not be detrimental to that parcel or to adjacent parcels for long-term forest resource production value or conflict with forest resource production in that general area;</li> <li>B. The proposed use will not intensify existing conflicts or add new conflicts between adjacent proposed uses and timber production and harvesting activities;</li> <li>C. The proposed use will not create an island effect wherein timber production lands located between the project site and other non-timber production lands are negatively affected;</li> <li>D. The proposed use will not hinder timber production and harvesting access to water and public roads or otherwise conflict with the continuation or development of timber production harvesting; and</li> <li>E. The proposed use will not significantly reduce or destroy the buffering effect of existing large parcel sizes adjacent to timber production lands.</li> </ul>	<p>As part of the discretionary review process associated with approval of the special use permit, the County Agricultural commissioner would evaluate the application.</p>
<b>PARKS AND RECREATION</b>	
<p><b>Goal 9.1: Parks and Recreation Facilities.</b> Provide adequate recreation opportunities and facilities including developed regional and community parks, trails, and resource-based recreation areas for the health and welfare of all residents and visitors of El Dorado County.</p>	<p>EID is proposing a management plan for the continued recreational use of SPRA. The proposed SPRA Management Plan would promote natural resource protection and enhancement while managing the recreational opportunities for continued long-term use and enjoyment of this regional recreation area.</p>

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<p><b>Policy 9.1.1.4:</b> Regional parks and recreation facilities shall incorporate natural resources such as lakes and creeks and serve a region involving more than one community. Regional parks generally range in size from 30 to 10,000 acres with the preferred size being several hundred acres. Facilities may include multi-purpose fields, ball fields, group picnic areas, playgrounds, swimming facilities, amphitheaters, tennis courts, multi-purpose hard courts, shooting sports facilities, concessionaire facilities, trails, nature interpretive centers, campgrounds, natural or historic points of interest, and community multi-purpose centers.</p>	<p>SPRA incorporates the natural resources, including Jenkinson Lake and the surrounding forestlands, into outdoor recreational facilities including group and individual campgrounds, multi-use trails, lake access, day use areas, and proposed educational facilities, including nature/cultural resource interpretive centers.</p>
<p><b>Objective 9.1.2: County Trails.</b> Provide for a County-wide, non-motorized, multi-purpose trail system and trail linkages to existing and proposed local, State, and Federal trail systems. The County will actively seek to establish trail linkages between schools, parks, residential, commercial, and industrial uses and to coordinate this non-motorized system with the vehicular circulation system.</p>	<p>The SPRA Master Plan includes provisions for multi-use trails system, with proposed reconfigured alignments for equestrian, pedestrian and mountain bike trails.</p>
<p><b>Policy 9.1.2.4:</b> Evaluate every discretionary application as well as public facilities planning with regard to their ability to implement the Hiking and Equestrian Trails Master Plan and the Bikeway Master Plan.</p>	<p>The SPRA trail system provides connectivity to other trail systems, including those of the El Dorado National Forest, such as the Fleming Meadow Loop Trail, the Mormon Emigrant Trail, the Mormon-Carson National Historic Trail, and the Pony Express Trail.</p>
<p><b>Policy 9.1.2.5:</b> All discretionary applications may be conditioned to provide an irrevocable offer of a trail easement dedication and construction of trails as designated on the Trails Master Plan provided it can be shown that such trails will serve as loops and/or links to designated or existing trails, existing or proposed schools, public parks and open space areas, and existing or proposed public transit nodes (e.g., bus stops, park and ride lots). Parkland dedication credit shall be given where applicable for provision of land and trail improvements that aid in implementing the Trails Master Plan.</p>	<p>The County may require an irrevocable offer of a trail easement as a condition of approval for the special use permit; however, EID proposes the construction and maintenance of a trail system to link with other County trails as a component of the SPRA Master Plan.</p>
<p><b>Policy 9.1.2.8:</b> Integrate and link, where possible, existing and proposed National, State, regional, County, city and local hiking, bicycle, and equestrian trails for public use.</p>	<p>See discussion for Policy 9.1.2.5 above.</p>
<p><b>Objective 9.1.3: Incorporation of Parks and Trails.</b> Incorporate parks and non-motorized trails into urban and rural areas to promote the scenic, economic, and social importance of recreation and open space areas.</p>	<p>Trail realignment, improvements and expansion are proposed for continued multi-use access within SPRA.</p>
<p><b>Policy 9.1.3.1:</b> Linear parks and trails may be incorporated along rivers, creeks, and streams wherever possible.</p>	<p>Portions of existing and proposed trail alignments are adjacent to streams and watercourses.</p>

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
<p><b>Policy 9.1.3.3:</b> Coordinate with Federal, State, other agencies, and private landholders to provide public access to recreational resources, including rivers, lakes, and public lands.</p>	<p>SPRA provides recreational access to forestland as well as Jenkinson Lake. EID proposes the SPRA Master Plan as a long-range planning and management strategy for continued public access and recreational use of SPRA, while protecting and enhancing natural resources.</p> <p>Goal 6.0 states that cooperative relationships shall be established between EID and other jurisdictions and the public regarding regional and local community recreational resources. Objectives 6.1 through 6.5 identify activities proposed to implement Goal 6.0.</p>
<p><b>Policy 9.1.3.4:</b> To the extent possible, maximize the use of the regional park and trail system by the physically handicapped and developmentally disabled as detailed in the Federal Americans with Disabilities Act.</p>	<p>Topographic limitations within SPRA prevent all facilities from being ADA compliant. Where possible, EID proposes ADA complaint facilities.</p>
<p><b>Goal 9.3: Recreation and Tourism.</b> Greater opportunities to capitalize on the recreational resources of the County through tourism and recreational based businesses and industries.</p>	<p>Goal 2.0 identifies the potential for seeking additional revenue related to recreational facilities within SPRA. Objectives 2.2 through 2.8 identify individual actions or activities by which this goal may be implemented.</p>
<p><b>Objective 9.3.2: Natural Resources.</b> Protect and preserve those resources that attract tourism.</p>	<p>Recreation within SPRA is natural resource based. As such, the protection and enhancement goals and objectives proposed by the SPRA Master Plan for natural resources serve to protect natural resources for conservation and environmental quality as well as tourism.</p>
<p><b>Objective 9.3.4: Historical Resources.</b> Recognize the values of the historical resources in preserving the County's cultural heritage and for contributing to tourism, recreation, and the economy of the County.</p>	<p>See discussion for Cultural Resources.</p>
<p><b>Policy 9.3.4.2:</b> The County will encourage the development of interpretive centers for local historical sites and/or events of historical interest.</p>	<p>SPRA Master Plan Goals 1.0 and 6.0, and Objectives 1.12, and 6.2 address educational and interpretive priorities.</p>
<p><b>Objective 9.3.8: Camping Facilities.</b> Expansion and development of additional Federal, State, and private overnight camping facilities including recreational vehicles and tent camping within the County while requiring appropriate mitigation of adverse environmental impacts.</p>	<p>The SPRA Master Plan program elements and individually proposed projects specifically target development of group and individual camping facilities, including recreational vehicle sites and primitive tent camping sites. In addition, as previously discussed, the Master Plan proposes a combination of management and administrative activities to achieve goals for the protection and enhancement of natural resources within SPRA, including design standards and guidelines to minimize the potential for adverse environmental effects associated with recreational facility development and rehabilitation.</p>
<p><b>Goal 10.2: Public Services and Infrastructure:</b> Provide adequate levels of public services and infrastructure for existing residents and targeted industries and establish equitable methods to ensure funding of needed improvements to existing infrastructure and services and new facilities to further economic development consistent with the County's custom, culture, and economic stability.</p>	<p>SPRA Master Plan Goals 3.0 and 4.0 emphasize the importance of adequate infrastructure within SPRA. Objectives 3.2, 3.5, 3.8, and 4.9 address specific infrastructure components relevant to SPRA operations and facilities. Relevant discussion pertaining to infrastructure can be found in Section 4.11, Hydrology and Water Quality, and Section 4.14, Utilities and Service Systems.</p>

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
<p><b>Objective 10.2.3: Coordination of Public Improvements:</b> Cooperate with other jurisdictions to promote the most cost-effective methods of providing civic, public and community facilities, and basic infrastructure necessary for supporting the economic, social, and environmental well being of the County and its residents.</p>	<p>SPRA Master Plan Goal 6.0 emphasizes the need for establishment of cooperative relationships between EID and other jurisdiction, as well as the public.</p>
<p><b>Policy 10.2.3.1:</b>  <b>Program 10.2.3.1.1:</b> Government Code Section 65401 authorizes the County to obtain lists of all capital projects planned by public agencies within the County. Proposed capital improvements found inconsistent with the County's General Plan can be protested to the sponsoring agency. As part of its annual review of the Capital Improvement Program, the County should include a Section 65401 review which lists all capital projects sponsored by other jurisdictions during the following year and makes a finding relative to the consistency of each project with the County's General Plan.</p>	<p>SPRA Master Plan Goal 6.0 and Objective 6.1 related to cooperative relationships between EID and other agencies, including the County of El Dorado.</p>
<b>TRANSPORTATION AND CIRCULATION</b>	
<p><b>GOAL TC-X:</b> To coordinate planning and implementation of roadway improvements with new development to maintain adequate levels of service on County roads.</p>	<p>SPRA Master Plan Goals 3.0 and 5.0, and Objectives 3.1, 3.2, 3.8, 3.11, and 5.11 pertain to roadway development within SPRA.</p> <p>Transportation is discussed within Section 4.4 of this Draft Master EIR.</p> <p>Implementation of the SPRA Master Plan, including design and construction of individual projects would be coordinated with the County of El Dorado through the special use permit approval process.</p>
<p><b>Policy TC-Xd:</b> Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2 or, after December 31, 2008, Table TC-3. The volume to capacity ratio of the roadway segments listed in Tables TC-2 and TC-3 as applicable shall not exceed the ratio specified in that table. Level of Service will be as defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council) and calculated using the methodologies contained in that manual. Analysis periods shall be based on the professional judgment of the Department of Transportation which shall consider periods including, but not limited to, Weekday Average Daily Traffic (ADT), AM Peak Hour, and PM Peak hour traffic volumes.</p>	<p>See discussion for Goal TC-X.</p>

2004 El Dorado County General Plan	Sly Park Recreation Area Master Plan
<p><b>Policy TC-Xe:</b> For the purposes of this Transportation and Circulation Element, “worsen” is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:</p> <ul style="list-style-type: none"> <li>A. A 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or</li> <li>B. The addition of 100 or more daily trips, or</li> <li>C. The addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.</li> </ul>	See discussion for Goal TC-X.
<p><b>Policy TC-Xf:</b> Before occupancy for development that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the developer shall do one of the following: (1) construct all road improvements necessary to regional and local roads needed to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element; or (2) ensure adequate funding is identified and available for the necessary road improvements and those projects are programmed. The determination of compliance with this requirement shall be based on existing traffic plus traffic generated from the project and from other reasonably foreseeable projects.</p>	See discussion for Goal TC-X.
<p><b>Policy TC-Xg:</b> Each development project shall dedicate right-of-way and construct or fund improvements necessary to mitigate the effects of traffic from the project. The County shall require an analysis of impacts of traffic from the development project, including impacts from truck traffic, and require dedication of needed right-of-way and construction of road facilities as a condition of the development. For road improvements that provide significant benefit to other development, the County may allow a project to fund its fair share of improvement costs through traffic impact fees or receive reimbursement from impact fees for construction of improvements beyond the project’s fair share. The amount and timing of reimbursements shall be determined by the County.</p>	See discussion for Goal TC-X.
<p><b>GOAL TC-4:</b> To provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of the viable alternative transportation modes.</p>	<p>SPRA Master Plan Goals 1.0, 3.0 and 4.0, and Objectives 1.10, 3.8, 4.1, and 4.3 pertain to trails within SPRA.</p> <p>Project components include the restoration of existing and construction of additional trails within SPRA.</p>
<p><b>Policy TC-4g:</b> The County shall support development of facilities that help link bicycling with other modes of transportation.</p>	<p>SPRA Master Plan Goals 2.0 and 4.0, and Objectives 2.6, 4.3, and 4.4 pertain to bike trails. The SPRA Master Plan proposes construction of a new Mountain Bike Trail.</p> <p>Recreation is discussed in Section 4.13 of this Draft Master EIR.</p>
<p><b>Policy TC-4h:</b> Where hiking and equestrian trails abut public roads, they should be separated from the travel lanes whenever possible by curbs and barriers (such as fences or rails), landscape buffering, and spatial distance. Existing public corridors such as power transmission line easements, railroad rights-of-way, irrigation district easements, and roads should be put to multiple use for trails, where possible.</p>	Recreation is discussed in Section 4.13 of this Draft Master EIR.

#### **4.1.4 Environmental Impacts**

##### **Implementation of the SPRA Master Plan and associated components would not physically divide an established community.**

Adoption and implementation of the Master Plan and development of individual projects associated with Master Plan elements would occur within remote rural forestlands. No significant expansion of the current boundaries is proposed and no established communities exist within the Master Plan area. Therefore, no impact would result from the proposed SPRA Master Plan or its associated project. No mitigation is warranted.

##### **Implementation of the SPRA Master Plan and associated components would conflict with the General Plan and the Zoning Ordinance.**

#### **4.1.4.1 Land Use**

Land uses surrounding the Master Plan area consist primarily of undeveloped forestlands; however, residential uses exist adjacent to the western SPRA boundary. Ongoing recreational uses within SPRA include: camping, trails, day use areas, and recreational lake access. As discussed in Chapter 3 of the Master Plan, SPRA is subject to continuous use during the summer months and on weekends. EID is proposing the SPRA Master Plan and associated components to decrease the density and intensity of recreational use in certain existing areas, while protecting and enhancing natural resources. To this end, the SPRA Master Plan proposes management strategies and a series of proposed projects to minimize adverse environmental impacts related to ongoing recreational use as well as the restoration of environmental quality within SPRA. A complete description of individually proposed projects can be found in the Project Description, Chapter 3, of this Draft Master EIR.

#### **4.1.4.2 Services and Utilities**

The SPRA Master Plan and associated components are consistent with the El Dorado County General Plan goals, objectives, and policies related to services and utilities (Table 4.1-1). The SPRA Master Plan proposes goals and objectives related to emergency services, fire protection, law enforcement, and medical emergency services, consistent with the El Dorado County General Plan. Master Plan elements and individual projects propose management strategies and activities to improve access, expand staffing, improve emergency response times, and reduce crime and vandalism.

#### **4.1.4.3 Health and Safety**

The SPRA Master Plan and associated components are consistent with the El Dorado County General Plan goals, objectives, and policies related to health and safety (Table 4.1-1). The SPRA Master Plan proposes goals and objectives related to fire hazards, including defensible space, development limitations, adequate fire protection, and area-wide fuel management. The FMP, identifies fuel and hazard reduction management techniques as well as fire potential within SPRA. Master Plan elements and individually proposed projects identify specific target areas and activities designed to implement health and safety improvements within SPRA. Geotechnical hazards and noise levels are analyzed within Sections 4.9 and 4.6 of this Draft Master EIR.

#### **4.1.4.4 Conservation**

The SPRA Master Plan and associated components are consistent with the El Dorado County General Plan goals, objectives, and policies related to conservation (Table 4.1-1). Natural resource conservation is a primary emphasis of the Master Plan. The SPRA Master Plan proposes goals and objectives related to the protection and enhancement of natural resources including soil conservation, water quality and quantity, wildlife and vegetation resources, cultural resources, and open-space conservation. Master Plan Elements and individually proposed projects target natural resource management techniques and activities including erosion control, water quality, water resource protection, wetland preservation, drainage, forest resources, native vegetation and landmark trees, as well as cultural resource protection and open-space conservation. The Master Plan Standards and Design Guidelines emphasize resource protection for all Master Plan Elements and individual projects include management and development activities targeted to improve and enhance environmental quality and increase public awareness through education. Sections 4.7, 4.8, and 4.11 of this Draft Master EIR discuss biological resources, cultural resources, and water quality and hydrology.

#### **4.1.4.5 Parks and Recreation**

The SPRA Master Plan and associated components are consistent with the El Dorado County General Plan goals, objectives and policies related to parks and recreation (Table 4.1-1). Management principles and individual projects proposed by EID for recreational resources are consistent with the El Dorado County General Plan objectives related to park acquisition and development, County trails, recreation coordination, recreational and tourist use, natural resources, and tourist lodging. Master Plan components and individual projects propose continued recreational access to Jenkinson Lake and the surrounding forestlands, as well as access to, and recreational use of campground facilities and multi-use trails within SPRA.

#### **4.1.4.6 Transportation and Circulation**

The SPRA Master Plan and associated components are consistent with the El Dorado County General Plan goals, objectives and policies related to transportation and circulation (Table 4.1-1). SPRA Master Plan Goals 3.0 and 5.0, and Objectives 3.1, 3.2, 3.8, 3.11, and 5.11 pertain to roadway development within SPRA. The improvements proposed by the SPRA Master Plan to transportation and circulation would be consistent with the El Dorado County General Plan goals and policies related to LOS, safety, trails, and bicycle routes.

### **Conclusion**

The SPRA Master Plan proposes goals and objectives paralleling the goals, objectives and policies related to services and utilities, health and safety, conservation, parks and recreation, and transportation and circulation identified by the El Dorado County General Plan. The conservation-oriented Master Plan design standards and guidelines emphasize the retention of the rural alpine character, and the maintenance and development of recreational facilities in a manner consistent with the character of the affected region, user needs, public safety, park resource protection, and the surrounding communities.

#### **4.1.4.7 Existing General Plan Designation and Zoning**

Several of the existing recreational land uses occurring within SPRA that were developed under ownership by the U.S. Bureau of Reclamation are classified as legal non-conforming uses by the

El Dorado County Planning Services in accordance with the El Dorado County Zoning Ordinance. Parcels within the Master Plan area are zoned “RF”-Recreational Facilities and “RA-20”-Residential Agricultural. The Recreational Facilities zoning district is designed to provide for the orderly development and maintenance of lands suitable for recreational use within El Dorado County. This zoning district is also intended to protect lands suitable for recreation from encroachment of incompatible land uses. Pursuant to Section 17.48.060 of the El Dorado County Zoning Ordinance, recreational uses which by their nature occur after daylight hours, are designed for overnight use, or are intended for the use of 50 or more people at one time require a special use permit from El Dorado County Planning Services. Parcels located within the southwest corner of the Master Plan area boundary are zoned Residential Agricultural. The intent of this zoning district is to provide for the orderly and timely development of residential and agricultural uses consistent with natural conditions and desirable development patterns. Other uses proposed in this zoning district require a special use permit. The SPRA Master Plan is intended to facilitate ongoing and expanded recreational opportunities within SPRA; therefore the Recreational Facility Zoning district would be the appropriate zoning district for all lands within SPRA.

The Natural Resource land use designation is intended to identify lands with economically viable natural resources as well as to protect the economic viability of those resources. Specifically within the General Plan, forested areas, important watersheds, and lakes and ponds are identified as important resources. The General Plan identifies forestry, recreation, and water resources development as among the compatible land uses for the Natural Resource designation.

The SPRA Master Plan proposes a management strategy emphasizing the protection and enhancement of natural resources, consistent with the intent of the El Dorado County General Plan Natural Resource land use designation. The SPRA Master Plan goals and objectives identify the preservation of the existing rural, alpine character of SPRA, while protecting the surrounding communities. The SPRA Master Plan specifies standards and guidelines, and the proposed individual projects include specific provisions addressing natural landscape features including topography and native vegetation, hillsides and ridgelines, and lighting.

However, recreational uses currently ongoing within SPRA, such as overnight camping, as well as the proposed development and operation of additional recreational facilities including the Scout/Youth Group Camp, Sugarloaf Fine Arts Center, and the Retreat/Event Center represent land uses more intense than those land uses allowed under the Natural Resource land use designation as specified by the General Plan. The Tourist Recreational land use designation is designed to provide areas for tourist and resident – serving recreational uses, as well as lodging facilities, and supporting commercial services. Intensity of use varies according to location and availability of infrastructure under this land use designation. Individual land uses permitted by this land use designation include campgrounds, golf courses, ski areas, snow parks, riding stables, trail heads, museums, and other similar recreational and sight seeing activities. Permitted lodging uses include RV parks and other transient lodging. Individually proposed activities and facilities may be permitted by right or require approval of a special use permit as specified by the Zoning Ordinance. The uses and facilities proposed by the SPRA Master Plan would be consistent with those uses allowed under the Tourist Recreational land use designation. As proposed, the SPRA Master Plan and individual projects would require an amendment to the existing general plan land use designation.

General Plan amendments are permitted up to four times in a year. Procedurally, a general plan amendment is the same as enactment of a general plan, including adoption of a resolution by the legislative body. A general plan amendment is considered a “project” under Section 15378 (a)(1) of the CEQA Guidelines and is therefore subject to CEQA. Adoption of the general plan amendment would require review by the County of El Dorado pursuant to CEQA.

As discussed above, the SPRA Master Plan and associated components propose the development and operation of land uses more intense than those uses allowed under the Natural Resource land use designation. The proposed land uses would however, be consistent with those land uses specified under the Tourist Recreational land use designation. In addition, lands within SPRA are primarily within the Recreational Facility zoning district, although a small portion of SPRA lands within the southwestern corner of SPRA are within the Residential Agricultural 20-acre minimum zoning district, and land at the very most northern portion of SPRA is zoned Residential Agricultural 80-acre minimum. Parcels within SPRA located within the Residential Agricultural zoning district would be required to be rezoned to Recreational Facilities. Pursuant to Section 17.48.060 of the El Dorado County Zoning Ordinance, uses and facilities proposed by the SPRA Master Plan would require approval of a Special Use Permit by El Dorado County Planning Services (El Dorado County, 2004a). The amendment to the General Plan and the Zoning Ordinance, and the approval of a special use permit for the proposed recreational activities, would require discretionary approval by the County of El Dorado, and approval by the County has not been granted as of the time of preparation of this document; therefore, impacts related to land use are considered significant. Potential conflict with the zoning ordinance related to encroachment on agricultural and timber lands is discussed in Section 4.2 Agricultural Resources.

#### **4.1.4.8 County of El Dorado Special Use Permit**

Special use permits provide a County review process to consider uses that may be generally compatible with other permitted uses in a zoning district, but which by their individual nature require that special considerations be given to any combination of the following project components: site design, adjacent land uses, public infrastructure and service availability, and environmental impacts in general. This process provides discretionary authority to the County to impose conditions of approval addressing project-specific issues necessary to ensure proposed uses are compatible with adjacent land uses. Approval of the special use permit would require findings of General Plan Consistency from the El Dorado County Planning Commission.

#### **Implementation of the SPRA Master Plan and associated components would not conflict with a Habitat Conservation Plan or Natural Community Conservation Plan for the Project Area.**

As discussed within the NOP circulated for the Draft Master Plan EIR, no habitat conservation plans or natural community conservation plans exist for the project area; therefore, no impact would result from the Proposed Project. No mitigation is warranted.

#### **4.1.5 Mitigation Measures**

Modifications to the existing facilities and implementation of the SPRA Master Plan would require discretionary approval by the County of El Dorado. As such, the proposed facilities and

uses would be required to be consistent with the General Plan and the Zoning Ordinance. As discussed in the impact analyses above, implementation of the SPRA Master Plan and development of individual projects would result in inconsistency with the El Dorado County General Plan as currently proposed. However, approval of a general plan amendment (a change from Natural Resource to Tourist Recreational land use designation), a rezone (a change from Residential Agricultural to Recreational Facilities zoning districts), and a special use permit would allow for the implementation of Master Plan elements in a manner consistent with the General Plan and Zoning Ordinance. Implementation of the following mitigation measures would reduce significant impacts related to land use to a less than significant level.

**Mitigation Measure LU-1:** An application for a General Plan amendment and rezone to Recreational Facilities shall be submitted to the El Dorado County Planning Services for review and approval. No development shall be permitted to commence until such time as the general plan amendment and rezone has been approved by the County of El Dorado.

**Mitigation Measure LU-2:** Before adoption of the SPRA Master Plan by the EID Board of Directors, an application for a special use permit shall be submitted to the El Dorado County Planning Services for review and approval. No development shall be permitted to commence until such time as the special use permit has been issued by the County of El Dorado.

Implementation of mitigation measures LU-1 and LU-2 would ensure that the Master Plan and individually proposed projects would be implemented, developed, and operated in accordance with the regulatory land use authority of the County of El Dorado as defined by the General Plan and Zoning Ordinance.

## **4.2 Agriculture**

### **4.2.1 Existing Conditions**

#### **4.2.1.1 Sly Park Recreation Area**

Forest resources have been managed within SPRA since the mid 1800s to provide timber for mining as well as the development of ranches. Sawmills operated within SPRA from the mid 1800s through the early 1900s, producing housing materials, fruit boxes, and mining timbers (Funk, 2005). SPRA and surrounding lands have also been historically used for grazing cattle and sheep (URS, 2003).

SPRA encompasses approximately 800 acres of Mixed Conifer forestlands, primarily consisting of timber stands ranging in age from 60 to 90 years. Salvage harvesting and controlled burning are ongoing forest resource management activities within SPRA. Although historically used for commercial timber harvesting and grazing, lands within SPRA are not currently used commercially for either purpose.

#### **4.2.1.2 Surrounding Lands**

Lands surrounding SPRA are composed of federal and private timberlands and currently support commercial timber harvesting operations as well as grazing practices. Portions of these lands located along the northern and southern boundaries of SPRA are included in the County of El Dorado Timberland Preserve Zoning District, which is intended to designate lands within the County that are appropriate for growing and harvesting forest products. Additional lands to the north, east, and southwest of the SPRA are included in the Residential Agricultural Zoning District, which is intended to provide for the orderly and timely development of residential and agricultural uses consistent with natural conditions and desirable development patterns.

#### **4.2.1.3 Forest Management Plan**

A FMP (Funk, 2005) has been prepared concurrent with the preparation of the SPRA Master Plan. The FMP identifies appropriate management strategies for forest resources within SPRA, including commercial timber development, wildlife enhancement, fire protection and forest fuels management, and regeneration. The FMP also evaluates current timber stocks and growth, land conservation practices, and potential future silvicultural opportunities.

### **4.2.2 Regulatory Setting**

#### **4.2.2.1 Federal**

##### **Sierra Nevada Forest Plan**

The Eldorado National Forest is one of 11 national forests under federal direction as presented in the Sierra Nevada Forest Plan (SNFP). The goal of the forest plan is to manage wildlife habitat and provide species protection, while reducing the risk of wildland fire. The SNFP was amended in January 2004, adopting an integrated vegetation management strategy emphasizing wildfire risk reduction. The overall goal of this management strategy is to reduce fire risk at the urban-wildland interface, while modifying regional fire behavior, thereby reducing the potential for

catastrophic fires that threaten rural residents as well as wildlife habitat. The 2004 amendment adopts a broadened management strategy incorporating additional objectives including: stand density reduction for forest health, restoring and maintaining ecosystem structure and composition, and restoration of ecosystems following catastrophic disturbance events. The SNFP also contains provisions for timber salvage operations and incorporates new fuels and vegetation management standards and guidelines.

### **Eldorado National Forest Land and Resource Management Plan**

The Eldorado National Forest Land and Resource Management Plan directs management of the Eldorado National Forest and defines compatible forest practices for forested lands and resources. The plan identifies long-range goals and objectives, as well as management actions. Emphasis for management activities in the general forest zone focuses on timber harvesting, grazing, and minerals development. Recreation activities are designed to blend in with these resource activities and do not have priority. The Plan also emphasizes the protection of viewsheds along heavily traveled roads, major rivers, and reservoirs, as well as areas of concentrated public use. Outdoor recreation is a major use within the forest due to accessibility from large population centers surrounding the forest.

#### **4.2.2.2 State**

##### **Williamson Act**

The Williamson Act, enacted in 1965, is a statewide agricultural land resource protection program administered by individual Counties. The principles behind the Act involve voluntary commitment by landowners to preserve agricultural lands and open space, thereby prohibiting urban development. The contractual agreement represents an enforceable restriction and is entered into for a minimum period of ten years. The contract is automatically renewed until the land owner files a “notice of non-renewal.” In return for the preservation of this land, landowners receive a reduction in property taxes ranging from 20 percent to 75 percent. Compatible uses under the Williamson Act are adopted by the legislative body of local government. Minimum acreage for land under contract is 20 acres in El Dorado County (El Dorado County, 2003).

##### **California Forest Practice Act**

The Z’berg-Nejedly Forest Practice Act of 1973 establishes regulations for timber harvesting operations within the state.

##### ***State Board of Forestry and Fire Protection***

The responsibilities of the Board of Forestry and Fire protection are mandated by the Public Resources Code. In general, the Board is responsible for developing state-wide policies related to forestry as well as the development of rules and guidance policies, and representing the interest of the state within federal forestlands in California. The Board is composed of government-appointed members and operates within the California Department of Forestry and Fire Protection (CDF).

### ***California Department of Forestry and Fire Protection***

CDF is responsible for enforcing the California Forest Practice Act on all non-federal timber lands. Timber Harvest Plans (THPs) represent the environmental analysis of proposed timber harvesting operations and are functionally equivalent to an EIR. THPs are required to be submitted to CDF for all commercial timber harvesting. These plans must be prepared by a registered professional forester (RPF) and are reviewed by CDF for compliance with the Forest Practice Act, the rules adopted by the State Board of Forestry and Fire Protection, and other applicable state and federal laws.

### **California Forest Taxation Reform Act of 1976 (Government Code 51110-51119.5)**

The California Forest Taxation Reform Act of 1976 requires counties to establish the timberland preserve zone (TPZ) to designate qualified lands suitable for the production and harvesting of timber. The TPZ zoning district otherwise replaces the use of agricultural preserves on timberlands and involves the restriction of land use, for a minimum of ten years, to growing and harvesting timber or other compatible land uses as established by the County or City. Property owners receive a property tax reduction in exchange for the commitment of lands to timber production.

#### **4.2.2.3 Local**

### **County of El Dorado**

#### ***El Dorado County General Plan***

Agricultural and forested lands within El Dorado County are highly regarded by the County's residents, and are valued for the way they define the character and lifestyle of the area. The Agricultural and Forestry Element of the County's General Plan addresses the conservation, management, and utilization of agricultural and forested lands within the County.

Interim Guidelines for policies related to Agricultural and Timberland setbacks were adopted by the County in June 2006, and amended in September 2006. These guidelines define the standards by which the County aims to conserve lands for agriculture and timber activities consistent with the Agricultural and Forestry Element of the General Plan (El Dorado County, 2006).

#### ***El Dorado County Zoning Ordinance***

Timber production and harvesting are considered uses permitted by right in the Exclusive Agriculture (AE), Transportation Corridor (TC), and the Timberland Preserve Zone (TPZ) zoning districts.

Section 17.06.050(GG) of the El Dorado County Zoning Ordinance defines non-compatible land uses that have the potential to conflict with agricultural uses, including timberlands. Non-compatible land uses identified by the Zoning Ordinance include, but are not limited to: residential structures, nursing homes, public schools, playgrounds, swimming pools, ponds, and churches. Section 17.06.150 of the Zoning Ordinance specifies special setbacks for areas where agricultural and timber uses abut incompatible land uses. Potentially incompatible land uses proposed abutting timberland parcels are subject to a 200-foot setback, where Timberland exists on parcels in existence as of August 11, 1983 and exceeding 10 acres in size.

### Residential Agricultural Zone

The purpose of the County's Residential Agricultural districts is to provide for the orderly and timely development of residential and agricultural uses consistent with individual sites' natural conditions and desirable development patterns. Uses permitted by right within the Residential Agricultural zoning districts include: one single-family detached dwelling; agricultural uses; one unlighted sign not to exceed twelve square feet of message area and twelve feet above ground level advertising authorized activities on the premises; drilling of wells and excavation of earth exclusively for authorized residential and agricultural purposes on that property, and local distribution lines for public utilities. Agricultural uses include the following: raising and grazing of livestock and other animals; growing of trees, fruits, vegetables, flowers, grains and other crops, packing and processing of agricultural products produced on the premises, without changing the nature of the products, sale on the premises of products produced thereon; and any structure or use incidental or accessory to any of the foregoing uses.

### Timberland Preserve Zone

The TPZ district applies to lands within El Dorado County subject to the Forest Taxation Reform Act of 1976 and is intended to provide for the growing and harvesting of forest products. Compatible land uses within the TPZ district include: watershed management, fish and wildlife habitat; uses accessory to growing, harvesting, and processing of forest products; utility transmission lines or facilities; non-commercial recreation uses; mineral resource extraction and processing for road building accessory to timber production and harvesting; raising and grazing of livestock, poultry, and other animals; warning signs; signs identifying the owner or agricultural products produced; and the sale of products produced on the premises. Residential development is generally considered inconsistent with TPZ lands. However, a single-family detached residence may be constructed provided the county agricultural commissioner acknowledges three consecutive years of intensive land management and a special use permit is granted by the zoning administrator.

### **4.2.3 Environmental Impact Thresholds/Criteria for Evaluation**

For the purposes of this Draft Master EIR, impacts related to agriculture or timberland are considered significant if they would:

- Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural use;
- Conflict with existing zoning for agricultural use, timberland preserve or a Williamson Act Contract; or
- Otherwise convert Farmland or timberland to non-agricultural use.

### **4.2.4 Environmental Impacts**

**Implementation of the SPRA Master Plan and development of the associated components would not result in the conversion of Prime Farmland, Unique Farmland or Farmland of Statewide Importance.**

Lands within SPRA have been mapped by the California Department of Conservation Farmland Mapping and Monitoring Program primarily as Other Land, with a portion of the southern SPRA mapped as Farmland of Local Importance. A small portion of the northern boundary of SPRA is also mapped as Grazing Land. Other Lands is a generalized mapping category grouping lands not meeting the criteria for other mapping categories and may include rural residential development, brushlands, timberlands, wetlands riparian areas, strip mines, borrow pits, water bodies less than 40 acres, and other lands not suitable for agricultural activities. Farmland of Local Importance is a category of agricultural lands identified by a local advisory committee and adopted by the Board of Supervisors. These lands are either currently used for agricultural production or have properties capable of production, but do not meet the defined criteria for Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. Grazing Land is land on which suitable vegetation exists for grazing livestock.

According to mapping completed by the Land Resource Protection Division of the State Department of Conservation, no Prime Farmland, Unique Farmland or Farmland of Statewide Importance is present within SPRA. Lands within SPRA are primarily mapped as Other Lands and Farmland of Local Importance with additional acreage of Grazing Land along the northern SPRA boundary; therefore **no impact** would result from implementation of the SPRA Master Plan or development of the individual projects.

**Implementation of the SPRA Master Plan and development of the associated components would not convert Farmland or Timberland to non-agricultural use.**

EID proposes the Master Plan as a long-term management strategy to conserve and restore SPRA lands and identify sustainable design principles for continued recreational use, as well as the preservation of the unique Alpine forest characteristics associated with SPRA. The SPRA Master Plan identifies goals and objectives related to natural resource conservation as well as recreation. In support of Goal 1.0, which identifies the protection of natural resources, Objectives 1.1 and 1.4 addresses the protection of forest resources and habitat quality as it pertains to the development of timber management strategies within SPRA. Design standards and guidelines reiterate these principles of forestland conservation through the minimization of tree loss, preservation of habitat areas, as well as implementation of restoration and revegetation activities associated with individual projects proposed as components of the Master Plan.

In addition, a FMP has been prepared to identify potential management activities for the continued health of and sustainable utilization of timberland within SPRA. Timber harvesting activities identified by the FMP would be subject to the regulations established within the California Forest Practice Act and would require preparation of a Timber Harvest Plan (THP) or a Non-Industrial Timber Management Plan (NTMP) for review and approval by the California Department of Forestry and Fire Protection (CDF), in conjunction with existing local, state, and federal laws and regulations. Management activities potentially involving timber removal, including harvesting dead, dying, or diseased trees when accomplished in compliance with the conditions and criteria established by the Forest Practice Rules, and the cutting and removal of trees in compliance with Sections 4290 and 4291 of the Public Resources Code, identified within the FMP would be exempted from preparation of a THP under Section 1038 of the California Forest Practice Rules.

Implementation of the SPRA Master Plan and development of individual projects would not convert timberland to non-agricultural use and; therefore, **no impact** would result.

**Development of individually proposed components associated with implementation of the SPRA Master Plan could result in conflict with existing timberland preserve or agricultural zoning.**

Lands within and surrounding SPRA are not designated for agriculture by the El Dorado County General Plan and no agricultural production lands abut SPRA. However, as shown on Figure 4.1-2, lands to the north and southeast are zoned “RA-80”-Residential Agricultural-80, and land to the southwest is zoned “RA-20”-Residential Agricultural-20. There are no parcels within SPRA currently under Williamson Act contract. Lands along the northern and southern boundaries of SPRA are located within the Timberland Preserve Zoning District and timber harvesting operations are ongoing within a portion of these lands. Pursuant to the County of El Dorado Zoning Ordinance, land uses currently ongoing within SPRA as well as additionally proposed land uses as components of the Master Plan have the potential to result in the development of non-compatible land uses adjacent to agricultural and timberland preserve land. Non-compatible land uses are defined by Section 17.06.050(GG) of the El Dorado County Zoning Ordinance which states the following:

*“ ‘Non-compatible uses’ means those uses of land which are apt to conflict with agricultural uses due to sprays, dust, noise, equipment or products escaping the agricultural property in a manner which threatens the health, safety or welfare of adjacent occupants or land uses. It also means those uses which are apt to cause conflict and threaten the loss of viability of agricultural use due to trespass, vandalism, theft, complaint, and dog-related problems. It includes but is not limited to:*

- 1. Residential structures;*
- 2. Nursing homes;*
- 3. Public schools;*
- 4. Playgrounds;*
- 5. Swimming pools;*
- 6. Ponds; and*
- 7. Churches.”*

Land adjacent to SPRA includes parcels within the TPZ zoning district along the northern and southern boundaries. Non-commercial recreational uses including hunting and fishing; day use for picnicking, riding and hiking; and temporary camping are uses permitted by right in the TPZ zoning district. Land uses within SPRA currently include those recreational uses specified by the El Dorado County Zoning Ordinance as non-commercial as well as additional recreational uses, including permanent individual and group campsites, which would be considered non-compatible with agricultural and TPZ land. In addition, EID is proposing additional new recreational facilities within the Master Plan that would also be defined as non-compatible with agricultural and TPZ land.

The “Interim Interpretive Guidelines for El Dorado County General Plan Policies 8.1.3.2 and 8.4.1.2,” were adopted by the County of El Dorado June 22, 2006 and amended on September

28, 2006. As amended, these guidelines supersede the setback standards defined in Section 17.06.150 of the County Code. These guidelines define agricultural and timberland setback standards, which must be applied to parcels on which development is proposed, as determined by the zoning and land use designation of adjacent parcels. These standards are applicable to lands located in the “RA”-Residential Agricultural and “TPZ”-Timberland Production Zoning Districts within the SPRA (El Dorado County, 2006). Lands within the SPRA are designated Natural Resource by the County General Plan.

For areas located outside of a designated Agricultural District Overlay, the Interim Guidelines specify the following standards applicable to SPRA project components proposed adjacent to agricultural land:

- “1. On project parcels 10 acres or larger in area, agriculturally incompatible uses shall be set back a minimum of 200 feet from any adjacent parcel that is agriculturally zoned land;*
- 2. On project parcels that are less than 10 acres in area, no special agricultural setback is required;*
- 3. Modifications to the setback required in item 1 above may be requested in accordance with the [adopted] administrative relief procedures [pursuant to Resolution No. 176-97 of the El Dorado County Board of Supervisors].”*

Although non-commercial recreational uses are permitted by right within the TPZ zoning district, development of individual projects associated with implementation of the SPRA Master Plan adjacent to TPZ zoned lands could result in the development of recreational uses that would be considered non-compatible land uses in accordance with the El Dorado County Zoning Ordinance.

For areas located outside of a designated Community Region or Rural Center, the Interim Guidelines specify a 200-foot setback applicable to SPRA project components proposed adjacent to parcels zoned or designated as timberland.

Analysis of individual projects proposed as components of the SPRA Master Plan is included in **Error! Reference source not found.** A detailed discussion of these projects can be found in the project description, Chapter 3.

**Table 4.2-1 — Environmental Impacts Related to Agricultural Resources Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Construct New Campsites</b>                      13.04 Dogwood Camp                      16.02 Primitive Camp Area</p>	<p>Dogwood Camp and the proposed Primitive Camp area are located in areas of SPRA that are adjacent to TPZ land. Land to the south of the proposed Primitive Camp area is also located in an area adjacent to land in the “RA” zoning district. The development of campsites within these areas would result in new public use and access areas within SPRA and may result in non-compatible land uses in accordance with the Interim interpretive Guidelines for El Dorado County General Plan Policies 8.1.3.2 and 8.4.1.2, and the El Dorado County Zoning Ordinance.</p>	Potentially Significant
<p><b>Construct Post/Pier Structures</b>                      2.09 Scout/Youth Group Camp Mess Hall                      2.12 Scout/Youth Group Camp (North)                      2.13 Scout/Youth Group Camp (South)                      2.17 Scout/Youth Group Camp Mess Hall                      5.02 Jenkinson Camp                      10.04 Chimney Camp                      20.03 Retreat and Event Center                      20.05 Retreat and Event Center (Phase I)                      20.06 Retreat and Event Center (Phase II)</p>	<p>The area proposed for development of the Retreat and Events Center and Jenkinson Camp are not located adjacent to TPZ land; therefore development of these projects would not result in adverse impacts to agricultural or timber lands. Land to the south of the proposed Retreat and Event Center is currently zoned “RA-20”-Residential Agriculture. Development of the proposed facility adjacent to land located within this zoning district would result in potentially significant impacts related to agriculture resources. However, pursuant to the mitigation measure identified in Section 4.1, Land Use, this section would be rezoned to “RF”- Recreation Facilities. The proposed facility would then be located a sufficient distance from land to the south in the “RA” zoning district so as not to result in adverse impacts to agricultural resources.</p> <p>However, the construction of post/pier structures within the Scout/Youth Group Camp, and Chimney Camp would occur in areas of SPRA adjacent to TPZ lands. The construction of these structures would result in the development of permanent dining facilities and cabins for group and individual recreational uses. Development of these recreational uses has the potential to result in uses of land in conflict with adjacent agricultural and timber lands; therefore impacts are considered potentially significant.</p>	Potentially Significant
<p><b>Reconfigure Campsites</b>                      2.07 Scout/Youth Group Camp                      2.11 Scout/Youth Group Camp                      2.16 Scout/Youth Group Camp                      4.04 Pine Cone Camp                      4.05 Pine Cone Camp                      6.04 Sierra Camp (West)                      6.05 Sierra Camp (East)                      7.03 Stonebraker Camp                      8.03 Hilltop Camp                      9.02 Chimney/Hilltop Host Site</p>	<p>Continued recreational use within the areas of Pine Cone Camp, Sierra Camp, and Stonebraker Camp, would not occur adjacent to agricultural or TPZ land; therefore no impact would result from reconfiguration of these campsites.</p> <p>Development of the components proposed within the Main Group Campground would be located adjacent to agricultural lands. The existing facility is located a sufficient distance from the adjacent parcel boundary to be considered consistent with the Interim Guidelines. Therefore, impacts would be considered less than significant.</p> <p>However, development of the components proposed in the Black Oak Equestrian Camp would result in the development of recreational facilities adjacent to lands within the RA zoning district. Additionally, permanent camping facilities within the areas of the</p>	Potentially Significant

Component ID/Project Name	Impact Analysis	Level of Significance
10.02 Chimney Camp 12.01 Hazel Creek Camp 13.02 Dogwood Camp 14.03 Rainbow Camp 15.03 Kamloop Camp 21.01 Main Group Campground (Relocate Host Site) 21.06 Main Group Campground (Tent Sites at Groups Sites #1 and #5) 21.09 Main Group Campground (Tent Sites at Group Site 32) 21.12 Main Group Campground (Tent Sites at Group Site #3 and #4) 21.14 Main Group Campground (Group Kitchens) 23.01 Black Oak Equestrian Camp	Scout/Youth Group Camp, Chimney Camp, Hilltop Hazel Creek, Dogwood Camp, Rainbow Camp, and Kamloop Camp, would result in permanent camping facilities within areas of SPRA adjacent to TPZ lands; therefore impacts associated with these projects are considered potentially significant.	
<b>Construct New Day Use Area</b> 19.03 Bumpy Meadow Trailhead	Proposed improvements at Stonebraker, and Hazel Creek Camp are not located adjacent to agricultural lands; therefore no impact would result from development of these proposed components.	Potentially Significant
<b>Reconfigure Day Use Area</b> 7.04 Stonebraker Camp		
<b>Trail Construction</b> 1.03 Main Park Entrance 2.05 Scout/Youth Group Camp 7.01 Stonebraker Camp 12.04 Hazel Creek Camp 16.01 Primitive Camp Area 22.01 Mountain Bike Trail 23.05 Black Oak Equestrian Camp	Proposed day uses including picnicking, riding and hiking would be considered incompatible with adjacent agricultural lands, including lands located in the RA zoning district. Therefore, development of proposed improvements at the Main Park Entrance, Scout/Youth Group Camp, and Black Oak Equestrian Camp, and development of the Mountain Bike Trail would have the potential to result in the development of incompatible uses adjacent to agricultural lands. Impacts are therefore considered potentially significant.	
<b>Bridges at Trail Crossings</b> 2.20 Scout/Youth Group Camp 12.07 Hazel Creek Camp	The proposed new Primitive Camp would be located adjacent to land zoned "RA." However, ownership of these lands is held by the USFS as part of the Eldorado National Forest. The Eldorado National Forest Land and Resource Management Plan allows and includes a wide range of recreational facilities. The Plan permits privately developed recreational facilities (including trails) with a special use permit. A discussion of the USFS special use permit can also be found in Section 4.1, Land Use. Given the fact that recreational uses, including camping, are allowed uses on USFS lands within the Eldorado National Forest, development of the Primitive Camp Area would not be considered incompatible. Therefore, impacts related to development of this component are considered less than significant.	

Component ID/Project Name	Impact Analysis	Level of Significance
	Day uses, including picnicking, riding and hiking are considered uses permitted by right within the TPZ zoning district, and would not be considered non-compatible; therefore no impact to TPZ lands would result from development of new day use areas, the reconfiguration of existing day use areas or trail construction.	
<b>Infrastructure</b> 2.18 Scout/Youth Group Camp (North) 2.19 Scout/Youth Group Camp (South) 5.04 Jenkinson Camp SPRA13 Increased Phone Service	Development of water and communication infrastructure is considered a use permitted by right within the RA and TPZ zoning districts; therefore the proposed construction of additional infrastructure would not be considered non-compatible and no impact would result from construction of infrastructure projects associated with the SPRA Master Plan.	No Impact
<b>Waterless Toilets/Restrooms</b> 2.08 Scout/Youth Group (North) 2.14 Scout/Youth Group (South) 5.03 Jenkinson Camp 16.03 Primitive Camp Area 19.02 Bumpy Meadow Trailhead 20.04 Retreat and Event Center (1) 20.07 Retreat and Event Center (2) 24.02 Marina Parking Expansion	<p>The development of restroom, shower, and laundry facilities are projects proposed as components of the recreation element of the Master Plan and are designed to accommodate long-term recreational use within SPRA. Proposed facilities within the areas of Jenkinson Camp, Sierra Camp, Bumpy Meadows Trailhead, the proposed Retreat and Event Center, and the Main Group Campground would be sufficiently setback from adjacent lands zoned for agriculture and would not be adjacent to TPZ land; therefore no impact would result from development of these facilities.</p> <p>However, the Marina Parking Lot Expansion component would occur adjacent to agricultural land, therefore impacts related to development of this component are considered potentially significant.</p>	Potentially Significant
<b>Showers/Laundry Facilities</b> 2.10 Scout/Youth Group (North)- Showers Only 2.15 Scout/Youth Group (South)- Showers Only 6.06 Sierra Camp 21.02 Main Group Campground	Additionally, the proposed facilities within the area of the Scout/Youth Group would have the potential to result in or contribute to land uses with the potential to conflict with TPZ land. Impacts related to the construction of facilities within the Scout/Youth Group Camp are therefore considered potentially significant.	
<b>Reconfigure Existing Parking</b> 1.05 Main Park Entrance 4.01 Pine Cone Camp 6.01 Sierra Camp 10.01 Chimney Camp (Day Use)	The Main Park Entrance, Pine Cone Camp, and Sierra Camp are not located adjacent to agricultural or TPZ lands. Non-commercial recreational uses specified by the El Dorado County Zoning Ordinance include day use for picnicking, riding, and hiking are uses permitted by right; therefore, reconfiguration of the day use parking area within Chimney Camp would not result in the development of land use conflicting with TPZ land. Chimney Camp components would not be located adjacent to agricultural land; therefore, no adverse impacts would result from reconfiguration of existing parking areas.	No Impact
<b>Construct New Parking Areas</b> 2.02 Scout/Youth Group Camp (North) 3.01 Miwok Trailhead 4.02 Pine Cone Camp	The construction of new parking areas within the SPRA is a component of the Access Element of the Master Plan, which is designed to improve circulation and accessibility within SPRA to accommodate continued, long-term recreational uses. The development of new parking areas within Hazel Creek Camp, the Miwok Trailhead, Bumpy Meadow Trailhead, and within the area of the proposed Lake Drive Stabilization project would result in parking	Potentially Significant

Component ID/Project Name		Impact Analysis	Level of Significance
6.07 11.02 12.03 18.01 19.01 20.01 20.02 21.03	Sierra Camp/Shower Parking Lake Drive Stabilization (Day Use) Hazel Creek Camp (Day Use and Trailhead) Dog Park Bumpy Meadow Trailhead Retreat and Event Center (East) Retreat and Event Center (West) Main Group Campground/Shower Parking	for day use of SPRA. Day use for picnicking, riding and hiking is considered non-commercial recreational use and is permitted by right within the TPZ zoning district; therefore no impact would result from construction of these parking areas. Likewise, parking proposed within the areas of Pine Cone Camp, Sierra Camp, the Main Group Camp, and the Retreat and Events Center would not result in land uses conflicting with TPZ lands as these areas are not located adjacent to TPZ land. However, new parking proposed for construction within the areas of the Scout/Youth Group Camp and the Sugarloaf Fine Arts Center dog park would facilitate long-term recreational use within areas of SPRA adjacent to TPZ land; therefore impacts are considered potentially significant.  New parking area components within the Scout/Youth Group, the Sugarloaf Fine Arts Center Dog Park, the Bumpy Meadows Trailhead, the Retreat and Events Center, and the Main Group Campground would be located a sufficient distance away from parcel boundaries to be consistent with the County's guidelines for setbacks adjacent to agricultural land. Impacts related to agriculture would therefore be considered less than significant.	
<b>Marina Parking Expansion</b> 24.01	Marina Parking Expansion	The proposed Marina Parking Expansion would not be located adjacent to TPZ land. No adverse impact to TPZ land would result from construction of expanded parking for the Marina. However, the proposed expansion would be located adjacent to agricultural land; therefore, impacts are considered potentially significant.	Potentially Significant
<b>Realign/Improve Campground Access Roads</b> 2.01 2.03 2.04 2.06 4.03 5.01 6.02 6.03 7.02 8.01 9.01 12.02 13.03 21.04 21.05 21.08	Scout/Youth Group Camp Scout/Youth Group Camp (North) Scout/Youth Group Camp (South) Scout/Youth Group Camp (South) Pine Cone Camp Jenkinson Camp Sierra Camp (West) Sierra Camp (East) Stonebraker Camp Hilltop Camp Chimney/Hilltop Host Site Hazel Creek Camp Dogwood Camp Main Group Campground (Group Site #1) Main Group Campground (Group Site #5) Main Group Campground (Group Site #5)	The proposed realignment and improvement of campground access roads within SPRA is a component of the Access Element of the Master Plan, which is designed to improve circulation and accessibility within SPRA to accommodate continued, long-term recreational uses. Realignment and improvement of existing campground access routes within SPRA adjacent to agricultural or TPZ land would facilitate ongoing recreational uses that would be considered incompatible with these land uses.  Recreational uses within Pine Cone Camp, Jenkinson Camp, Sierra Camp, Stonebraker Camp, Main Group Camp, Black Oak Equestrian Camp, and the proposed Lake Drive Access improvements would not be located adjacent to TPZ land and would not facilitate land uses incompatible with TPZ land. Impacts related to these projects are considered less than significant.  Improvements proposed within the Main Group Camp and Black Oak Equestrian Camp would be adjacent to agricultural lands. The proposed improvements proposed within the Main Group Camp would be sufficiently setback from adjacent agricultural land, consistent with the County Interim Guidelines. However, improvements proposed as components of the Black Oak Equestrian Center would have the potential to develop incompatible and uses adjacent to agricultural land; therefore impacts are considered potentially significant.  Proposed improvements for the Scout/Youth Group Camp, Hilltop Camp, Chimney Camp,	Potentially Significant

Component ID/Project Name	Impact Analysis	Level of Significance
21.11 Site #2) Main Group Campground (Group Sites #3 and #4) 23.02 Black Oak Equestrian Center 25.01 Lake Drive Access Improvements	Hazel Creek Camp, Dogwood Camp, access routes would be located adjacent to and would facilitate incompatible land uses adjacent to TPZ land. Therefore impacts related to these projects are considered potentially significant.	
<b>Reconfigure Main Entrance</b> 1.01 Main Park Entrance 1.02 Main Park Entrance	The Main Park Entrance is not located adjacent to TPZ land; therefore no adverse impacts to TPZ land would result from reconfiguration of the Main Park Entrance.  However, the Main Park Entrance is located adjacent to agricultural land. Improvements proposed within this component would have the potential to result in the development of incompatible land uses adjacent to agricultural land; therefore impacts are considered potentially significant.	Potentially Significant
<b>Install Interpretive/Trail Signage/Kiosks</b> 1.06 Main Park Entrance 3.04 Miwok Trailhead 7.05 Stonebraker Camp 12.10 Hazel Creek Camp 19.05 Bumpy Meadow Trailhead	Interpretive and trail signage, and kiosks would contribute to day uses within SPRA related to hiking and riding. These uses are considered non-commercial recreational uses by the El Dorado County Zoning Ordinance and are considered uses permitted by right within the TPZ zoning district. No adverse impacts would result from the construction of these facilities.  Improvements proposed for the Bumpy Meadow Trailhead would be located adjacent to agricultural land. However, sufficient setbacks are proposed, consistent with the County Interim Guidelines; impacts are therefore considered less than significant.  Improvements proposed as components of the Main Park Entrance would have the potential to result in the development of incompatible land uses adjacent to agricultural land; therefore impacts are considered potentially significant.	Potentially Significant
<b>Construct Visitor Center/New Maintenance Shop</b> 1.04 Main Park Entrance 1.07 Main Park Entrance	Construction of the proposed Visitor Center and new Maintenance Shop would not occur adjacent to TPZ land. No adverse impacts related to TPZ land would result from construction of these projects. However, proposed improvements would have the potential to result in the development of land uses conflicting with adjacent agricultural land; therefore impacts are considered potentially significant.	Potentially Significant
<b>Construct New Facilities</b> 18.02 Dog Park  <b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Center	Construction of the Sugarloaf Fine Arts Center and the Dog Park would occur in an area of SPRA that is adjacent to agricultural and TPZ land. Development of these facilities would contribute to long-term recreational use within SPRA and would have the potential to result in conflict with the adjacent agricultural and TPZ land, according to the County Interim Guidelines and the El Dorado County Zoning Ordinance; therefore, impacts are considered potentially significant.	Potentially Significant
<b>Rehabilitate Vegetation</b> 1.08 Main Park Entrance 4.07 Pine Cone Camp	Vegetation rehabilitation and restricted access areas within SPRA are proposed as components of the Natural Resource Protection and Restoration Element of the Master Plan. Vegetation rehabilitation would be implemented to address soil compaction and	No Impact

Component ID/Project Name	Impact Analysis	Level of Significance
6.08 Sierra Camp 6.09 Sierra Camp 7.06 Stonebraker Camp 8.04 Hilltop Camp 10.03 Chimney Camp 12.05 Hazel Creek Camp 12.06 Hazel Creek Camp 12.08 Hazel Creek Camp 12.09 Hazel Creek Camp 13.01 Dogwood Camp 14.02 Rainbow Camp 15.02 Kamloop Camp 21.07 Main Group Campground (Group Sites #1 and #5) 21.10 Main Group Campground (Group Site #2) 21.13 Main Group Campground (Group Sites #3 and #4) 23.03 Black Oak Equestrian Camp FMP Plant/maintain Seedlings for Forest Health FMP	disturbance related to ongoing unrestricted access of park visitors. Access restrictions would include designating appropriate access areas as well as barriers along riparian or shoreline areas and would be implemented to reduce erosion as well as to restore wetland and riparian habitats. Planting seedlings and keeping seedlings free of competing vegetation are also proposed to improve forest health. Watershed management and fish and wildlife habitat management are considered uses permitted by right, and are therefore compatible with the TPZ zoning district. Therefore, no adverse impacts related to TPZ land would result from implementation of proposed access restrictions and vegetation rehabilitation activities. Similarly, vegetation rehabilitation and access restrictions would not facilitate public use or access adjacent to agricultural land, even when proposed adjacent to agricultural land. Therefore, no adverse impacts related to agricultural land would result from implementation of proposed vegetation rehabilitation components.	
<b>Restrict Access</b> 3.02 Miwok Trailhead 3.03 Miwok Trailhead 4.06 Pine Cone Camp (Shore Access) 8.02 Hilltop Camp 14.01 Rainbow Camp (Creek Access Control) 15.01 Kamloop Camp (Creek Access Control) 19.04 Bumpy Meadow Trailhead 23.04 Black Oak Equestrian Center 23.06 Black Oak Equestrian Center		

Component ID/Project Name	Impact Analysis	Level of Significance
<b>Dock Expansion</b> 7.07 Stonebraker Camp	The proposed expansion of the existing dock located at Stonebraker Camp would facilitate long-term ongoing water-based recreational opportunities within SPRA. The existing dock at Stonebraker Camp is located along the shoreline of Jenkinson Camp and is substantially setback from any area of TPZ land. No agricultural land is present adjacent to this project component; therefore, impacts are considered less than significant.	Less than Significant
<b>Lake Drive Stabilization</b> 11.01 Lake Drive Stabilization	The proposed Lake Drive Stabilization project represents a component of the Natural Resource Protection and Restoration Element of the Master Plan and would reduce erosion and provide/enhance shoreline wildlife habitat. Watershed management and fish and wildlife habitat management are considered uses permitted by right, and are therefore compatible with the TPZ zoning district. No agricultural land is adjacent to this project component. Therefore, no adverse impacts related to TPZ land would result from implementation of the proposed Lake Drive Stabilization.	No Impact
<b>SPRA Administration</b> SPRA01 Increased Staffing SPRA02 Staff Training SPRA03 Reservation Systems Software SPRA05 Website Development SPRA06 Proactive Maintenance SPRA07 Annual Maintenance Work Plan SPRA08 Volunteer Maintenance Events	Administrative activities proposed by SPRA would involve increased staffing, technological and software improvements, and maintenance activities and would; therefore, not result in adverse impacts to agricultural or TPZ lands.	No Impact
<b>Planning</b> SPRA04 Day-Use Carrying Capacity SPRA09 Trail Maintenance Plan	<p>As components of the Park Operations and Maintenance Element, EID proposes to establish a day use carrying capacity for SPRA visitors, as well as develop a plan addressing trail maintenance. These activities would contribute to long-term management of Day uses within SPRA, which are compatible uses within TPZ land; therefore, no adverse impacts would result from these activities.</p> <p>Planning activities proposed to support the long-term viability of the SPRA as a recreation area. Recreational uses adjacent to agricultural land would have the potential to result in the development of incompatible uses conflicting with adjacent agriculture. However, individually proposed components within the SPRA would be subject to the setbacks as prescribed in the County Interim Guidelines. Therefore, impacts are considered less than significant.</p>	Less than Significant
<b>Public Safety</b> SPRA10 Fire Prevention SPRA11 Emergency Preparedness Plan SPRA12 Law Enforcement	Preparation of an emergency preparedness plan and the addition of staffing for law enforcement are proposed to address public safety issues within SPRA and would not conflict with TPZ land surrounding SPRA. No adverse impacts would result related to these actions. However, as an additional public safety component and to address fire prevention within SPRA, EID is preparing a FMP in coordination with an RPF. The FMP identifies specific recommendations related to fuel load management, including vegetation removal	Less than Significant

Component ID/Project Name	Impact Analysis	Level of Significance
	<p>and controlled burning within non-improved areas of SPRA. To be included in the timberland preserve zone, the preparation of a forest management plan for the parcel is required in accordance with Section 17.44.070(B) of the El Dorado Zoning Ordinance. In addition to historical, access, boundary and silvicultural information; required contents of the FMP include the preparation of a fire protection plan, including a fuels management program. Although SPRA lands are not included in the TPZ zoning district, preparation of the FMP is consistent with County requirements for the TPZ zoning district and the fire prevention approach proposed by EID in conjunction with preparation of the FMP is consistent with the requirements specified by the El Dorado County Zoning Ordinance; therefore, impacts are considered less than significant.</p>	

It is not anticipated that implementation of the SPRA Master Plan would result in substantial adverse impacts related to agricultural resources or timberlands. Within the General Plan, the County of El Dorado has established value for conserving lands suitable for agriculture and commercial timber operations. In order to ensure the conservation of these valuable lands, the County Zoning Ordinance and the County Interim Guidelines specify standards by which land uses adjacent to agricultural and timber lands must be developed, including setbacks.

EID is proposing a master plan by which SPRA would be managed for long-term recreational use as well as natural resource conservation and restoration. SPRA Master Plan goals and objectives identify the importance of protecting of natural resources, including forest resources. To this end, EID has initiated preparation of a FMP, prepared parallel to the SPRA Master Plan, identifying current forest resources and identifying management activities for fire prevention, commercial harvesting, and long-term forest health. Timber operations adjacent to SPRA would be buffered from non-compatible uses through the incorporation of a development buffer, thereby reducing the potential for land use conflicts. In addition to physical and management activities within SPRA, EID proposes public education and outreach to create awareness within the community and for regional visitors.

#### **4.2.5 Mitigation Measures**

As identified within **Error! Reference source not found.**, development of individual projects proposed as components of SPRA would have the potential to result in significant impacts related to agricultural and timber land.

Pursuant to the Interim Interpretive Guidelines for El Dorado County General Plan Policies 8.1.3.2 and 8.4.1.2, non-compatible land uses would be required to provide for a setback of 200 feet when adjacent to lands within the Timberland Preserve Zoning District. Implementation of the following mitigation measure would reduce significant impacts related to TPZ land to less than significant levels.

**Mitigation Measure AG-1:** A minimum 200-foot setback from parcel boundaries shall be maintained for the project footprint where abutting land identified by the County of El Dorado as located within the Timberland Preserve Zoning District. The requirements for the 200-foot setback may be reduced or waived for individual project components, if approved by the County Agricultural Commissioner or the Director of Development Services.

Implementation of Mitigation Measure AG-1 would incorporate a 200-foot buffer between timberlands and non-compatible land uses as defined by Section 17.06.050(GG) of the El Dorado County Zoning Ordinance. The distance of this buffer zone is consistent with the County adopted Interim Guidelines and is established to provide a buffer between land uses which are apt to conflict with ongoing agricultural or timber harvest operations related to operational characteristics of these land uses including sprays, dust, noise, equipment, or products leaving the property in a manner that threatens the health, safety, or welfare of adjacent occupants. This buffer zone is also established to protect agricultural and timberlands from uses which are likely

to conflict with or threaten the viability of operations due to trespass, vandalism, theft, complaint, and dog-related problems.

In order to implement the General Plan policies related to the conservation of agricultural and timber land, the County has adopted interim interpretive guidelines. The agricultural setback standards defined in these guidelines pursuant to General Plan policies 8.1.3.2 and 8.4.1.2 supersede those setbacks specified by County Code Section 17.06.150.

**Mitigation Measure AG-2:** On project parcels 10 acres or larger in area, agriculturally incompatible uses shall be set back a minimum of 200 feet from any adjacent parcel that is agriculturally zoned, unless the requirement for the 200-foot setback is reduced or waived by the County Agricultural Commissioner or the Director of Development Services.

Implementation of Mitigation Measure Ag-2 would ensure the protection and conservation of agricultural land within the County through the creation of a buffer zone between agricultural lands and adjacent incompatible land uses consistent with General Plan Policies and the Zoning Ordinance.

Table 4.2-2 below identifies the project components that would be subject to the requirements of Mitigation Measure AG-1 and/or AG-2. Those project components not included in the table below have been determined to result in no impact or less than significant impacts related to timberlands as discussed in Table 4.2-1 and no mitigation is warranted.

**Table 4.2-2 — Proposed Mitigation Measures to Reduce or Eliminate Potential Impacts Related to Agricultural Resources Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Construct New Campsites</b></p> <p>13.04 Dogwood Camp 16.02 Primitive Camp Area</p>	<p>Implement Mitigation Measure AG-1. Implement Mitigation Measure AG -2 for Project Component ID 16.02.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Construct Post/Pier Structures</b></p> <p>2.09 Scout/Youth Group Camp Mess Hall 2.12 Scout/Youth Group Camp (North) 2.13 Scout/Youth Group Camp (South) 2.17 Scout/Youth Group Camp Mess Hall 5.02 Jenkinson Camp 10.04 Chimney Camp 20.03 Retreat and Event Center 20.05 Retreat and Event Center (Phase I) 20.06 Retreat and Event Center (Phase II)</p>	<p>Implement Mitigation Measure AG -1 for Project Component IDs 2.09, 2.12, 2.13, 2.17, and 10.04.  Project Component IDs 5.02, 20.03, 20.05, and 20.06 would not be located adjacent to TPZ or agricultural land; therefore no mitigation is warranted for these projects.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Reconfigure Campsites</b></p> <p>2.07 Scout/Youth Group Camp 2.11 Scout/Youth Group Camp 2.14 Scout/Youth Group Camp 2.16 Scout/Youth Group Camp 4.03 Pine Cone Camp 4.04 Pine Cone Camp 4.05 Pine Cone Camp 6.04 Sierra Camp (West) 6.05 Sierra Camp (East) 7.03 Stonebraker Camp 8.03 Hilltop Camp 9.02 Chimney/Hilltop Host Site 10.02 Chimney Camp 12.01 Hazel Creek Camp</p>	<p>Implement Mitigation Measure AG -1 for Project Component IDs 2.07, 2.11, 2.16, 8.03, 9.02, 10.02, 12.01, 13.02, 14.03, and 15.03.  Implement Mitigation measure AG -2 for Project Component ID 23.01  Project Component IDs 4.04, 4.05, 6.04, 6.05, 7.03, 21.01, 21.06, 21.09, 21.12, and 21.14 would be sufficiently setback from agricultural land and would not be located adjacent to TPZ land; therefore no mitigation is warranted for these projects.</p>	<p>Less than Significant with Mitigation Incorporation</p>

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
13.02 Dogwood Camp 14.03 Rainbow Camp 15.03 Kamloop Camp 21.01 Main Group Campground (Relocate Host Site) 21.06 Main Group Campground (Tent Sites at Groups Sites #1 and #5) 21.09 Main Group Campground (Tent Sites at Group Site 32) 21.12 Main Group Campground (Tent Sites at Group Site #3 and #4) 21.14 Main Group Campground (Group Kitchens) 23.01 Black Oak Equestrian Camp		
<b>Construct New Day Use Area</b> 19.03 Bumpy Meadow Trailhead	Implement Mitigation Measure AG -2 for Project Component IDs 1.03, 2.05, 2.20, 22.01, 23.05.	Less than Significant with Mitigation Incorporation
<b>Reconfigure Day Use Area</b> 7.04 Stonebraker Camp	Project Component IDs 7.01 and 12.04 are not located adjacent to agricultural land. Project Component IDs 19.03 and 16.01 have incorporated sufficient setbacks, no mitigation warranted.	
<b>Trail Construction</b> 1.03 Main Park Entrance 2.05 Scout/Youth Group Camp 7.01 Stonebraker Camp 12.04 Hazel Creek Camp 16.01 Primitive Camp Area 22.01 Mountain Bike Trail 23.05 Black Oak Equestrian Camp	No development of project components considered incompatible with TPZ land; therefore, no mitigation is warranted.	
<b>Bridges at Trail Crossings</b> 2.20 Scout/Youth Group Camp 12.07 Hazel Creek Camp		
<b>Waterless Toilets/Restrooms</b> 2.08 Scout/Youth Group (North) 2.14 Scout/Youth Group (South)	Implement Mitigation Measure AG -1 for Project Component IDs 2.08 and 2.14.  Implement Mitigation Measure AG -2 for Project Component ID 24.02.	Less than Significant with Mitigation

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
5.03 Jenkinson Camp 16.03 Primitive Camp Area 19.02 Bumpy Meadow Trailhead 20.04 Retreat and Event Center (1) 20.07 Retreat and Event Center (2) 24.02 Marina Parking Expansion	Project Component IDs 5.03, 16.03, 19.02, 20.04, and 20.07 would be sufficiently set back from adjacent agricultural land and would not be located adjacent to TPZ land; therefore no mitigation is warranted for these projects.	Incorporation
<b>Showers/Laundry Facilities</b> 2.10 Scout/Youth Group (North)-Showers Only 2.15 Scout/Youth Group (South)-Showers Only 6.06 Sierra Camp 21.02 Main Group Campground	Implement Mitigation Measure AG-1 for Project Component IDs 2.10 and 2.15.  Project Component IDs 6.06 and 21.02 would not be located adjacent to TPZ land; therefore no mitigation is warranted for these projects. Project Component ID 21.02 would be sufficiently set back from adjacent agricultural lands, therefore no mitigation is warranted related to agriculture.	Less than Significant with Mitigation Incorporation
<b>Construct New Parking Areas</b> 2.02 Scout/Youth Group Camp (North) 3.01 Miwok Trailhead 4.02 Pine Cone Camp 6.08 Sierra Camp/Shower Parking 11.02 Lake Drive Stabilization (Day Use) 12.03 Hazel Creek Camp (Day Use and Trailhead) 18.01 Dog Park 19.01 Bumpy Meadow Trailhead 20.01 Retreat and Event Center (East) 20.02 Retreat and Event Center (West) 21.03 Main Group Campground/Shower Parking	Implement Mitigation Measure AG-1 for Project Component IDs 2.02 and 18.01.  Project Component IDs 3.01, 4.02, 6.07, 11.02, 12.03, 19.01, 20.01, 20.02, and 21.03 would not be located adjacent to TPZ land; therefore no mitigation is warranted for these projects.  Project Component ID 2.02, 18.01, 19.01, 21.03, 20.02, and 20.01 would be sufficiently set back from adjacent agricultural lands, therefore no mitigation is warranted related to agriculture.	Less than Significant with Mitigation Incorporation
<b>Marina Parking Expansion</b> 24.01 Marina Parking Expansion	Implement Mitigation Measure AG-2 for Project Component ID 24.01.	Less than Significant with Mitigation Incorporated
<b>Realign/Improve Campground Access Roads</b> 2.01 Scout/Youth Group Camp 2.03 Scout/Youth Group Camp (North) 2.04 Scout/Youth Group Camp (South)	Implement Mitigation Measure AG-1 for Project Component IDs 2.01, 2.03, 2.04, 2.06, 8.01, 9.01, 12.02, and 13.03.  Implement Mitigation Measure AG-2 for Project Component ID 23.02.	Less than Significant with Mitigation Incorporation

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
2.06 Scout/Youth Group Camp (South) 4.03 Pine Cone Camp 5.01 Jenkinson Camp 6.02 Sierra Camp (West) 6.03 Sierra Camp (East) 7.02 Stonebraker Camp 8.01 Hilltop Camp 9.01 Chimney/Hilltop Host Site 12.02 Hazel Creek Camp 13.03 Dogwood Camp 19.01 Bumpy Meadow Trailhead 21.04 Main Group Campground (Group Site #1) 21.05 Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group Sites #3 and #4) 23.02 Black Oak Equestrian Center 25.01 Lake Drive Access Improvements	Project Component IDs 4.03, 5.01, 6.02, 6.03, 7.02, 9.01, 21.04, 21.05, 21.08, 21.11, and 25.01 would be sufficiently setback from agricultural land and would not be located adjacent to TPZ land; therefore no mitigation is warranted for these projects.	
<b>Reconfigure Main Entrance</b> 1.01 Main Park Entrance 1.02 Main Park Entrance	No impact related to TPZ land.  Implement Mitigation Measure AG-2 for Project Component IDs 1.01 and 1.02.	Less than Significant with Mitigation Incorporated
<b>Install Interpretive/Trail Signage/Kiosks</b> 1.06 Main Park Entrance 3.04 Miwok Trailhead 7.05 Stonebraker Camp 12.10 Hazel Creek Camp 19.05 Bumpy Meadow Trailhead	No impacts related to TPZ land.  Sufficient setbacks are proposed for Project Component IDs 3.04 and 19.05.  Implement Mitigation Measure AG-2 for Project Component ID 1.06.	Less than Significant with Mitigation Incorporated

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<b>Construct Visitor Center/New Maintenance Shop</b> 1.04 Main Park Entrance 1.07 Main Park Entrance	Implement Mitigation Measure AG-2 for Project Component IDs 1.04 and 1.07.	Less than Significant with Mitigation Incorporated
<b>Construct New Facilities</b> 18.02 Dog Park	Implement Mitigation Measures AG-1 and AG-2 for Project Component IDs 18.02 and 17.01.	Less than Significant with Mitigation Incorporation
<b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Center		

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## **4.3 Aesthetics**

The following Aesthetics section of this Draft Master EIR describes the potential impacts associated with the proposed SPRA Master Plan on the visual character of SPRA. It describes the existing site conditions; the regulatory setting at state and local levels; discusses how the proposed Master Plan has the potential to visually degrade the aesthetic quality of SPRA and surrounding areas; the degree and significance of those impacts; and identifies mitigation measures required to reduce impacts to below a level of significance. It also discusses the methods used to study and analyze the potential impacts associated with the project, and discusses why proposed mitigation measures cannot reduce all these impacts to a less than significant level.

### **4.3.1 Existing Conditions**

#### **4.3.1.1 Project Setting**

##### **Regional Setting**

SPRA is located on the west slope of the Sierra Nevada mountain range at an elevation of between 3,000 and 4,000 feet. The west slope is characterized by densely wooded, highly dissected mountains stepping up from the foothills around the City of Placerville to the granitic peaks forming the summit of the range. The visual qualities of this area are defined by the drainages carved by the westward flowing streams and rivers cascading from the mountains to the great Central Valley. Exposed granite and other volcanic rock forms, towering conifers and aspen, and bright, fast-flowing streams characterize the aesthetics of this region.

##### ***Other Regional Parks***

Visually, SPRA is similar to other lake camping destinations on the west slope. The primary focus is on Jenkinson Lake and campgrounds located near the water's edge. As in other similar man-made reservoirs used for water supply, the lake is drawn down during the summer months, creating a periodic aesthetically unappealing expanse of muddy flats around the remaining pool. In times of drought this is particularly pronounced. Other reservoirs that are popular camping and boating destinations within 30 miles of SPRA on the west slope include Ice House, Union Valley, Loon Lake, Wrights Lake, Silver Lake, and Caples Lake. Most of these lakes have similar visual resources: coniferous trees surrounding a central water body with campgrounds tucked back from the shore. Rock outcrops and occasional wildlife sightings add to the palette of trees, water, and sky. Jenkinson Lake differs from these other reservoirs in that the reservoir is located in proximity to the Sacramento Valley and the Highway 50 corridor, as well as the fact that a substantial residential community exists adjacent to SPRA that has a vested interest in the visual character of the lake.

##### **Existing Site Conditions**

The landscape of SPRA typifies the lower elevations of the Sierra Nevada mountain range with varied topography that ranges from gently rolling hills to steep hillsides and rugged escarpments. A west-east trending ridgeline dominates the north side of the site. Jenkinson Lake can be viewed from trails on the upper reaches of the slopes and from the residential area to the northwest, as well as from the various campgrounds and day use sites around the lake. Dense trees on the west side of the recreation area provide screening of the development to the west of

Sly Park Road; however, views from the west to the east provide spectacular views of the snow covered peaks of the Sierra Nevada range. Views of the lake from the ridge to the south of the lake, along which the Mormon-Emigrant Trail runs, are virtually non-existent, blocked by dense forest. Views of the lake from the equestrian trail are very limited.

The majority of views of the lake are enjoyed by visitors to SPRA, who come to the lake to recreate. Both visitors and year-round residents share the roads into SPRA (Sly Park Road and Mormon Emigrant Trail). Views of the lake from these roads are limited. Motorists have momentary glimpses of the lake through the trees along Sly Park Road between the Park entrance and Mormon Emigrant Trail. The Marina can be briefly viewed in this manner; however, the speed of traffic on Sly Park Road precludes safely viewing the lake for very long. The best views of the lake from the roads are where Mormon Emigrant Trail crosses over the dams. These vistas provide sweeping views up the length of the lake to the forested mountains in the background.

Through the seasons, the area undergoes the dramatic transformation from the snow cover of winter to the greens of spring, then the browns of summer to the myriad colors provided by deciduous trees in the fall. From the lake shore, the surrounding landscape provides a stunning vista and reminder of the rural and rugged qualities of the natural landscape.

Lake views are typical of many mountain reservoirs. They range from a natural forested setting near the east end of the lake, to a more recreational facility near the Marina and boat launch. During the high-use seasons of late spring, summer, and early fall, power boats and water skiers can be seen and heard in the main body of the lake. Campers and their accoutrements, tents, cars and gear, are readily apparent along the lake shore. Human uses are less prevalent along the upper east end of the lake. Above “the narrows”, the lake has a 5 mph speed limit. Boating in this area is usually limited to fishing, canoeing, kayaking, paddle boats, and sometimes sailing. While campsites and gear are still visible in this upper reach, campsites seem more spread out and farther from the shore. Because of this, views from and of the upper east end are more sensitive to human impacts than in the western section of the lake, which already has facilities such as parking lots, the Marina, docks at the group sites, and the Sierra campground peninsula day-use area.

### **4.3.2 Regulatory Setting**

The following discussion includes information on federal, state, and local regulations that apply to project area aesthetic resources.

#### **State Regulations**

The State of California regulates projects that have the potential to significantly affect the viewshed of scenic highways.

The nearest California designated scenic highway to the project site is U.S. Highway 50, approximately three to four miles to the north of SPRA. SPRA is not anticipated to be within the viewshed from Highway 50, nor are the magnitude of the proposed changes such that they would influence views at this distance even if SPRA was visible. No State of California scenic vistas designations have been found that include SPRA.

## **Local Regulations**

The El Dorado County General Plan calls for development of a Scenic Corridor Ordinance, the purpose of which is to map sensitive views and viewsheds within the entire County. Until this Ordinance is adopted by the County, the General Plan makes provision for review of any projects visible from the important scenic viewpoints identified in Table 5.3-1 and Exhibit 5.3-1 of the El Dorado County General Plan DEIR (2003). SPRA is not included in any of the significant viewpoints identified in Table 5.3-1 or Exhibit 5.3-1.

While no specific County references were identified designating Sly Park or Jenkinson Lake as a scenic resource, the El Dorado County General Plan (2004) does include a policy of “maintaining areas of importance for outdoor recreation including areas of outstanding scenic, historic, and cultural value” (Policy 7.6.1.1-C). The El Dorado County General Plan (2004) also includes a definition for a “Scenic Area” as “an open or mostly undeveloped area, the natural features of which are visually significant, or geologically or botanically unique.” SPRA may qualify for scenic area status under this definition.

### **4.3.3 Environmental Impact Thresholds/Criteria for Evaluation**

The following discussion identifies potential aesthetic impacts of Master Plan components and suggests mitigation measures to reduce the levels of impact. A detailed discussion of mitigation measures is found in Section 4.3.5.

#### **4.3.3.1 Methodology**

This section discusses the resources used to study and analyze the subject project, including previous studies, communications, and field studies/surveys.

Even though the recreation area is not formally designated as a scenic vista or visible from a state scenic highway, certain elements proposed in the Master Plan have the potential to result in significant impacts to the visual character of SPRA. While it is unlikely that widening the roads, reconfiguring the campgrounds, or increasing day use parking would significantly degrade the visual character of SPRA, several elements proposed in the Master Plan do have the potential to degrade the visual resources. These elements include the new Marina parking lot, the Bumpy Meadows staging area, the Conference Center expansion, the Sugarloaf Fine Arts Camp, Jenkinson Camp expansion, and improvement of the Scout Camp.

To assess these potential impacts, potentially sensitive viewpoints were identified by Sly Park EID staff (Figure 4.3-1). The following criteria were used in selection of these viewpoints:

- Views that are sensitive to visual impacts, based upon sensitivity of the view to disturbance because its pristine nature or prominence (conspicuousness);
- Views that are sensitive based upon their exposure to large numbers of people;
- Views that are particularly significant to visitors or staff; and
- Any other views thought important for consideration in assessing the visual impact of the Master Plan on the recreation area.

Fourteen viewpoints were selected that were thought to best represent the most important potentially sensitive views (Table 4.3-1).

**Table 4.3-1 — SPRA Sensitive Viewpoints**

Viewpoint	Description	Key Viewpoint
1	Main Entrance	Yes
2	Trail below entrance	No
3	Day use area	No
4	Mid-lake on-the-water	No
5	Sierra Campground	Yes
6	Chimney Campground	No
7	Hazel Creek Day-use Area	Yes
8	Camp Creek	No
9	South Shore Trail, east of Narrows	No
10	South Shore Trail, west of Narrows	Yes
11	Second Dam	Yes
12	Group Camps	No
13	First Dam	Yes
14	Northwest residence	Yes

Of these fourteen viewpoints, seven were selected as key views for use in this analysis based upon a ranking provided by SPRA staff. Viewsheds were generated from these seven viewpoints using Geographic Information Systems (GIS) software (Figure 4.3-3 through Figure 4.3-10). These viewsheds represent land visible from the selected viewpoint using topography only. Vegetation was not included in the viewshed analysis. This was done for two reasons: 1) vegetation is prone to change from both human-induced and natural causes such as harvesting and windthrow, and 2) detailed, highly accurate tree height and location information was not available at the time of the study. These viewsheds were used in determining the visual assessment ratings discussed later in this section.

Some of the proposed projects such as Sugarloaf and the Marina parking lot expansion would also have the potential to increase light pollution in the area. This potential is reviewed in relationship to the existing El Dorado County lighting ordinance.

Timber management operations also have the ability to significantly affect the scenic quality of a natural area. A FMP has been prepared as part of the SPRA Master Plan to address potential issues related to timber management.

The methodology employed in rating the scenic quality and sensitivity to visual impacts was adapted from the Bureau of Land Management Visual Resource Inventory protocols for assessing visual quality (BLM, 1986). These protocols use a Scenic Quality Assessment (SQA) and a Sensitivity Level Analysis (SLA) for determining Visual Resource Class (VRC) which

defines Visual Resources Objectives (VRO's). These VRO's are used in this study to determine the potential significance of impacts from non-natural modifications to landscape views.

The SQA provides a rating on the visual character of a landscape based upon landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications. Naturally striking landscapes are assigned an SQA rating of "A," moderately appealing landscapes are rated "B," and visually unappealing or bland landscapes receive a rating of "C." To perform an SQA, the study landscape is divided into a number of units based upon the physiographic characteristics noted above, ranging in size from less than 100 acres to several thousand. Each area is rated based upon its individual characteristics.

Figure 3.3-9 shows the SQAs assigned to SPRA. A multidisciplinary team visited SPRA in October 2005 to assign rating units. Because of the striking scenery of the lake, mountains, large conifers, and variety of vegetation, SPRA overall scored relatively high in Scenic Quality. The majority of the SQAs were given rating "B" as shown in Table 4.3-2. The south shore area rated "A" because of the relative lack of cultural modifications, variety of vegetation, and steepness of slope. Boy Scout Hill and Black Oak Equestrian Campground rated "C," primarily because of human disturbances and the lack of proximity to the lake. The team was unable to visit Boy Scout Hill because of access issues, so it was rated based upon a previous visit in April 2005, shortly after a major burn had damaged many trees. After the vegetation has recovered from this burn, Boy Scout Hill should also rate a "B."

**Table 4.3-2 — Scenic Quality Rating (SQR)**

SQRU	Score	Rating
1- Areas around the dams	16	B
2- Group camps and peninsula	16	B
3- Marina area	16	B
4- Not rated (combined with 6&7)	NA	NA
5- Not rated (combined with 6&7)	NA	NA
6- South Shore	20	A
7- N. shore camping areas & lakeshore	18	B
8- N. shore non-camping areas north of Lake Drive	14	B
9- East camps	15	B
10- Mormon Emigrant Trail viewshed S. of lake	12	B
11- Trails below dam	14	B
12- Boy Scout Hill	11	C
13- Equestrian Camp	9	C

The SLA considers types of users, amount of use, public interest, adjacent land use, special areas, and other factors to rate visual sensitivity of the landscape. Sensitivity Level Rating Units (SLRUs) are designated similar to SQA Units. Viewsheds generated using GIS from sensitive viewpoints identified throughout the park were used in determining SLRU's, which are assigned

values of Low, Medium, or High based upon assessments that include types of users, amount of use, public interest, adjacent land uses, special areas, and other factors. For this assessment, SPRA was divided into four SLRU's based upon visibilities: 1) visible to local residents and visitors, 2) visible to visitors but not local residents, 3) visible to local residents but not to visitors, 4) not visible from strategic viewpoints. Sensitivity Level overall ratings ranged from Medium for units three and four to High for units one and two, with the primary differences being level of use.

Visual Resource Classes were determined from a combination of SQRA, SLA, and Distance Zone (foreground/midground, background, or seldom seen) (Table 4.3-3). All of SPRA falls within the foreground/midground distance zone.

**Table 4.3-3 — Visual Resource Classes**

		Visual Sensitivity Levels						
		High			Medium			Low
Special Areas		I	I	I	I	I	I	I
Scenic Quality	A	II	II	II	II	II	II	II
	B	II	III	III/IV	III	IV	IV	IV
	C	III	IV	IV	IV	IV	IV	IV
		f/m	b	s/s	f/m	b	s/s	s/s
		Distance Zones						

Figure 4.3-10 shows VRC for SPRA ranging from Class II to Class IV. Within the BLM, VRC's are used to define objectives for landscapes as follows (BLM, 1986):

Class I Objective	Preserve the existing character of the landscape. Very limited management activity. Level of change should be very low and must not attract attention
Class II Objective	Retain the existing character of the landscape. The level of change should be low and should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, color, and texture found in the predominant natural features of the landscape.

Class III Objective	Partially retain the existing character of the landscape. The level of change should be moderate. Activities may attract attention, but should not dominate. Changes should repeat the basic elements of the predominant natural features.
Class IV Objective	Major modifications allowed. Level of change may be high. Activities may dominate the view and be the major focus. Objectives should still attempt to reduce the impact through careful location, minimal disturbance, and repetition of basic elements.

These objectives were used in assessing the potential impacts of the proposed projects on SPRA.

Because of the potential significance of the impact of the proposed Marina Parking Expansion on aesthetics of SPRA, a visual simulation was performed to better assess the impacts. GIS data was used to populate a 3D model built using Visual Nature Studio software. Proposed engineering design data was used to construct the parking lot, entry, and exit ramps and retaining wall in the software. Simulations were run for existing conditions; post-construction; and one, ten, and thirty years following construction. US National Forest Service data was used for tree growth rates and spacing was based upon existing tree densities. Simulations were generated from five viewpoints thought to have the potential of significant impacts from the proposed improvements, as follows:

1. Lake;
2. Pinecone campground;
3. Proposed retreat center;
4. Group campground; and
5. Mormon Emigrant Trail near the northern dam.

The simulated views are shown on Figure 4.3-11 through Figure 4.3-15.

#### **4.3.3.2 Criteria for Significance**

The following criteria were used to identify whether a proposed project would have a potentially significant effect on SPRA:

Would the Project:

- Have a substantial adverse effect on a scenic vista?

- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- Substantially degrade the existing visual character or quality of the site and its surroundings?
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Projects were evaluated based upon their potential to meet the above criteria and the Scenic Quality Rating of the Scenic Quality Units where they are located.

#### **4.3.4 Environmental Impacts**

The visual qualities of SPRA are one of the primary attractions for the large number of summer time visitors. The resulting heavy usage has the potential to degrade those visual resources that have led to SPRA's popularity. This degradation can occur from a number of factors related to human use of the resource such as: the expansion of facilities needed to accommodate visitors; impacts to vegetation caused by physical damage, soil compaction, erosion, or misuse; recreation activities that have the potential to be visually intrusive, such as boating; and, finally, the sheer number of visitors.

Table 4.3-4 examines the major components of the Sly Park Master Plan, and assesses their potential impacts on aesthetics of SPRA.

**Table 4.3-4 — Impacts Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Construct New Campsites</b>                      13.04 Dogwood Camp                      16.02 Primitive Camp Area</p>	<p>Low potential to affect SPRA aesthetics. Improvements would require minimal site disturbance, are screened from the majority of SPRA by the tree canopy, and should not result in disruption of this canopy.</p>	<p>Less than Significant Impact</p>
<p><b>Construct Post/Pier Structures</b>                      2.09 Scout/Youth Group Camp Mess Hall                      2.12 Scout/Youth Group Camp (North)                      2.13 Scout/Youth Group Camp (South)                      2.17 Scout/Youth Group Camp Mess Hall                      5.02 Jenkinson Camp                      10.04 Chimney Camp                      20.03 Retreat and Event Center                      20.05 Retreat and Event Center (Phase I)                      20.06 Retreat and Event Center (Phase II)</p>	<p>The Scout/Youth camp is in an area that was rated Class III/IV, allowing for a higher degree of modification to the visual character. This is primarily because of the existing character of the landscape and the fact that the area is not very visible from most areas of SPRA. Because the size of the Mess Hall and the number of Yurts proposed, this project would have the potential to significantly affect the views of the nearby residents, unless proper mitigation measures are implemented to screen these structures and help them to blend into the natural landscape.</p> <p>Improvements at Jenkinson Camp are unlikely to be visible from sensitive receptors because of screening by vegetation.</p> <p>Improvements at Chimney may be visible from adjacent campsites, from the Chimney day-use area, and from the Lake and would have the potential to significantly affect the visual quality, unless mitigation is incorporated.</p> <p>The proposed cabins at the Retreat and Event Center would have the potential to be visible from adjacent group camps, the marina area, the south shore trail, and the north shore campgrounds west of the narrows. These cabins could have significant aesthetic impacts if mitigation is not incorporated.</p>	<p>Potentially Significant Impact</p>
<p><b>Reconfigure Campsites</b>                      2.07 Scout/Youth Group Camp                      2.11 Scout/Youth Group Camp                      2.14 Scout/Youth Group Camp                      2.16 Scout/Youth Group Camp                      4.03 Pine Cone Camp                      4.04 Pine Cone Camp                      4.05 Pine Cone Camp                      6.04 Sierra Camp (West)                      6.05 Sierra Camp (East)                      7.03 Stonebraker Camp                      8.03 Hilltop Camp                      9.02 Chimney/Hilltop Host Site</p>	<p>In general, camp site reconfigurations would result in minimal impacts to aesthetics. In many cases throughout SPRA, campsites are not well defined, and the areas surrounding the sites are experiencing erosion and denudation. Reconfiguration of these areas to better define the sites should result in improved visual quality where eroding soils are stabilized and revegetation is allowed or encouraged to occur.</p> <p>The total number of camp sites is not expected to change as a result of this Master Plan; therefore visual impacts because the presence of sometimes brightly colored tents would not increase significantly.</p>	<p>No Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
10.02 Chimney Camp 12.01 Hazel Creek Camp 13.02 Dogwood Camp 14.03 Rainbow Camp 15.03 Kamloop Camp 21.01 Main Group Campground (Relocate Host Site) 21.06 Main Group Campground (Tent Sites at Groups Sites #1 and #5) 21.09 Main Group Campground (Tent Sites at Group Site 32) 21.12 Main Group Campground (Tent Sites at Group Site #3 and #4) 21.14 Main Group Campground (Group Kitchens) 23.01 Black Oak Equestrian Camp		
<b>Construct New Day Use Area</b> 19.03 Bumpy Meadow Trailhead	The Bumpy Meadows trailhead is visible from all of the viewsheds mapped but one (Figure through Figure 4.3-8); however, because the separation of the facility from the lake and the intervening trees, it is unlikely that this facility would have a significant impact on any of the views. The Bumpy Meadows site plan shows the parking lot occurring in the existing clearing, with only one 26-inch Ponderosa pine and possibly one 12-inch Ponderosa pine being removed as part of the construction, which would have a minimal impact on the overall tree canopy.	Less than significant Impact
<b>Reconfigure Day Use Area</b> 7.04 Stonebraker Camp	Reconfiguring the existing day use to eliminate one picnic site and delineate the boundaries of the other two should help to improve site aesthetics. Adding a new site for two tables would have an insignificant affect on visual quality.	Less than Significant Impact
<b>Trail Construction</b> 1.03 Main Park Entrance 2.05 Scout/Youth Group Camp 7.01 Stonebraker Camp 12.04 Hazel Creek Camp 16.01 Primitive Camp Area 18.01 Dog Park 22.01 Mountain Bike Trail 23.05 Black Oak Equestrian Camp	This project includes trail improvements, including realignments and new trails, in multiple areas throughout SPRA. In some cases, trail improvements may improve visual quality by reducing erosion. It is not anticipated that trail construction would affect existing trees.	None

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Bridges at Trail Crossings</b>  2.20 Scout/Youth Group Camp  12.07 Hazel Creek Camp</p>	<p>This bridge would be visible to visitors traveling on the trails and on Lake Drive. The Master Plan does not provide specific design guidelines for these bridges. While the bridges themselves would not have a significant impact on visual quality, they would be designed to be consistent with other park amenities.</p>	<p>Less than Significant Impact</p>
<p><b>Infrastructure</b>  2.18 Scout/Youth Group Camp (North)  2.19 Scout/Youth Group Camp (South)  5.04 Jenkinson Camp  SPRA13 Increased Phone Service</p>	<p>Since the proposed waterlines are underground, they would not affect site aesthetics once installed. Construction has the potential to affect site aesthetics, though if conducted during off-peak days, should result in less than significant impacts.</p>	<p>Less than Significant Impact</p>
<p><b>Waterless Toilets/Restrooms</b>  2.08 Scout/Youth Group (North)  2.14 Scout/Youth Group (South)  5.03 Jenkinson Camp  16.03 Primitive Camp Area  19.02 Bumpy Meadow Trailhead  20.04 Retreat and Event Center (1)  20.07 Retreat and Event Center (2)  24.02 Marina Parking Expansion</p>	<p>The Master Plan design criteria specify that the “design and placement of facilities ...be subordinate to the natural landscape setting and consistent with the existing character of the park” and that colors and finishes should “complement the shades and tones of the environment” and “appear natural and consistent with the environment.” If these criteria are applied to construction of restrooms, permanent site aesthetics impacts would be less than significant.</p> <p>Impacts to site aesthetics would be significant if trees are removed or large areas of soil are disturbed. Avoiding large trees and locating facilities where grading is minimized would reduce these impacts below a level of significance.</p> <p>Visual impacts because construction could be significant if conducted during peak SPRA usage times. For construction of facilities in general, off-season times should be preferred over peak-season times, and weekdays over weekends.</p>	<p>Potentially Significant Impact</p>
<p><b>Showers/Laundry Facilities</b>  2.10 Scout/Youth Group (North)- Showers Only  2.15 Scout/Youth Group (South)- Showers Only  6.06 Sierra Camp  21.02 Main Group Campground</p>	<p>Shower/laundry facilities only have the ability to potentially affect views internal to a campground. Because their limited size, they would not influence vista views. As with restrooms, if the design guidelines are followed, shower/laundry facilities should not affect the aesthetics of SPRA to a greater extent than the existing restroom facilities. These types of facilities fit with a visitor’s expectations of a campground, and provided that they are “consistent with the existing character of the Park,” would not result in a significant visual impact.</p> <p>Impacts to site aesthetics could be significant if trees are removed or large areas of soil are disturbed. Avoiding large trees and locating facilities where grading is minimized would reduce these impacts below a level of significance.</p> <p>Visual impacts because construction could be significant if conducted during peak SPRA usage times. For construction of facilities in general, off-season times should be preferred over peak-season times, and weekdays over weekends.</p>	<p>Potentially Significant Impact</p>
<p><b>Reconfigure Existing Parking</b>  1.05 Main Park Entrance  4.01 Pine Cone Camp</p>	<p>Parking reconfiguration includes redefining of parking at existing sites. Master Plan guidelines state “Parking space(s) should be easily discernable, hardened, and intrude into the site as little as possible.” In almost all cases, parking would be improved through</p>	<p>No Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
6.01 Sierra Camp 10.01 Chimney Camp (Day Use) 21.04 Main Group Campground (Group Site #1) 21.05 Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group Sites #3 and #4)	hardening the parking area and clearly defining the designated parking space. This would result in an improvement to the visual character of the individual campgrounds by reducing erosion and allowing rehabilitation of vegetation in non-parking areas.	
<b>Construct New Parking Areas</b> 2.02 Scout/Youth Group Camp (North) 3.01 Miwok Trailhead 4.02 Pine Cone Camp 6.08 Sierra Camp/Shower Parking 11.02 Lake Drive Stabilization (Day Use) 12.03 Hazel Creek Camp (Day Use and Trailhead) 18.01 Dog Park 19.01 Bumpy Meadow Trailhead 20.01 Retreat and Event Center (East) 20.02 Retreat and Event Center (West) 21.03 Main Group Campground/Shower Parking	New parking areas would have the potential for impacting aesthetics of SPRA in several ways: Creating large expanses of paved, graveled or packed-dirt surfaces; Centralizing cars which may result in increased glare during the day and increased light pollution at night; Removing trees; Creating unsightly cut/fill banks; Disturbing soil and vegetation during construction; and Storing and operating heavy equipment in a natural area. These impacts would generally be considered localized to the area immediately adjacent to the construction site. It is unlikely that the development of new parking areas would affect vista-views, but impacts would none-the-less be considered potentially significant if mitigation is not incorporated. Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.	Potentially Significant Impact
<b>Marina Parking Expansion</b> 24.01 Marina Parking Expansion	Development of the Marina Parking lot would have the potential to significantly affect the aesthetics of SPRA. Primary components of this project would include removal of numerous mature coniferous trees, creating a significant opening in the tree canopy, which will be visible from Sierra campground, the group campgrounds on the peninsula, the first dam site, the lake, and sections of the south shore trail. The parking lot would also involve cut and fill walls up to 12 feet tall. Additionally, cars parked in the lot will be highly visible because bright colors and glare. The proposed parking lot is in a Class II objective area according to the visual assessment protocol applied. Changes should not attract the attention of the casual observer and should be low-level. The proposed changes are of such a magnitude, given the number of trees removed, the height of the retaining walls and the proximity to the lake that this project would result in	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
	potentially significant impacts on site aesthetics for ten years or more, even if all mitigation measures are implemented. While the simulations showed that aesthetic impacts for vista views would be reduced within ten years by vegetative growth, this would not be true for areas immediately adjacent to the proposed parking lot, such as the road north of the lot and the trail between the lot and the lake.	
<b><i>Realign/Improve Campground Access Roads</i></b> 2.01 Scout/Youth Group Camp 2.03 Scout/Youth Group Camp (North) 2.04 Scout/Youth Group Camp (South) 2.06 Scout/Youth Group Camp (South) 4.03 Pine Cone Camp 5.01 Jenkinson Camp 6.02 Sierra Camp (West) 6.03 Sierra Camp (East) 7.02 Stonebraker Camp 8.01 Hilltop Camp 9.01 Chimney/Hilltop Host Site 12.02 Hazel Creek Camp 13.03 Dogwood Camp 19.01 Bumpy Meadow Trailhead 21.04 Main Group Campground (Group Site #1) 21.05 Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group Sites #3 and #4) 23.02 Black Oak Equestrian Center 25.01 Lake Drive Access Improvements	Campground road alignments would generally result in improved site aesthetics because the purpose of these alignments is to reduce erosion and vegetation disturbance, improve grades, and better accommodate two-way traffic. In some areas, retaining walls may be required to accommodate cut/fill slopes. In those cases, some level of mitigation would be required to reduce the visual impact of the retaining walls.  Additionally, realigning the roads would require heavy equipment for construction and paving. This construction would be planned to minimize impacts.	Potentially Significant Impact
<b><i>Reconfigure Main Entrance</i></b> 1.01 Main Park Entrance 1.02 Main Park Entrance	Reconfiguration of the Main Park entrance is likely to result in improvements to the visual quality of the entrance area because relocation of the dump station, improved traffic flow, signage and vegetation management. Visual impacts because construction should be minimal since construction activities would need to be performed during times of low visitation, and this area is not in proximity to camping sites or visible from the lake.	No Impact
<b><i>Install Interpretive/Trail Signage/Kiosks</i></b> 1.06 Main Park Entrance	These elements, if designed according to Master Plan guidelines, would enhance the visual quality of SPRA and would not result in an impact. While construction of kiosks or	Less than Significant

Component ID/Project Name	Impact Analysis	Level of Significance
3.04 Miwok Trailhead 7.05 Stonebraker Camp 12.10 Hazel Creek Camp 19.05 Bumpy Meadow Trailhead	interpretive trails could result in some visual impact, construction activities would require minimal site disturbance and a very low level of impact to aesthetics.	Impact
<b>Construct Visitor Center/New Maintenance Shop</b> 1.04 Main Park Entrance 1.07 Main Park Entrance	These facilities are located at the entrance, away from the lake and screened by trees from any sensitive viewsheds. Visibility by potentially sensitive receptors would be negligible; however, the Visitor Center would potentially be seen by all visitors who enter the park. If the design guidelines in the Master Plan are implemented, it would result in a visual improvement, rather than an impact.  Temporary impacts because construction could be significant, and construction would be done off-season or away from peak visitation times.	Potentially Significant Impact
<b>Construct New Facilities</b> 18.02 Dog Park	The Dog Park would likely only be visible to users of the facility and from the proposed Sugarloaf Fine Arts Camp. Visibility from the remainder of SPRA would likely be limited to a hole in the tree canopy; however, the Master Plan contains provisions to "avoid removing native trees greater than six inches DBH. This would limit any visible tree canopy impacts to a less than significant level.	Less than Significant Impact
<b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Center	The Sugarloaf Fine Arts Camp is within several of the viewsheds identified as potentially sensitive in this study; however, because intervening trees, parking structures or facilities are unlikely to be seen from sensitive viewpoints. Tree canopy modifications are likely to be noticed as holes in the canopy, so removal of existing trees should be avoided wherever possible. Where removal of trees over six inches DBH is necessary, additional trees should be planted to replace those removed. The facility parking lot, sports courts, and amphitheater are likely to have the largest impact on the canopy. The parking lot is on the opposite side of the ridge from potentially sensitive viewers, so it is less likely to create a noticeable hole than the other elements.	Potentially Significant Impact
<b>Rehabilitate Vegetation</b> 1.08 Main Park Entrance 4.07 Pine Cone Camp 6.08 Sierra Camp 7.06 Stonebraker Camp 8.04 Hilltop Camp 10.03 Chimney Camp 12.05 Hazel Creek Camp 12.06 Hazel Creek Camp 12.08 Hazel Creek Camp 12.09 Hazel Creek Camp 13.01 Dogwood Camp	No impact. Rehabilitating vegetation would improve SPRA aesthetics.	No Impact

Component ID/Project Name	Impact Analysis	Level of Significance
14.02 Rainbow Camp 15.02 Kamloop Camp 21.07 Main Group Campground (Group Sites #1 and #5) 21.10 Main Group Campground (Group Site #2) 21.13 Main Group Campground (Group Sites #3 and #4) 23.03 Black Oak Equestrian Camp FMP Plant/maintain Seedlings for Forest Health		
<b>Restrict Access</b> 3.02 Miwok Trailhead 3.03 Miwok Trailhead 4.06 Pine Cone Camp (Shore Access) 8.02 Hilltop Camp 14.01 Rainbow Camp (Creek Access Control) 15.01 Kamloop Camp (Creek Access Control) 19.04 Bumpy Meadow Trailhead 23.04 Black Oak Equestrian Center 23.06 Black Oak Equestrian Center	No impact. Access restrictions that follow the design guidelines would help to improve aesthetics through reduction in erosion and facilitation of revegetation.	No Impact
<b>Dock Expansion</b> 7.07 Stonebraker Camp	Expansion of the Stonebraker rental facility would be visible primarily to other boaters and users of the rental facility. It is unlikely that the addition of two 8' x 40' sections to the existing floating dock would have an impact on these types of SPRA users, many of whom appreciate looking at other boats.	Less than Significant Impact
<b>Lake Drive Stabilization</b> 11.01 Lake Drive Stabilization	Stabilization of Lake Drive between Chimney and Hazel Creek camps would require relocation of the road and construction of a retaining wall upslope of the road. At this time, it is not known how large the retaining wall would be; however, it would be visible from the Lake and South Shore trail, as well as to travelers on Lake Drive, and would require mitigation to reduce visual impacts to a less than significant level.  Additionally, construction would be coordinated to reduce the visual impact of heavy equipment and disturbed areas on visitors.  Note: This project was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
<b>SPRA Administration</b> SPRA01 Increased Staffing SPRA02 Staff Training SPRA03 Reservation Systems Software SPRA05 Website Development SPRA06 Proactive Maintenance SPRA07 Annual Maintenance Work Plan SPRA08 Volunteer Maintenance Events	SPRA administration would improve aesthetics through proactive and planned maintenance.	No Impact
<b>Planning</b> SPRA04 Day-Use Carrying Capacity SPRA09 Trail Maintenance Plan SPRA11 Emergency Preparedness Plan	SPRA planning would improve aesthetics through limiting day use and trail maintenance.	No Impact
<b>Fire Prevention</b> SPRA10 Fire Prevention	Fire prevention would improve aesthetics through reduced chances of wildfire damage to existing trees such as occurred at the Scout/Youth camp.	No Impact
<b>Law Enforcement</b> SPRA12 Law Enforcement	Law enforcement would have no impact on SPRA aesthetics	No Impact

#### 4.3.4.1 Construction Impacts

Construction impacts have been discussed in Table 4.3-4.

#### 4.3.4.2 Operational Impacts

Operational impacts have been discussed in Table 4.3-4.

#### 4.3.5 Mitigation Measures

**Mitigation Measure AES-1:** Use colors for structures that are compatible with the natural landscape.

This mitigation measure would reduce the visibility of structures in vista views and reduce their impacts to local views, as well as help them to blend into the native landscape.

**Mitigation Measure AES-2:** Avoid removal of existing trees. Adjust locations of facilities as practicable to minimize impacts to existing vegetation. Use retaining walls where feasible to protect existing trees from cut/fill within the drip-line. Where removal of trees is necessary, replant with fast growing, native species suitable to site conditions. Develop a Mitigation Monitoring Plan to ensure survival of plantings.

**Mitigation Measure AES-3:** If existing vegetation is insufficient to screen improvements from potentially sensitive receptors, plant additional vegetation sufficient to provide a visual screen. Use both trees and shrubs to create a layered visual barrier.

Screening would reduce the visual impact of facilities.

**Mitigation Measure AES-4:** Site facilities to minimize the need for extensive site grading. Avoid steep cut and fill banks that will have difficulty revegetating. Plant cut and fill banks to aid in revegetation. Use retaining walls where necessary to retain soil and minimize cut/fill banks. Consider the use of planting pockets or stepped walls with vegetation planted between tiers for retaining walls that cannot easily be screened by planting at the base of the wall.

**Mitigation Measure AES-5:** Where feasible, conduct construction at times when it will not have significant impacts on SPRA visitors: off-season is preferable to peak-season, and weekdays are preferable to weekends.

**Mitigation Measure AES-6:** Where feasible, use naturally colored pavements or additives. Incorporate planting islands into parking

lots help preserve existing trees, plant new trees, and break up large expanses of pavement.

**Mitigation Measure AES-7:**

Maintain plantings around parking areas to reduce glare and light impacts.

**Mitigation Measure AES-8:**

Minimize soil and vegetation disturbance during construction. Replant disturbed areas as soon after construction is completed as is feasible.

**Table 4.3-5 — Proposed Mitigation Measures to Reduce or Eliminate Potential Impacts Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Construct Post/Pier Structures</b></p> <p>2.09 Scout/Youth Group Camp Mess Hall</p> <p>2.12 Scout/Youth Group Camp (North)</p> <p>2.13 Scout/Youth Group Camp (South)</p> <p>2.17 Scout/Youth Group Camp Mess Hall</p> <p>5.02 Jenkinson Camp</p> <p>10.04 Chimney Camp</p> <p>20.03 Retreat and Event Center</p> <p>20.05 Retreat and Event Center (Phase I)</p> <p>20.06 Retreat and Event Center (Phase II)</p>	AES-1, AES-2, AES-3	Less than Significant with Mitigation Incorporation
<p><b>Waterless Toilets/Restrooms</b></p> <p>2.08 Scout/Youth Group (North)</p> <p>2.14 Scout/Youth Group (South)</p> <p>5.03 Jenkinson Camp</p> <p>16.03 Primitive Camp Area</p> <p>19.02 Bumpy Meadow Trailhead</p> <p>20.04 Retreat and Event Center (1)</p> <p>20.07 Retreat and Event Center (2)</p> <p>24.02 Marina Parking Expansion</p>	AES-2, AES-4, AES-5	Less than Significant with Mitigation Incorporation
<p><b>Showers/Laundry Facilities</b></p> <p>2.10 Scout/Youth Group (North)- Showers Only</p> <p>2.15 Scout/Youth Group (South)- Showers Only</p> <p>6.06 Sierra Camp</p> <p>21.02 Main Group Campground</p>	AES-2, AES-4, AES-5	Less than Significant with Mitigation Incorporation

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Construct New Parking Areas</b></p> <p>2.02 Scout/Youth Group Camp (North)</p> <p>3.01 Miwok Trailhead</p> <p>4.02 Pine Cone Camp</p> <p>6.08 Sierra Camp/Shower Parking</p> <p>11.02 Lake Drive Stabilization (Day Use)</p> <p>12.03 Hazel Creek Camp (Day Use and Trailhead)</p> <p>18.01 Dog Park</p> <p>19.01 Bumpy Meadow Trailhead</p> <p>20.01 Retreat and Event Center (East)</p> <p>20.02 Retreat and Event Center (West)</p> <p>21.03 Main Group Campground/Shower Parking</p>	<p>AES-2, AES-4, AES-5, AES-6, AES-7, AES-8</p> <p>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Marina Parking Expansion</b></p> <p>24.01 Marina Parking Expansion</p> <p>24.03 Marina Parking Expansion (Fish Cleaning Station)</p>	<p>AES-1, AES-2, AES-3, AES-4, AES-5, AES-6, AES-7, AES-8</p>	<p>Significant and Unavoidable</p>
<p><b>Realign/Improve Campground Access Roads</b></p> <p>2.01 Scout/Youth Group Camp</p> <p>2.03 Scout/Youth Group Camp (North)</p> <p>2.04 Scout/Youth Group Camp (South)</p> <p>2.06 Scout/Youth Group Camp (South)</p> <p>4.03 Pine Cone Camp</p> <p>5.01 Jenkinson Camp</p> <p>6.02 Sierra Camp (West)</p> <p>6.03 Sierra Camp (East)</p> <p>7.02 Stonebraker Camp</p>	<p>AES-2, AES-4, AES-5, AES-8</p>	<p>Less than Significant with Mitigation Incorporation</p>

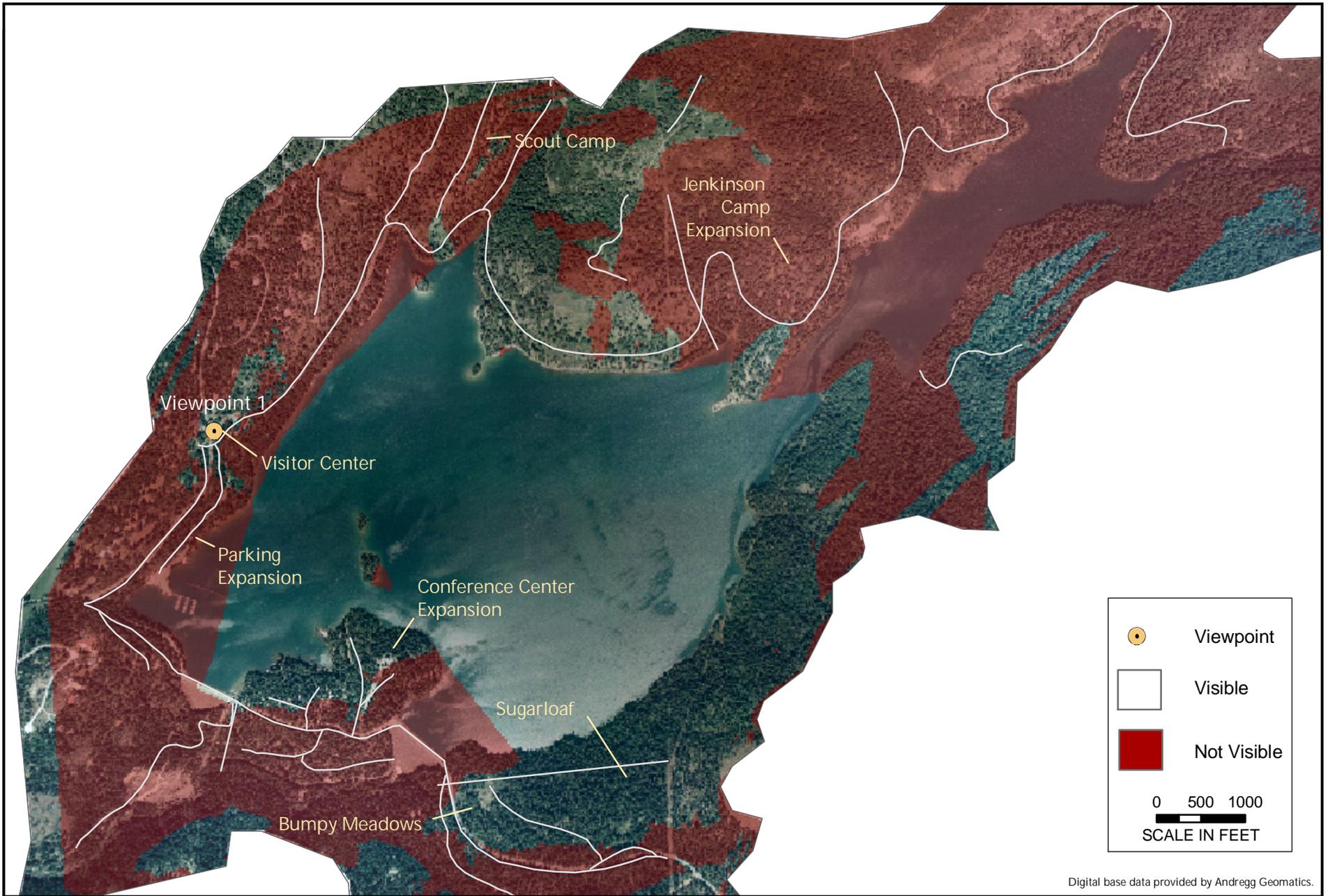
Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
8.01 Hilltop Camp 9.01 Chimney/Hilltop Host Site 12.02 Hazel Creek Camp 13.03 Dogwood Camp 19.01 Bumpy Meadow Trailhead 21.04 Main Group Campground (Group Site #1) 21.05 Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group Sites #3 and #4) 23.02 Black Oak Equestrian Center 25.01 Lake Drive Access Improvements		
<b>Construct Visitor Center/New Maintenance Shop</b> 1.04 Main Park Entrance 1.07 Main Park Entrance	AES-5	Less than Significant with Mitigation Incorporation
<b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Center	AES-2, AES-3, AES-6, AES-8	Less than Significant with Mitigation Incorporation
<b>Lake Drive Stabilization</b> 11.01 Lake Drive Stabilization	AES-4, AES-5, AES-8 Note: Component 11.01 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.	Less than significant with Mitigation Incorporation

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POTENTIALLY SENSITIVE VIEWPOINTS

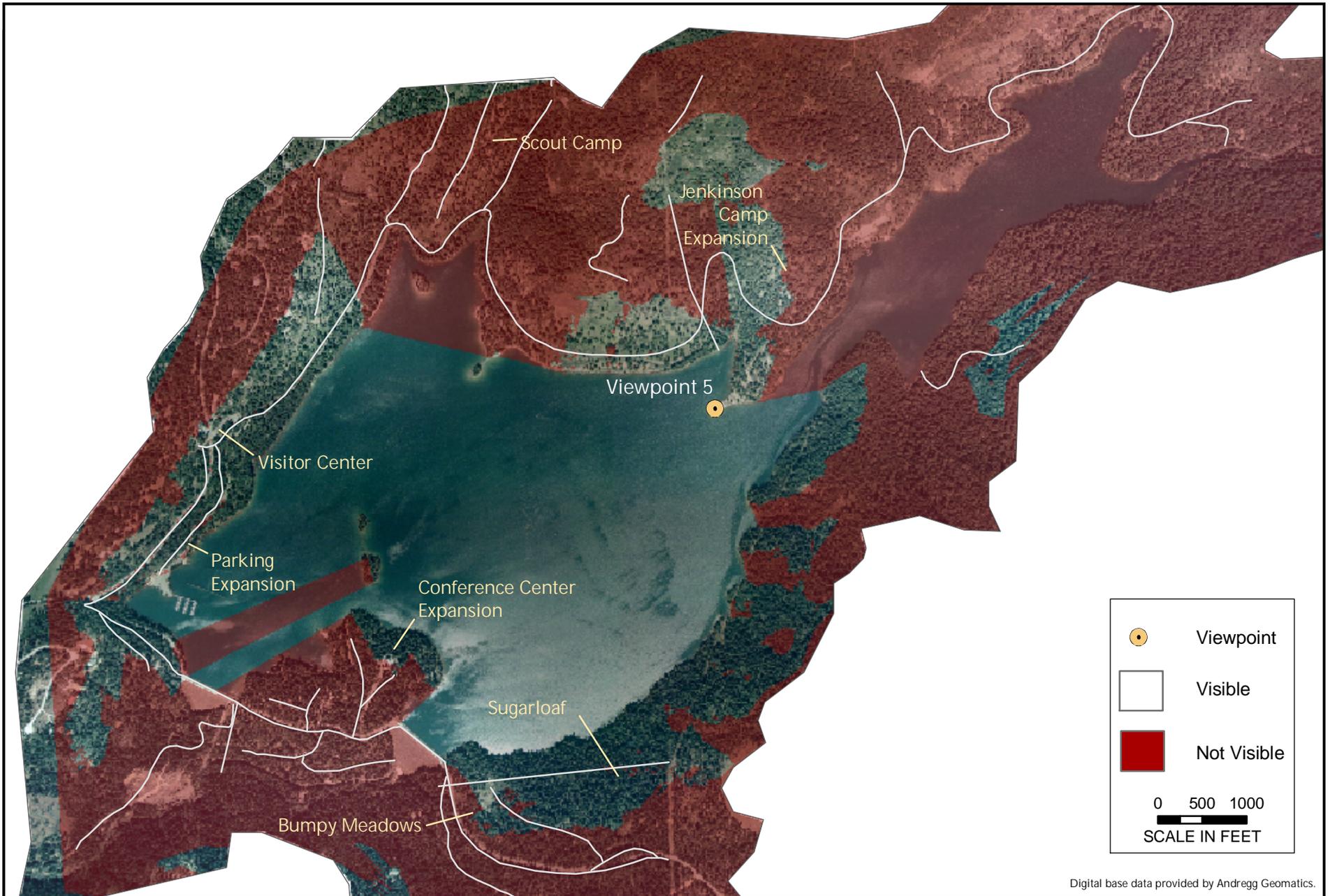




Digital base data provided by Andregg Geomatics.

### VIEWSHED FOR VIEWPOINT 1

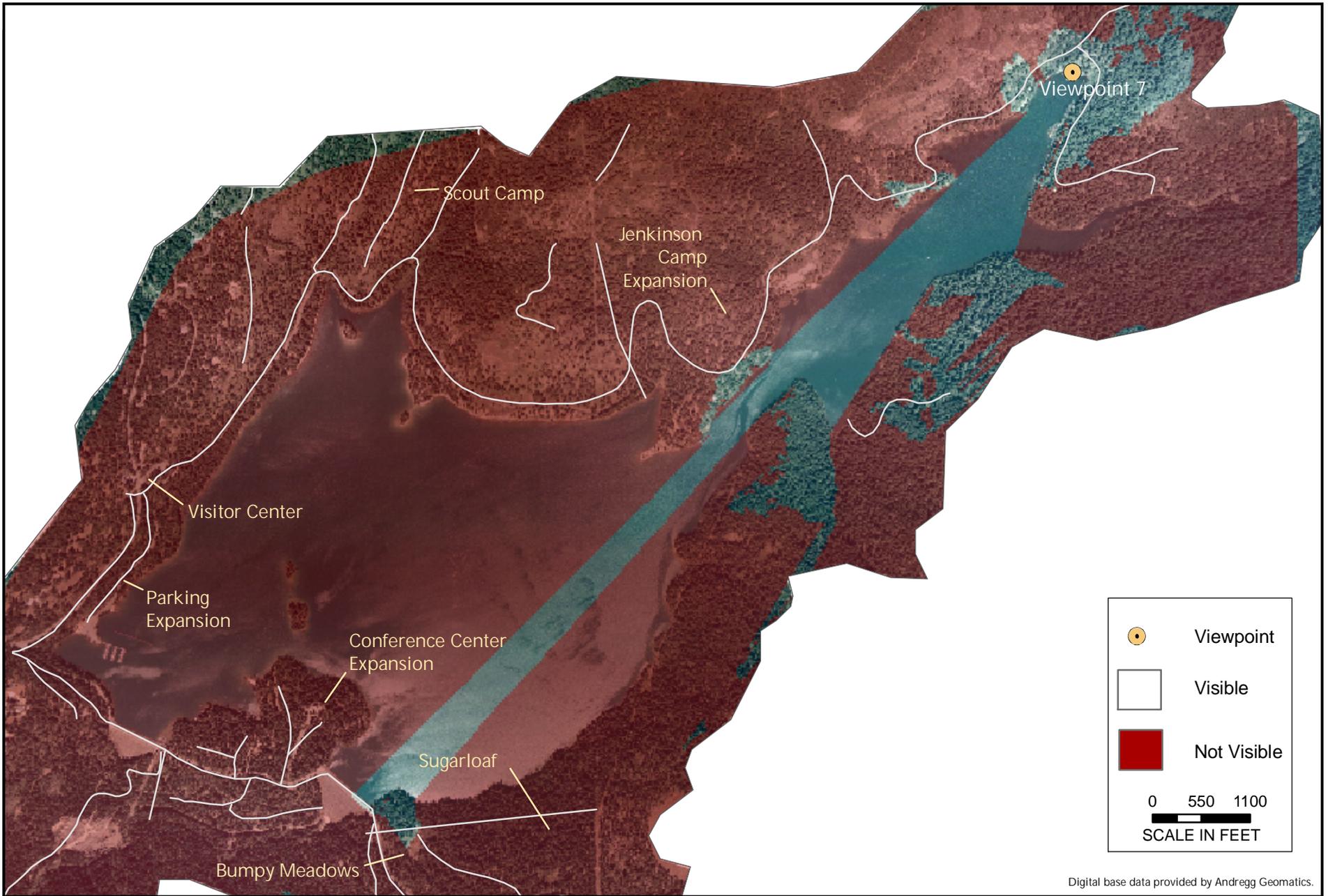




Digital base data provided by Andregg Geomatics.

### VIEWSHED FOR VIEWPOINT 5





Digital base data provided by Andregg Geomatics.

VIEWSHED FOR VIEWPOINT 7





VIEWSHED FOR VIEWPOINT 10

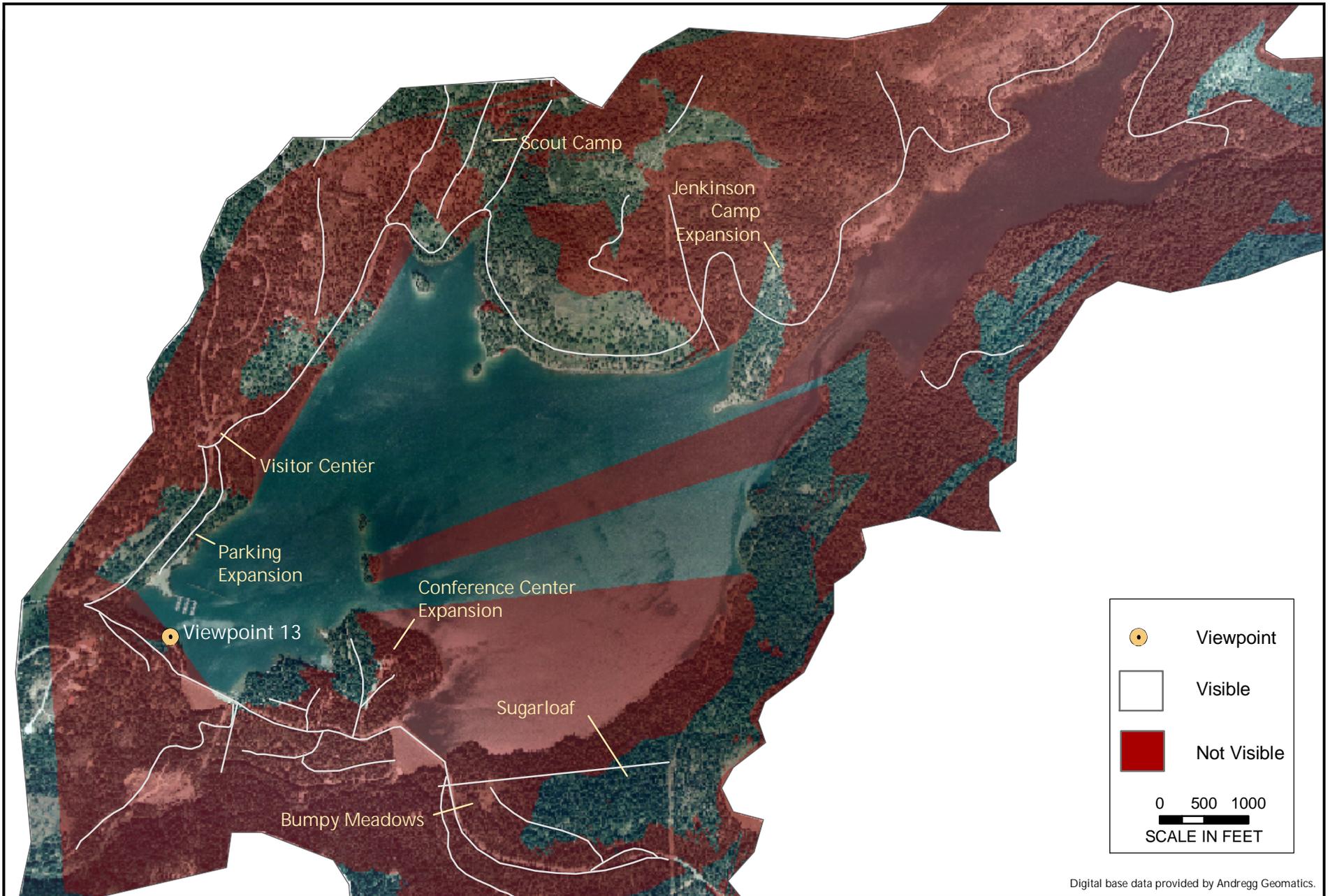




Digital base data provided by Andregg Geomatics.

### VIEWSHED FOR VIEWPOINT 11

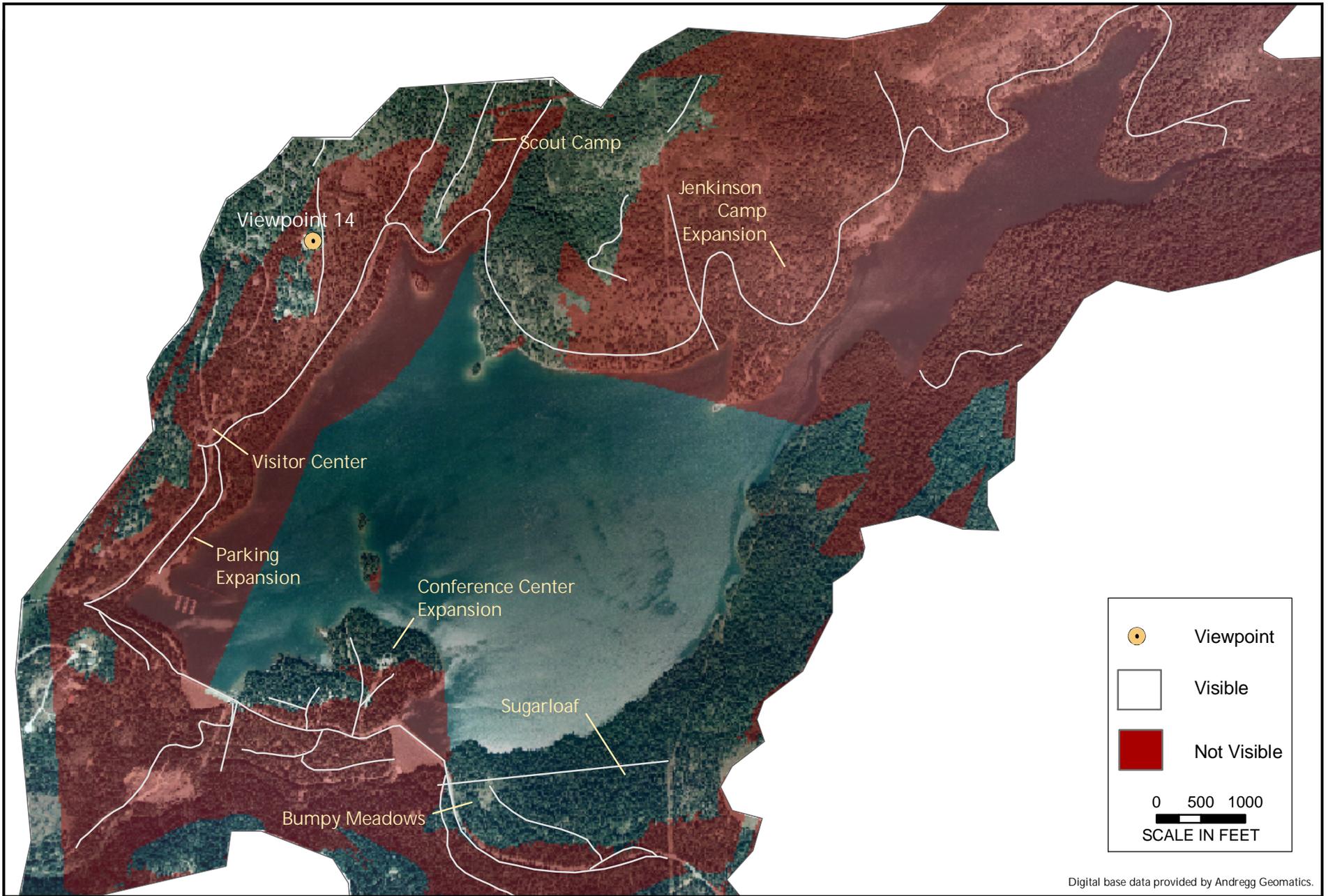




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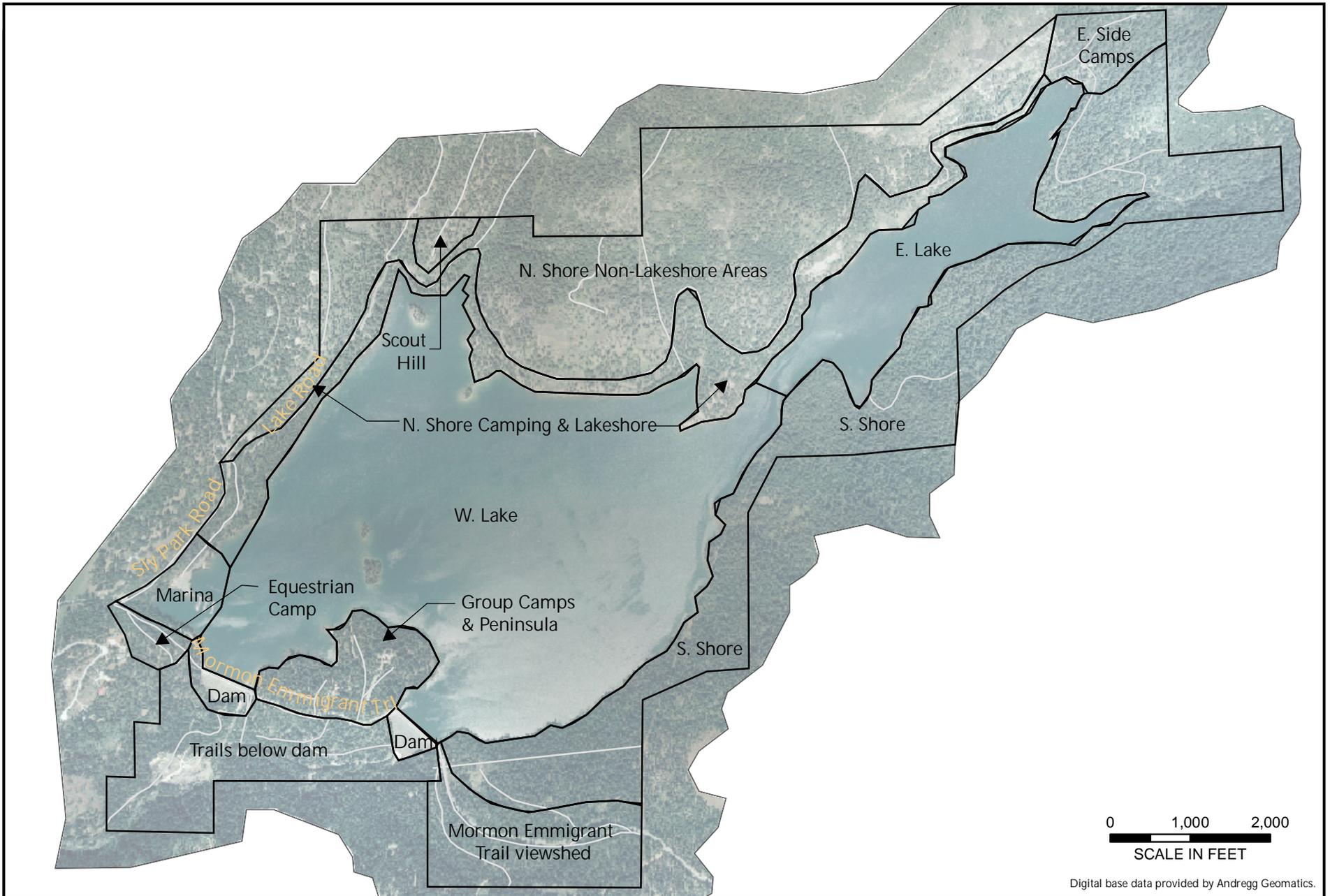
### VIEWSHED FOR VIEWPOINT 13





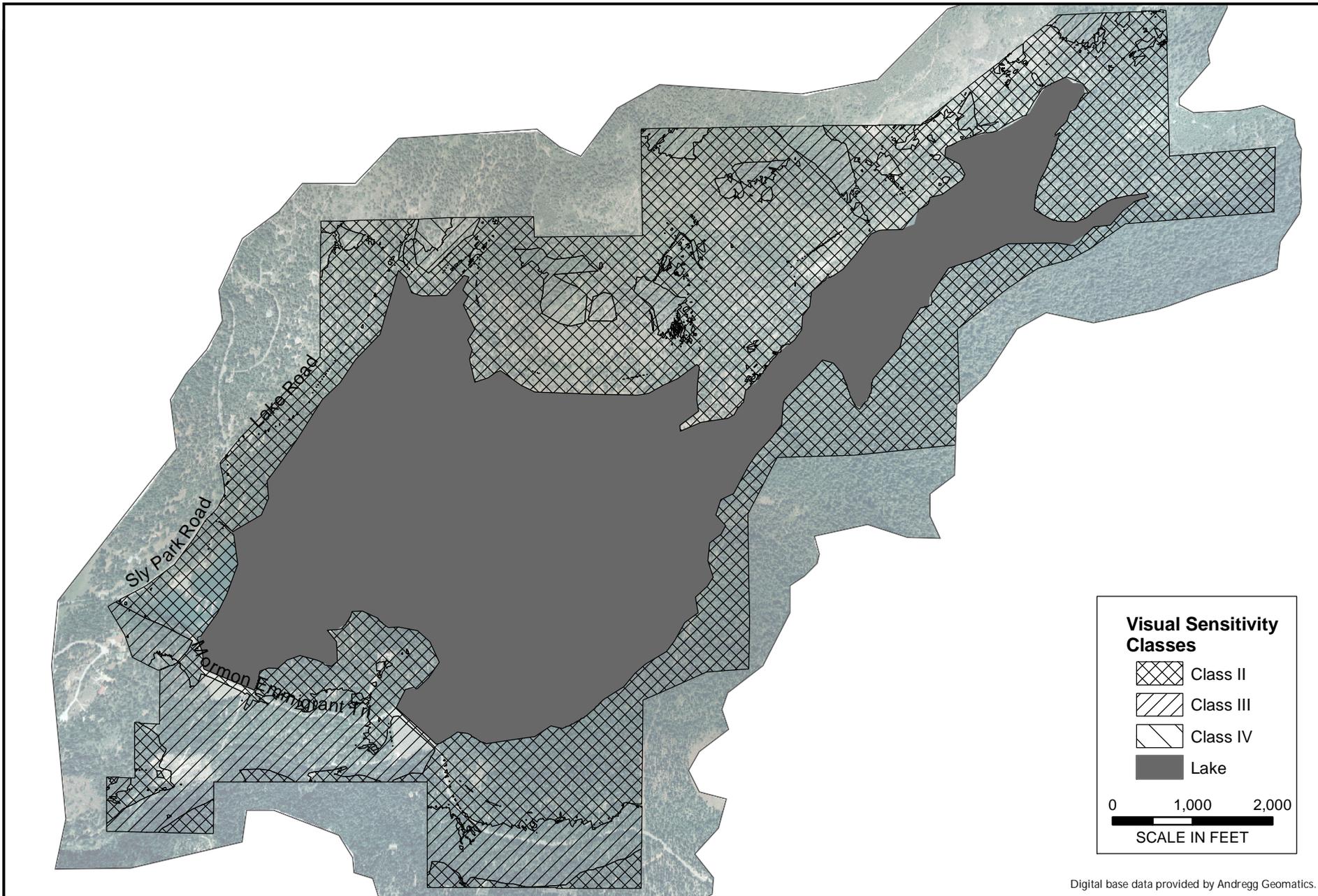
VIEWSHED FOR VIEWPOINT 14





SCENIC QUALITY RATING UNITS





Digital base data provided by Andregg Geomatics.

### VISUAL RESOURCE CLASSES





**MARINA PARKING LOT  
EXPANSION  
VISUAL SIMULATION**

**SLY PARK  
RECREATION AREA  
MASTER PLAN  
MASTER EIR**

**FIGURE 4.3-11  
LAKE VIEW**



**MARINA PARKING LOT  
EXPANSION  
VISUAL SIMULATION**

**SLY PARK  
RECREATION AREA  
MASTER PLAN  
MASTER EIR**

**FIGURE 4.3-12  
PINE CONE  
CAMPGROUND**

EXISTING CONDITIONS



10 YEARS



AFTER CONSTRUCTION



RETAINING WALL

30 YEARS



**MARINA PARKING LOT  
EXPANSION  
VISUAL SIMULATION**

**SLY PARK  
RECREATION AREA  
MASTER PLAN  
MASTER EIR**

**FIGURE 4.3-13  
RETREAT CENTER**

EXISTING CONDITIONS



10 YEARS



AFTER CONSTRUCTION



RETAINING WALL

30 YEARS



**MARINA PARKING LOT  
EXPANSION  
VISUAL SIMULATION**

**SLY PARK  
RECREATION AREA  
MASTER PLAN  
MASTER EIR**

**FIGURE 4.3-14  
GROUP  
CAMPGROUND**

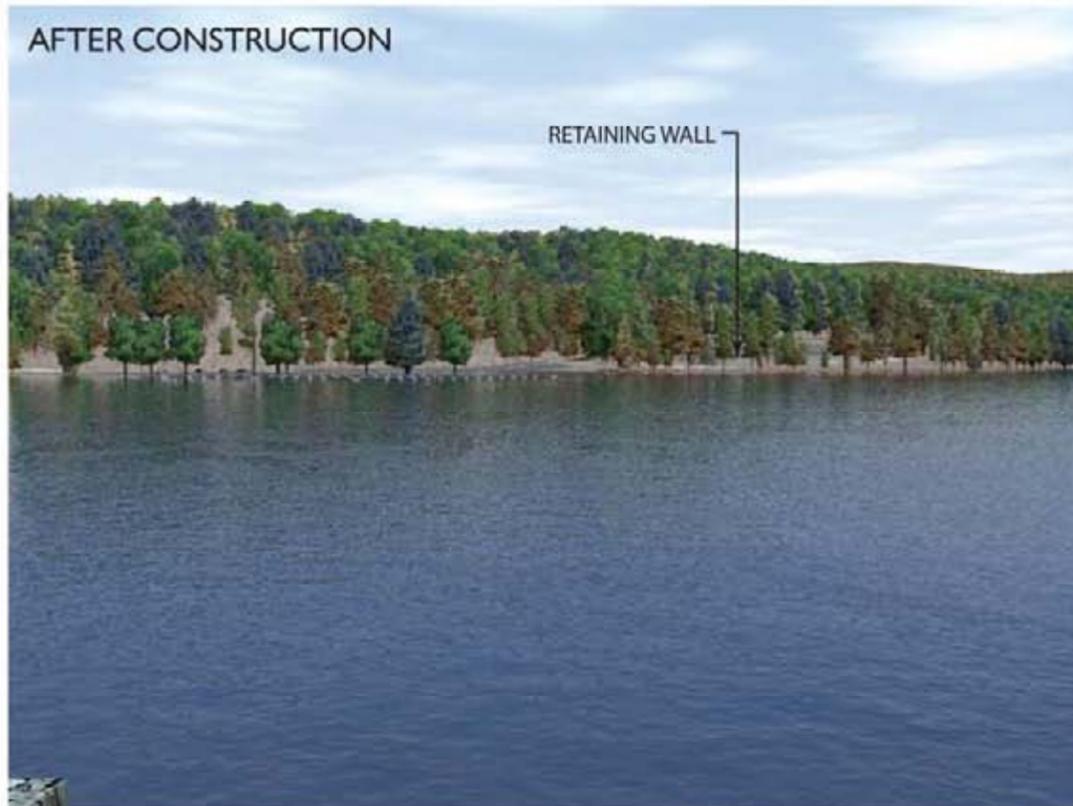
EXISTING CONDITIONS



10 YEARS



AFTER CONSTRUCTION



30 YEARS



**MARINA PARKING LOT  
EXPANSION  
VISUAL SIMULATION**

**SLY PARK  
RECREATION AREA  
MASTER PLAN  
MASTER EIR**

**FIGURE 4.3-15  
MORMON  
EMIGRANT TRAIL**

## 4.4 Transportation/Traffic

On public roads, the quality of traffic flow is described in terms of operating Levels of Service (LOS). LOS is a qualitative measure of traffic operating conditions whereby a letter grade "A" through "F", corresponding to progressively worsening operating conditions, is assigned to an intersection or roadway segment. Table 4.4-1 presents the characteristics associated with each LOS grade.

LOS can be determined for individual intersections and for segments of roadways, although the basis for this determination varies by facility type. The LOS standard presented in the County of El Dorado LOS standard is LOS E in Community regions and LOS D in rural centers and rural regions.

**Table 4.4-1 — Level of Service Definitions**

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay $\leq$ 10.0 sec	Little or no delay. Delay $\leq$ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay $>$ 10.0 sec and $\leq$ 20.0 sec	Short traffic delays. Delay $>$ 10 sec/veh and $\leq$ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay $>$ 20.0 sec and $\leq$ 35.0 sec	Average traffic delays. Delay $>$ 15 sec/veh and $\leq$ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestions of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay $>$ 35.0 sec and $\leq$ 55.0 sec	Long traffic delays. Delay $>$ 25 sec/veh and $\leq$ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay $>$ 55.0 sec and $\leq$ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay $>$ 35 sec/veh and $\leq$ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay $>$ 80.0 sec	Intersection blocked by external causes. Delay $>$ 50 sec/veh	Forced flow, breakdown.

Source: Transportation Research Board, 2000

A traffic impact is considered significant if it renders an acceptable LOS on a street segment or at a signalized intersection, or if it worsens already unacceptable conditions on a street segment or at a signalized intersection.

Where no effect on LOS is identified, a project may still “worsen” existing traffic conditions. In the El Dorado County General Plan Transportation and Circulation Element, “worsen” is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

- A. 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or
- B. The addition of 100 or more daily trips , or
- C. The addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

#### **4.4.1 Existing Conditions**

A technical traffic analysis of the proposed SPRA Master Plan was prepared by kdAnderson Transportation Engineers on July 18, 2006. This section of the Draft Master EIR summarizes information and data contained in that technical study, which is attached in its entirety as Appendix B of this Draft Master EIR.

##### **4.4.1.1 Project Setting**

#### **Regional Circulation System**

##### ***Road Segments***

SPRA is served by U.S. Highway 50 (U.S. 50), the primary regional arterial linking El Dorado County with the Sacramento Metropolitan area to the west and with the Lake Tahoe resort area to the east. Locally, SPRA is connected to U.S. 50 via the grade separated Sly Park Road interchange. Local access to SPRA occurs via a primary intersection on Sly Park Road that serves the northern portions of SPRA and via Emigrant Trail, an El Dorado County road that provides access to the south shore portions of SPRA. The following discussion describes these facilities.

##### **U.S. Highway 50**

U.S. 50 is the primary regional east-west arterial across El Dorado County. In the area of SPRA, U.S. 50 is a four-lane expressway. Access to this segment of U.S. 50 occurs via both grade-separated interchanges and at-grade intersections. The most recent traffic volume counts published by the California Department of Transportation (Caltrans) indicated that U.S. 50 carries an Annual Average Daily Traffic (AADT) volume of 14,900 vehicles per day west of Sly Park Road and an AADT volume of 10,900 vehicles per day east of the interchange. Trucks and recreational vehicles comprise about 7 percent of the total traffic on U.S. 50 in this area. The daily traffic volumes vary throughout the year. The daily volumes rise to 19,100 vehicles per day and 15,100 vehicles per day west and east of the Sly Park Road interchange during peak summer months, respectively.

##### **Sly Park Road**

Sly Park Road is classified as a Regional two-lane road in the 2004 El Dorado County General Plan. Sly Park Road links the Pollock Pines area around U.S. 50 with Jenkinson Reservoir and with the community of Pleasant Valley to the south. In the area of SPRA, Sly Park Road is a rural two lane road that follows the general terrain of the foothills along an alignment that would

be classified as “mountainous.” The road typically provides two 12-foot travel lanes and shoulders that range from 1 to 4 feet in width. Access is allowed at both private driveways and public street intersections. Daily traffic volume counts conducted for this study revealed that the volume of traffic on Sly Park Road near Mormon Emigrant Trail ranged from 4,500 to nearly 6,000 vehicles per day over the five days surrounding the July 4<sup>th</sup> weekend of 2004 (see Appendix B).

### Mormon Emigrant Trail

Mormon Emigrant Trail is designated as a Regional 2-lane road in the 2004 El Dorado County General Plan. Mormon Emigrant Trail begins at its intersection with Sly Park Road and continues easterly along the south shore of Jenkinson reservoir to the Amador County line and State Route 88 (SR 88). Along the south shore, Mormon Emigrant Trail features two 12-foot wide travel lanes with 2- to 4-foot wide shoulders. Traffic counts conducted over the July 4<sup>th</sup> weekend indicated that Mormon Emigrant Trail carries approximately 1,200 to 2,400 vehicles per day just east of Sly Park Road and 900 to 2,000 vehicles per day east of the SPRA group camp area.

### ***Intersections/Interchanges***

#### U.S. Highway 50/Sly Park Road Interchange

The U.S. 50/Sly Park Road Interchange is a grade separated interchange in a tight diamond configuration. Two Sly Park Road travel lanes pass underneath U.S. 50. The eastbound and westbound U.S. 50 ramp intersections on Sly Park Road are controlled by stop signs on the ramp approaches. Traffic counts conducted by Caltrans reveal that the eastbound (EB) off- and westbound (WB) on-ramps each carry about 3,500 vehicles per day, while the EB on- and WB off-ramps carry fewer than 900 vehicles per day.

#### Sly Park Road/Mormon Emigrant Trail Intersection

The Sly Park Road/Mormon Emigrant Trail intersection is a “T” intersection controlled by a stop sign on the westbound Mormon Emigrant Trail approach. The intersection has single-lane approaches and has not been widened to include auxiliary turn lanes.

#### Sly Park Road/Lake Drive Intersection

Lake Drive links SPRA’s north shore area with Sly Park Road. The Sly Park Road/Lake Drive intersection is a four legged intersection controlled by stop signs on the east and west legs. The east leg of the intersection includes two inbound and two outbound lanes. The west leg of the intersection is a single-lane approach to a convenience market/ gasoline sales. No auxiliary turn lanes exist on Sly Park Road at the intersection.

### **Sly Park Recreation Area – Internal Roads**

The circulation system serving Sly Park Recreation Area comprises roads that fall into one of the following four general classifications.

#### ***Major Access Roads***

Major Access Roads link SPRA with Sly Park Road and are intended to provide the capacity to accommodate peak traffic flows near the main gate. The portion of Lake Drive from Sly Park Road through the main gate to the Mooring Area Road intersection is the only Major Access

Road. This road is about 48 feet wide, with two travel lanes in each direction and paved shoulders that are about 4 to 8 feet wide.

### ***Collector Roads***

Collector Roads link the regional circulation system with the primary recreation area attractions, such as boat ramps, campgrounds, day use areas, and trailheads. Lake Drive and the Mooring Area Road are Collector Roads. Collector Roads range in width from 22 feet down to 12 feet with the narrowest sections existing near the far eastern end of Lake Drive. On street parking is permitted at various designated locations along Collector Roads. The posted speed limit on Collector Roads is 15 mph, although some curves are posted with advisory speeds as low as 5 mph.

### ***Campground Access Roads***

Campground Access Roads are paved roads that provide access to day use areas and to individual campsites. Campground Access Roads are generally 10 to 12 feet wide, although some portions of these roads are as narrow as nine feet in locations constrained by trees and other natural features. While these widths would preclude two-way travel in most urban settings, two-way traffic flow is accommodated by motorists who move onto the dirt shoulder to permit opposing vehicles to pass.

### **Sly Park Recreation Area - Parking**

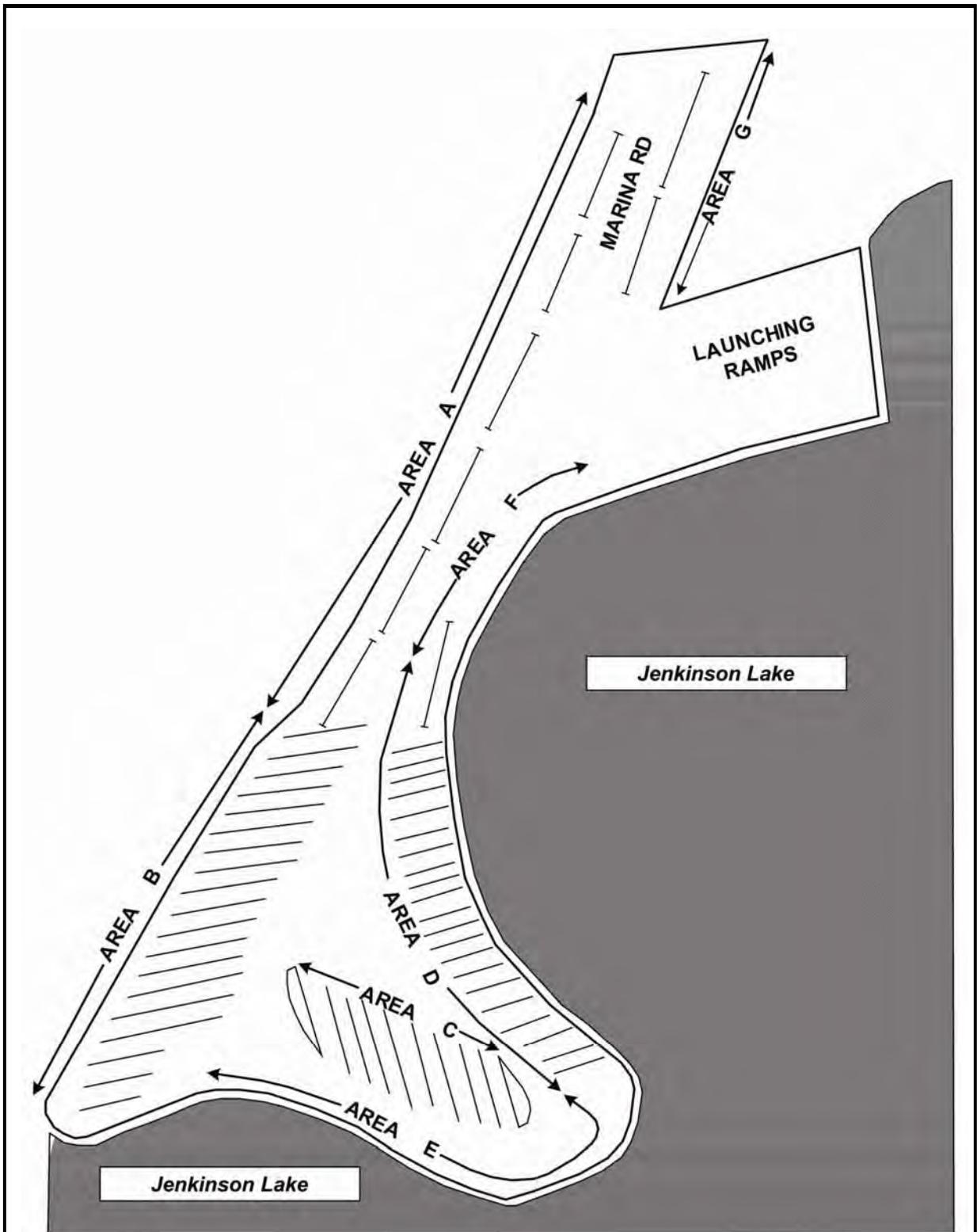
The availability of parking is an important issue to campers and day users alike because almost all users travel to and from SPRA via automobile. In an effort to characterize existing parking utilization at the Park, two parking utilization surveys were conducted over a total of four weekends. One survey was conducted over two mid-day periods on Saturday, July 3, 2004. Another survey was conducted on three separate weekends during June 2006. These surveys address parking in general at the Park and specifically at the Marina.

Existing parking areas are located at group use facilities along Lake Drive, day use areas, campsites, and the Marina. These facilities and parking utilization are discussed below.

### ***Existing Parking Areas***

#### **Designated Parking Areas Near Boat Launching Areas**

These paved areas are intended to provide spaces for automobile/trailer combinations, as well as for individual automobiles and boat trailers. The spaces in these areas are individually striped for both pull in and drive through use. The type and number of parking spaces in the Marina parking area are shown in Table 4.4-2. Figure 4.4-1 shows the Marina Parking Lot layout.



Digital Data Provided by KAnderson & Associates, Inc.

NO SCALE

**EXISTING MARINA PARKING LAYOUT**



SLY PARK RECREATION AREA MASTER PLAN  
MASTER EIR

FIGURE 4.4-1

**Table 4.4-2 — Marina Area Parking Supply**

Size	Designation	Number of Spaces
Vehicles and Trailer (40 feet)	Regular	30
	Handicap	1
	Short term (15 minute)	2
Vehicles (19 feet)	Regular	21
	Handicap	1
	Sheriff	1
	Undesignated parking along shore	8
<b>Total Number of Spaces</b>		<b>64</b>

Source: kdAnderson 2006.

Designated Parking Areas Near Group Use Facilities along Lake Drive

In some locations Lake Drive has been widened to provide on-street parking for day use activities. This is the case immediately north of the Marina Parking Lot, in the major day use area immediately north of the main entrance and the Chimney Camp day use area. While the road has been widened in these areas, individual parking spaces have not been striped.

Unimproved Day Use Parking Areas

Some parking is available for day users at Sierra Camp Point and Hazel Creek Camp. However, these parking areas are not paved and are difficult to distinguish from the areas that are allocated to adjoining camping sites.

Unimproved Campsite Parking

Each campsite is intended to provide space for vehicles to park. The SPRA staff has an estimate of the number of spaces that each site may accommodate. However, these spaces are not paved and it is often difficult to distinguish the limits of the parking areas allocated to each campsite.

**Existing Parking Utilization**

The results of the parking surveys throughout the SPRA are shown in Table 4.4-3. As indicated, in the mid-afternoon of July 3, 2004, there were over 400 automobiles, 31 auto/trailer combinations, 14 isolated boat trailers, and 9 large RVs parked at various locations on the north shore of Jenkinson Lake. This generally represents full utilization of available parking in many of the Park’s areas. While the parking supply in the Marina area was nearly over capacity, there was parking available in the day use area just to the north. Parking in the large day use area immediately north of the main entrance was fully utilized. Parking capacity in the other day use areas (Sierra Point, Chimney and Hazel Creek) was well used and spilling into adjoining areas.

**Table 4.4-3 — Parking Utilization Survey at Sly Park Saturday, July 3, 2004**

Area	Description	Vehicle Type	Parked Vehicles Saturday July 3, 2004	
			12:30 p.m. to 1:00 p.m.	2:30 p.m. to 3:00 p.m.
1	Marina Parking Lot	Automobile	19	24
		Auto w/ trailer	27	29
		Trailer only	9	7
2	Day Use	Automobile	34	48

Area	Description	Vehicle Type	Parked Vehicles Saturday July 3, 2004	
			12:30 p.m. to 1:00 p.m.	2:30 p.m. to 3:00 p.m.
3	Pine Cone Camp (1-19)	Automobile	31	46
		RV's	3	3
4	Pine Cone Camps (20-38)	Automobile	23	28
5	Sierra Camp west (50-68)	Automobile	20	21
6	Sierra Camp Day Use	Automobile	32	39
7	Sierra Camp east (69-104)	Automobile	42	49
		RV	4	4
8	Stonebraker ramp	Automobile	8	10
		Auto w/ trailer	5	2
		Trailer only	6	7
9	Stonebraker camp	Automobile	9	6
10	Hilltop camp	Automobile	27	29
11	Chimney Camp/Day Use	Automobile	28	33
12	Hazel Creek Camp	Automobile	28	33
		RV	1	1
13	Dogwood camp	Automobile	8	7
		RV	1	1
14	Rainbow camp	Automobile	20	27
15	Kamloop camp	Automobile	7	12
16	overflow	Automobile	2	1
	<i>Totals</i>	<i>Automobile</i>	<i>341</i>	<i>413</i>
		<i>Auto/trailer</i>	<i>32</i>	<i>31</i>
		<i>Trailer</i>	<i>15</i>	<i>14</i>
		<i>RV</i>	<i>9</i>	<i>9</i>
		<b>Total</b>	<b>397</b>	<b>467</b>

Source: kdAnderson 2006.

### Marina

Parking demands at the Marina are closely related to weather conditions. During the three weekends in June 2006, parking utilization was monitored under varying weather conditions. Permits for 89 boats were issued that day (a total of 101 boats are currently allowed). As noted in Table 4.4-4, highest utilization of the Marina parking lot occurred on a summer day when the temperature reached 100 degrees, while parking demand was low on cooler days.

To provide additional perspective for these observations, information collected by EID regarding attendance on July 4<sup>th</sup> 2004 weekend has been assembled and presented in Table 4.4-5. As shown, day use was higher on Sunday and Monday than on Saturday on which the study was conducted (although the number of “extras” associated with camping was higher on Friday). Thus, it is possible that parking demands would have been higher on Sunday.

The number of parking spaces appears adequate for normal operations throughout the year, but is inadequate during peak demand periods, which primarily include warm weather weekends in June, July and August. Table 4.4-6 compares parking demands on two high-demand weekends with available parking capacity.

**Table 4.4-4 — Marina Parking Area Parking Utilization**

Date / Time	Saturday June 3, 2006: 1:00 p.m.			Sunday June 11, 2006: 3:15 p.m.			Sunday June 25, 2006: 2:00 p.m.		
Weather	Moderate			Overcast, cool (75 degrees)			Clear, Hot (100 degrees +)		
	Total Boats								
Area	Vehicle Plus Trailer	Vehicle	Trailer	Vehicle Plus Trailer	Vehicle Only	Trailer Only	Vehicle Plus Trailer	Vehicle Only	Trailer Only
A – six 40 foot	5	-	-	6	-	-	6	-	-
– one 40 Handicap	1	-	-	-	-	-	1	-	-
B – 15 40 foot	7		2	12	2	1	11	1	3
– two auto	-	1	-	-	2	-	1	1	-
– one auto Handicap					1			1	
C – nine 40 foot	4		5	6	3		8	1	-
D – 15 auto		6			14	1		11	3
– one 40 foot	1			1	-		1		
– sheriff		1			1			1	
E – Eight auto un-striped		1			3		1	7	
E – two un-striped 40 15 minute	1			-	-	-	-	-	-
F – four auto		1		1			4	1	-
G – beyond rest rooms to Lake Drive				3	2		28	5	1
<b>Total</b>	<b>19</b>	<b>10</b>	<b>7</b>	<b>29</b>	<b>28</b>	<b>2</b>	<b>61</b>	<b>29</b>	<b>7</b>

Source: kdAnderson 2006.

**Table 4.4-5 — Attendance on the 4th of July Weekend – 2004**

	July 2 Friday	July 3 Sat	July 4 Sun	July 5 Mon
Non-CF <sup>1</sup> Boats	10	14	7	16
SC <sup>2</sup> Boats	6	0	2	3
Regular Boats	62	56	46	49
Family Campers	637	637	637	290
	259	49	70	80
Additional Camping People	717	336	95	98
Group Campers	200	200	200	40
Pets	105	18	29	21
Day Use	242	889	1,117	1,008
SC DU	7	67	98	101

Source: kdAnderson 2006.

Note: Numbers are “numbers of people” on that given day; the formula used was multiplying the “number of vehicles” by 3.5 people (FS standards also).

<sup>1</sup> Non-CF Boats are those vessels not registered by the Department of Motor Vehicles.

<sup>2</sup> SC Boats are vessels exempt from registration, and generally include boats for federal, State, or local agency use.

**Table 4.4-6 — Parking Capacity vs. Demand by Vehicle Type**

Vehicle Type	Total Number Spaces Available	Number of Vehicles Observed Sunday June 11, 2006 Overcast, Cool 75°	Number of Vehicles Observed Sunday June 25, 2006 Clear, Hot 100°+
Automobile with Trailer (40 feet)	33	31 <sup>1</sup>	68 <sup>1</sup>
Automobile Only (19 feet)	31	28	29
Total	64	59	97 <sup>2</sup>

Source: kdAnderson 2006.

Notes: (1) Automobile with trailer combined with Trailer Only.

(2) 34 total vehicles parked along Marina Road (28 vehicle plus trailer)

On the highest demand day observed (June 25, 2006), all designated vehicle plus trailer spaces at the Marina were occupied, either by vehicles pulling trailers or by trailers or vehicles alone. Of the 32 automobile with trailer spaces designated for long-term parking (one additional short-term space provided), 28 were occupied by a complete rig, while two were occupied by automobiles and six by trailers. Another six vehicles plus trailers were parked in undesignated areas or double parked. Twenty-eight vehicles plus trailers were parked along Marina Road beyond the restrooms. Vehicles with trailers were observed on the entire length of the east side of Marina Road as far north as the main access road intersection. Vehicles with trailers were also parked on the west side of the road for about 25% of its length. However, another seven trailers were separated from their towing vehicles and left alone, and three of them were occupying 40 foot spaces.

Use of the Marina parking by vehicles not related to boat launching is also an issue. Water play occurs in the area south of the parking lot. Fishing also occurs in this area. Operators of boats permanently moored in the Marina will park here when they use their boats. As a result, on the peak day, nearly all of the regular (i.e., 20 foot) spaces were occupied, and passenger vehicles occupied two 40 foot spaces as well.

CBW recommendations for available parking are generally consistent with the sum of the parking demands of automobile-trailer, trailer, and regular vehicles parking in 40 foot spaces on peak days. Because the number of vehicles at the Marina during peak demands exceeds the number of available parking spaces, patrons resort to parking along both sides of Marina Road above the restrooms, including areas posted “No Parking.” Parked vehicles plus trailers encroach from 3 – 5 feet into the travel way. Marina Road is typically 16 to 21 feet wide in this area, and during these conditions, access along Marina Road is restricted and safety becomes an issue. This is pronounced at locations where the road curves and where trees exist at the edge of the road.

The narrow available travel widths under these overflow conditions result in sections of Marina Road operating as a one-way street, where vehicles must take turns passing through restricted areas. Emergency vehicles traveling to and from the Marina are expected to be delayed under such conditions, and pedestrians and bicyclists must compete with automobiles in narrow areas.

## **Existing Conditions at Area Intersections**

### ***Intersection Levels of Service***

To determine existing traffic volumes and obtain more information about traffic conditions in the study area, new traffic counts were taken during the weekday morning and evening peak traffic periods and on Saturday at the key intersections on Sly Park Road. These counts were made on Thursday, July 1, and Saturday, July 3. Counts were taken at the U.S. 50/Sly Park Road interchange section.

Existing intersection Levels of Service at each intersection are shown on Table 4.4-7. Because existing weekday traffic volumes are relatively low, the Levels of Service at nearly every intersection meet El Dorado County’s minimum standards (i.e., LOS C or better). However, on Saturday afternoon the length of delays at the EB U.S. 50 off ramps are indicative of LOS E conditions for motorists waiting to turn onto Sly Park Road and LOS F during the weekday evening peak hour. In addition, warrants for signalization are currently met at this intersection under both study periods.

While projected LOS at the recreation area access onto Sly Park Road are calculated to be LOS B or better, long delays were occasionally observed at this location on Saturday afternoon. Congestion at the intersection is the result of delays at the entry gate as staff process arriving guests. While two entry lanes are available, new arrivals are generally limited to the inside lane, and there were occasions when the queue of traffic at the gate extended back to Sly Park Road. As a result, some traffic wishing to turn left into the park was delayed. In turn, these waiting motorists sometimes blocked the path of motorists waiting to turn left out of the recreation area.

## **Existing Conditions on Area Roadway Segments**

Table 4.4-8 summarizes the characteristics of the existing circulation system within SPRA in terms of road width and roadway segment daily traffic volume.

### ***Roadway Segment Level of Service***

The El Dorado County General Plan EIR includes evaluation of roadway segment Level of Service based on hourly traffic volumes. The LOS C-D threshold for Sly Park Road is identified as 680 vehicles per hour. The 2015 Capital Improvement Program (CIP) lists Sly Park Road as operating at LOS “D” to LOS “E”.

The El Dorado County General Plan EIR suggests that the portion of Sly Park Road from Mormon Emigrant Trail to Park Creek Road carries a weekday peak hour volume of 340 vehicles per hour (vph) and operates at LOS C. The segment from Park Creek Road to U.S. 50 is reported to carry 470 vph and operate at LOS C.

**Table 4.4-7 — Existing Peak Hour Levels of Service at Intersections on Sly Park Road**

Intersection	Control	Weekday P.M.		Saturday Afternoon	
		Average Delay	Level of Service	Average Delay	Level of Service
WB U.S. 50 Ramps NB left turn WB left +right turn	WB Stop	8.7 sec 12.9 sec	A B	9.0 sec 16.7 sec	A C
EB U.S. 50 ramps SB left turn EB left+right turn	EB Stop	7.9 sec 58.3sec	A F	8.5 sec 41.9 sec	A E
Ridgeway Drive NB left turn SB left turn EB left + right turn WB left + right turn	EB/WB Stop	8.6 sec 7.7 sec 18.7 sec 11.3 sec	A A C B	8.3 sec 8.0 sec 21.8 sec 12.4 sec	A A C B
Recreation Area Access NB left turn SB left turn EB left+thru+right turn WB left+thru+right turn	EB / WB Stop	7.7 sec 7.5 sec 10.0 sec 10.6 sec	A A B B	7.6 sec 7.6 sec 12.1 sec 11.9 sec	A A B B
Mormon Emigrant Trail SB left turn WB left + right turn	WB Stop	7.5 sec 10.0 sec	A B	7.7 sec 10.1 sec	A B

Source: kdAnderson 2006.

As a comparison, the highest hourly traffic volumes observed over the July 4th weekend on Sly Park Road north of the recreation area entrance ranged from 350 vph on Thursday to 515 vph on Saturday. These volumes are indicative of LOS C.

## **Future (Year 2025) Background Traffic Conditions**

The El Dorado County General Plan EIR presents weekday peak hour traffic volume forecasts for various General Plan alternatives. On Sly Park Road these forecasts range from 450 to 470 vph on the segment from Mormon Emigrant Trail to Park Creek Road and from 590 to 610 vph on the segment from Park Creek Road to U.S. 50.

The El Dorado County General Plan EIR suggests that the portion of Mormon Emigrant Trail from Sly Park Road to the Second Dam carries a weekday peak hour volume of 280 to 330 vph. Comparison of the peak commute hour to the non peak commute hour reveals that the non-peak commute hour on Mormon Emigrant Trail carries between about 11 to 37 percent more traffic than the commute hour. Increasing peak hour traffic projections by 37 percent (which occurred on a Friday) results in Mormon Emigrant Trail carrying one-hour traffic volumes between 385 and 450 vph.

### **4.4.2 Regulatory Setting**

#### **Intersections**

Traffic conditions at unsignalized intersections are judged to exceed County standards when minimum LOS standards are exceeded and when the volume of traffic exceeds Caltrans' warrants for signalization. At unsignalized intersections, a traffic impact would be considered "adverse but not significant" if the County LOS standard is exceeded but the projected traffic does not satisfy traffic signal warrants. When Level of Service is poor, the only means to completely alleviate delays to stop-controlled vehicles would be to install a traffic signal. However, the unmet signal warrants would imply that the reduction in delay for the stop-controlled vehicles may not justify the new delays that would be incurred by the major street traffic (which is currently not stopped). Under these circumstances, installation of a signal would not be recommended and the substandard LOS for stop-controlled vehicles would be considered an "adverse but not significant" impact.

#### **Roadway Systems**

This report section also describes the methodology selected to determine LOS at intersections that are controlled by traffic signals, all-way stops, or side street stop signs. All intersection Levels of Service analysis is predicated on the length of delays experienced by motorists waiting at the intersection.

At unsignalized intersections, gap acceptance and corresponding delays are used for Level of Service analysis. Procedures used for calculating unsignalized intersection LOS are as presented in the 2000 Highway Capacity Manual. Levels of Service at unsignalized intersections, which are controlled by side street stop signs, are indicative of the magnitude of the delay incurred by motorists that must yield the right of way at an intersection.

**Table 4.4-8 — Existing Roadway Segment Daily Traffic Volumes**

Road	From	To	Classification	Width in Feet	Daily Traffic Volume July 1 - July 5, 2004				
					Thursday	Friday	Saturday	Sunday	Monday
Mormon Emigrant Trail	Group Camp	East	--		900	1,412	1,702	1,575	1,966
	Sly Park Road	Group Camp			1,184	1,676	2,104	1,982	2,375
Sly Park Road	Park Access	U.S. Highway 50	--		4,642	5,549	5,829	5,498	5,720
	Park Access	Mormon Emigrant Trail			4,575	5,262	5,297	4,824	5,084
	Mormon Emigrant Trail	South			3,933	4,285	3,950	3,668	3,906
Lake Drive	Sly Park Road	Mooring Access Road	Collector	45	625	907	1,526	1,542	1,289
	Mooring Access Road	Day Use	Collector	20	490	945	1,498	1,855	1,441
	Day Use	Pine Cone Camp	Collector	18-20	452	895	1,335	1,625	1,179
	Sierra Camp	Stonebraker Camp	Collector	18	228	506	786	793	626
	Stonebraker Camp	Hilltop Camp	Collector	16	153	388	691	660	427
	Chimney Camp	Hazel Creek Camp	Collector	12	105	343	594	609	363
Mooring Access Road	Lake Drive	Ramp	Collector	16-21	283	300	721	680	771

Source: kdAnderson 2006.

Note: These are unadjusted raw counts based on axle counts that include trailers. Thus, the actual number of vehicles is likely to be slightly lower. Also, the counts made at the Entrance may not be reliable due to lane controls used during counts. Scout Hill was not in use at the time these traffic counts were taken.

### 4.4.3 Environmental Impact Thresholds/Criteria for Evaluation

A traffic impact is considered significant if it renders an unacceptable LOS on a street segment or at a signalized intersection, or if it worsens already unacceptable conditions on a street segment or at a signalized intersection. Table 4.4-9 presents the El Dorado County General Plan EIR thresholds for roadway segment Level of Service based on hourly traffic volumes.

### 4.4.4 Environmental Impacts

New facilities are proposed for development within SPRA in addition to the reconfiguration of campgrounds and day use areas. These proposed facilities include the development of the Sugarloaf Fine Arts Camp, a Retreat and Event Center, and the Scout/Youth Group Camp. Both the Sugarloaf Fine Arts Camp and the Retreat and Event Center are to be located on Mormon Emigrant Trail. The Scout/Youth Group Camp is located on Lake Drive.

**Table 4.4-9 — Tables of Functional Class and LOS Thresholds Two-Way Volumes**

Code	Facility Type	A	B	C	D	E
2R	Minor Two-Lane Highway	90	200	680	1,410	1,740
2U	Major Two-Lane Highway	120	290	790	1,600	2,050
2A	Two-Lane Arterial	--	--	970	1,760	1,870
4AU	Four-Lane Arterial, Undivided	--	--	1,750	2,740	2,890
4AD	Four-Lane Arterial, Divided	--	--	1,920	3,640	3,740
4A	Six-Lane Arterial, Divided	--	--	2,710	5,320	5,600
2F	Two-Lane Expressway/Freeway	1,100	2,010	2,880	3,570	4,010
3F	Three-Lane Freeway	1,700	3,080	4,400	5,410	6,060
4F	Four-Lane Freeway	2,320	4,200	5,950	7,280	8,140

Source: kdAnderson 2006.

#### 4.4.4.1 Anticipated Trip Generation

While the exact operation and characteristics of the three new facilities have not been finalized, assumptions have been made based on data provided to determine the probable number of trips generated and to assess the impacts of the Sly Park Recreation Area expansion on traffic conditions in the area.

#### The Sugarloaf Fine Arts Camp

The Sugarloaf Fine Arts Camp is envisioned to hold approximately 300 people and provide 150 parking spaces. This equates to one parking space per two attendees. Assuming an automobile occupancy of two attendees per vehicle, a total of 150 vehicles or 300 daily trips would be associated with this use. Because this facility is also planning on having participants arrive at the beginning of the week and leave during the end of the week, it was assumed that all of the 150 vehicles would drop off the participants after parking and unloading. Assuming that vehicles would arrive over a two-hour time period, a total of 150 trips per hour are anticipated. It should be noted that based on the operational program of this facility, arrivals and departures from this facility would not coincide with the peak hour of commuter traffic. It should also be noted that

the Sugarloaf Fine Arts Camp is currently operating a location located approximately one mile south of SPRA. Access to the existing Camp is via Sly Park Road. The Camp currently generates an unknown number of daily trips that would be transferred to the proposed facility within SPRA upon project completion. It is assumed that these daily trips would be included within the total daily trips stated above for this facility.

### **The Retreat and Event Center**

The Retreat and Events Center is to have lodging available for 75 people and have a capacity of 300 patrons. A total of 75 parking spaces are to be constructed. As for the Sugarloaf Fine Arts Camp, an auto occupancy rate of two patrons per vehicle was assumed. Therefore, sufficient parking would not be available for all participants to park. The majority of the participants would have to be dropped off.

A total of 150 vehicles would be required to transport the 300 attendees. Assuming use of all 75 parking spaces by lodge patrons and those spending the day, the remaining 75 vehicles would be required to drop off their attendees and pick them up later that day. These 75 vehicles would generate a total of 300 daily trips. The 75 vehicles utilizing the parking spaces were assumed to make one inbound and one outbound trip per day for a total of 150 daily trips. Therefore, the Retreat and Event Center is anticipated to generate a total of 450 trips per day.

As for the Sugarloaf Fine Arts Camp, the operational program would prohibit arrivals and departures outside the commute hour and it would likely take a two-hour period for participants to arrive/depart. As such, this facility is anticipated to generate a total of 225 trips per two-hour period (75 from parked vehicles and 150 from additional patrons) or 113 trips per hour.

### **Scout/Youth Group Camp**

The Scout/Youth Group Camp is to have a capacity of 360 people and a total of 75 parking spaces. Assuming an auto-occupancy of two patrons per vehicle, a total of 180 vehicles would be required to transport all of the attendees. Assuming that 75 vehicles remained on site, the additional 105 vehicles would be for drop off and pick ups only because no additional parking spaces would exist. If the Scouts did not spend the night, the 105 vehicles transporting the scouts would generate a total of 420 daily trips while the 75 vehicles parked in the parking spaces would generate a total of 150 daily trips for a total of 570 daily trips. As for the other two facilities, events would be scheduled out side the peak commute hours and were assumed to occur over a two-hour period. As such, a total of 285 trips would be generated during the two hour period (210 trips from drop offs and 75 trips from those using the parking spaces) or about 143 trips per hour. The Scout/Youth Group Camp is currently in use at Scout Hill within SPRA. Therefore, the above trip generation numbers are estimated based on the current use. The proposed daily trips generated from improvements at Scout Hill are not expected to add additional daily trips from the current condition.

Table 4.4-10 presents the trip generation associated with the expansion of SPRA. As shown, the improvements to the existing facility at Scout Hill and the two new facilities are anticipated to generate a total of 1,310 daily trips with 406 trips occurring during a one-hour period.

**Table 4.4-10 — Trip Generation**

Land Use	Daily Vehicles	Daily Trips	Trips Per Drop Off/Pick Up Hour
Sugarloaf Fine Arts Camp <sup>1</sup>	150	300	150
Retreat and Events Center	150	450	113
Scout/Youth Group Camp <sup>2</sup>	180	560 <sup>3</sup>	143
<b>Total</b>	<b>480</b>	<b>1,310</b>	<b>406</b>

Source: kdAnderson 2006.

Notes:

- (1) This camp is an existing offsite use.
- (2) The Scout/Youth Group Camp is an existing use. However, existing traffic volumes contained in Table 4.4-8 do not reflect this facility because it was not in operation at the time the traffic counts were taken.
- (3) The Scout/Youth Group Camp is currently in use at Scout Hill within SPRA. Therefore, the above trip generation numbers are estimated based on the current use.

**4.4.4.2 Existing Roadway Segment Level of Service with Proposed Project**

Table 4.4-11 displays the peak one-hour traffic volumes during the July 4<sup>th</sup> weekend that occur out of the peak “commute hours” for each of the study roadways that are affected by implementation of the Proposed Project. In addition this table also displays the peak one-hour trip generation of the Proposed Project and the resulting peak hour roadway volumes for each of the study roadways.

As shown, on Mormon Emigrant Trail the highest traffic volumes, which were observed on Monday July 5, 2004, reached 254 vehicles during the peak one hour period. With the additional 263 new trips generated by the Proposed Project, a total of 517 trips are anticipated on Mormon Emigrant Trail.

On Lake Drive the highest traffic volumes for the two study sections ranged from 88 to 201 vph. The addition of the 143 new trips generated by the expansion equates to one-hour traffic volumes ranging between 231 to 344 vph.

**Table 4.4-11 — One Hour Non-Commute Traffic Volumes  
July 1, 2004 to July 5, 2004**

#	Road	From	To	Existing	Project	Existing + Project
1	Mormon Emigrant Trail	Sly Park Road	Group Camp	254	263	517
4	Sly Park Road	U.S. 50	Park Access	515	406	921
5		Park Access	Mormon Emigrant Trail	418	406	824
3	Lake Drive	Sly Park Road	Mooring Access Rd	88	143	231
8		Mooring Access Rd	Day Use	201	143	344

Source: kdAnderson 2006.

On Sly Park Road the one-hour traffic volumes without the expansion are already approaching the LOS “C/D” threshold (680 vph). With traffic generated from all three proposed facilities, this roadway is anticipated to operate at LOS “D.” While traffic generated by the Proposed Project is anticipated to worsen traffic conditions, operations would not fall below the LOS “E” identified under the 2015 CIP in the El Dorado County General Plan. To maintain LOS “C” operations, only a portion of the trip generation would be able to occur during these one-hour intervals. Therefore under the proposed SPRA Master Plan, the arrival and departures would be staggered and segregated to avoid the peak hours to maintain acceptable operations. However, the 2015 CIP lists the LOS of this facility at LOS “E” operations. Therefore, LOS “E” operations could be maintained even with the simultaneous operations at all three facilities.

It should also be noted that the 515 vph that were observed on Sly Park Road occurred on a Sunday non-peak commute hour. However, the peak hour commute period on Monday was only slightly less (13 vehicles) than the 515 vph that were observed on the Sunday. Therefore, allowing operations during the commute hours would be comparable to non-peak commute hour segment operations on Sunday.

#### **4.4.4.3 Future Roadway Segment Level of Service with Proposed Project**

The El Dorado County General Plan EIR presents weekday peak hour traffic volume forecasts for various General Plan alternatives. On Sly Park Road, these forecasts range from 450 to 470 vph on the segment from Mormon Emigrant Trail to Park Creek Road, and from 590 to 610 vph on the segment from Park Creek Road to U.S. 50.

The peak hour typically occurs during the evening or morning commute. However, the uses envisioned by the expansion of Sly Park would not have hours of operation that occur during the commute peak hour. Therefore, a comparison between evening commute hour and the next highest afternoon or evening hour was made from daily counts that were obtained over the July 4th weekend. This comparison revealed that the one-hour peak that occurred outside of the typical commute hour during the weekday ranged from 98 percent to 108 percent of those volumes that were observed during the commute hour. An 8 percent increase (which occurred on a Friday) results in the one-hour volumes on Sly Park Road result in range from about 485 to 510 vph on the segment from Mormon Emigrant Trail to Park Creek Road and from 635 to 660 vph on the segment from Park Creek Road to U.S. 50. While these off-peak hours are anticipated to operate at LOS “C” operations, the addition of trips generated by the expansion of SPRA would result in LOS “D” operations on both Sly Park Road study segments. As such, operations with the expansion would worsen but not below the LOS “D” operations that were identified in the El Dorado County General Plan for the 2015 CIP.

The El Dorado County General Plan EIR suggests that the portion of Mormon Emigrant Trail from Sly Park Road to the 2nd Dam carries a weekday peak hour volume of 280 to 330 vph. Comparison of the peak commute hour to the non peak commute hour reveals that the non-peak commute hour on Mormon Emigrant Trail carries between about 11 to 37 percent more traffic than the commute hour. Increasing peak hour traffic projections by 37 percent (which occurred on a Friday) results in Mormon Emigrant Trail carrying one-hour traffic volumes between 385 and 450 vph. The addition of the 263 trips generated from the expansion results in traffic volumes ranging from about 645 to 715 vph. This would be indicative of LOS “C” operations because the LOS “C/D” threshold for this facility is 790 vph.

With implementation of the SPRA Master Plan, it was noted that additional daily trips would be generated, but no new peak hour trips during the typical commute are anticipated. Because no peak hour trips would be generated, no change in peak commute hour trips is anticipated and thus the increase would not affect peak commute hour operations at the study intersections.

#### **4.4.4.4 Impacts of Sly Park Recreation Area Expansion**

While development of these three sites is anticipated to generate daily traffic, as previously discussed, the hours of operation are to be limited so as to avoid the peak commute hour of the adjacent street. As such, these three sites would not add to peak hour traffic volumes to the commute hour. Therefore, no change in peak hour intersection operations would occur.

While implementation of SPRA Master Plan would not generate traffic during peak hour commutes, the projects are anticipated to generate about 406 new trips during peak drop off/pick up times. This equates to a total of 263 new trips during the one hour drop off/pick up hour on Mormon Emigrant Trail and 143 new trips during the one hour drop off/pick up hour on Lake Drive. Because it is anticipated that the origins and destinations for patrons to these facilities would be via U.S. 50, a total of 406 new trips during the one-hour drop off/pick up time are anticipated on Sly Park Road.

Because the project has committed to scheduling arrivals and departures outside the peak commute hours, the expansion would not generate any traffic during this time. Because the expansion would not result in the addition of traffic at study intersections during the peak commute hours, intersection operations during this time would not be affected. As a result, no significant impacts to transportation/traffic would occur.

No impacts to parking would occur. Parking proposed for the Retreat and Events Center and Sugarloaf Fine Arts Camp would meet County parking requirements.

#### **4.4.5 Mitigation Measures**

No mitigation would be required.

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## 4.5 Air Quality

### 4.5.1 Existing Conditions

The SPRA project site is within the portion of the Sierra Nevada Foothills situated within the Mountain Counties Air Basin (MCAB), which includes portions of Plumas, Sierra, Nevada, Placer (middle portion), El Dorado (western portion), Amador, Calaveras, Tuolumne, and Mariposa counties. The MCAB lies along the northern Sierra Nevada mountain range, close to or contiguous with the Nevada border, and covers an area of roughly 11,000 square miles. The MCAB includes the western slope of El Dorado County, from Lake Tahoe on the east to the Sacramento County boundary on the west. The prevailing wind is southwesterly and air pollution generally moves west to east through the air basin.

Air quality concerns in western El Dorado County include the most common pollutants including ozone, particulate matter from dust and diesel exhaust, and state defined Toxic Air Contaminants (TACs). Two TACs of concern in the county are diesel exhaust particulates and naturally occurring asbestos.

The El Dorado County Air Quality Management District's Guide to Air Quality Assessment (2002) and the Sacramento Metropolitan Air Quality Management District's (SMAQMD) Guide to Air Quality Assessment (2004) provide the background for the following discussion on climate and air contaminants.

#### 4.5.1.1 Climate

The proximity to the Sierra range and changes in elevation create considerable variation in the climate of the MCAB. There is a wide variation in rainfall, temperature, and winds throughout the basin. Temperature variations have significant influence on wind flow, dispersion along ridges, vertical mixing, and photochemistry. Precipitation in winter can be high in the upper elevations and then decrease rapidly towards the western side of the basin. The topography and climate create local conditions that become the dominant effect on emissions within the air basin. These local conditions can affect regional airflows and create areas of high pollutant concentrations. Inversion layers of warm air over cooler air often occur and trap pollutants close to the ground. Stagnant air in summer combines with high temperatures and sunshine to create ground level ozone from photochemical reactions between reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>). These two ozone precursors are also transported into the MCAB by winds from the San Francisco Bay Area and the Sacramento area.

#### 4.5.1.2 Air Contaminants

Ozone (O<sub>3</sub>), particulate matter (PM<sub>10</sub>), carbon monoxide (CO), and naturally occurring asbestos are pollutants and TAC's of particular concern and importance within the region. Ozone and PM<sub>10</sub> are pollutants for which the Sacramento Metropolitan region, including the MCAB portion of El Dorado County, still periodically exceeds state and national standards.

#### Ozone

Ground level ozone is not emitted directly into the air, but is formed instead by chemical reactions between NO<sub>x</sub> and ROG in the presence of sunlight. The major sources of NO<sub>x</sub> and

ROG are emissions from motor vehicle exhaust, gasoline vapors, chemical solvents, industrial facilities and electric utilities. For example, in the Sacramento Valley region, over 70 percent of the NOx produced is from motor vehicles.

Ozone is a public health concern because it acts as a respiratory irritant and increases susceptibility to respiratory infections and diseases. It can also harm lung tissue at high concentrations. Ozone can cause damage to leaf tissues of crops and vegetation.

### **Particulate Matter**

PM10 consists of particulate matter that is 10 microns or less in diameter. A micron is one-millionth of a meter. Airborne dust contains PM10 and can include a wide range of solid or liquid particles, including smoke, dust, and aerosols. The health effects of PM10 exposure depend upon the specific composition of the particulate matter. Effects may include aggravated asthma, chronic bronchitis, and decreased lung function. A sub-set of PM10 is PM2.5 which includes particles less than 2.5 microns in diameter.

### **Carbon Monoxide (CO)**

Carbon Monoxide is an odorless, colorless gas that is formed by the incomplete combustion of fuels. Emissions from motor vehicles are the primary source of CO in the region. High concentrations of CO can reduce the oxygen-carrying capacity of the blood, causing dizziness, headaches, unconsciousness, and even death. CO binds to hemoglobin in the bloodstream more strongly than oxygen and both the cardiovascular system and the central nervous system can be affected. State and federal ambient air quality standards for CO have been set to keep CO emissions below that level which adversely affects the cardiovascular and nervous systems.

### **Naturally Occurring Asbestos (NOA)**

According to the California Air Resources Board (CARB), asbestos is a term used for several types of naturally-occurring fibrous minerals found in many parts of California. Serpentine rock often contains chrysotile asbestos. This rock, and its parent material, ultramafic rock, are abundant in the Sierra foothills. Asbestos can be released from rock when it is broken or crushed. This can happen when cars drive over unpaved roads which are surfaced with these rocks, or when land is graded for construction. It is also released naturally through weathering and erosion. After release from rocks, asbestos can become airborne and may stay in the air for long periods of time.

All types of asbestos are hazardous and have the potential to cause cancer and lung disease. Health risks to people are dependent upon their length and intensity of exposure to asbestos. Asbestos-related disease, such as lung cancer, may not occur for decades after breathing asbestos fibers (California Air Resources Board, 2002).

## **4.5.2 Regulatory Setting**

### **4.5.2.1 Federal and State Standards**

The U. S. Environmental Protection Agency (EPA) and CARB have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated

with each pollutant. The ambient air quality standards cover what are called “criteria” pollutants because the health and other effects of each pollutant are described in criteria documents. The criteria pollutants of most concern include those in Table 4.5-1.

**Table 4.5-1 — Federal and State Ambient Air Quality Standards**

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone (O3)	1-Hour	--	0.09 ppm
	8- Hour	0.08 ppm	0.07 ppm
Carbon Monoxide (CO)	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35/0 ppm	20.0 ppm
Particulate Matter (PM10)	Annual	50 µg/m <sup>3</sup>	20 µg/m <sup>3</sup>
	24-Hour	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
Particulate Matter (PM2.5)	Annual	15 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>
	24-Hour	65 µg/m <sup>3</sup>	--
Sulfur Dioxide (SO2)	Annual	0.03 ppm	--
	24-Hour	0.14 ppm	0.04 ppm
Nitrogen Dioxide (NO2)	Annual	0.053 ppm	--
	1-Hour	--	0.25 ppm

Source: California Air Resources Board, 2006

Both the federal and State governments have enacted laws mandating the identification of areas not meeting the ambient air quality standards and development of regional air quality plans to eventually attain the standards.

State definitions of attainment classifications include:

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment:** a pollutant is designated attainment if the state standard for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment:** a pollutant is designated nonattainment if there was at least one violation of a State standard for that pollutant in the area.
- **Nonattainment/Transitional:** is a subcategory of the nonattainment designation. An area is designated nonattainment / transitional to signify that the area is close to attaining the standard for that pollutant.

Federal definitions of attainment classifications include:

- **Nonattainment:** any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant.
- **Attainment:** any area that meets the national primary or secondary ambient air quality standard for the pollutant.
- **Unclassifiable:** any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

Under the federal Clean Air Act, the MCAB portion of El Dorado County has been designated attainment or unclassified for all national ambient air quality standards except the 8-hour ozone standard. The MCAB portion of El Dorado County is designated “severe non-attainment” for the Federal 8-hour Ozone standard. Under the State of California system, El Dorado County is designated non-attainment for the California standards of ozone and PM10 (Table 4.5-2). The MCAB is either attainment or unclassified for the remaining Federal and State standards for nitrogen dioxide, sulfur dioxide, carbon monoxide, sulfates, hydrogen sulfide, lead, and visibility reducing particles.

**Table 4.5-2 — MCAB Attainment Status**

Pollutant	Federal Standards <sup>1</sup>	California Standards <sup>2</sup>
Ozone (O3)	Severe Non-attainment (8-hr)	Non-attainment
Carbon Monoxide (CO)	Unclassified <sup>2</sup>	Unclassified
Particulate Matter (PM10)	Unclassified	Non-attainment
Sulfur Dioxide (SO2)	Unclassified	Attainment
Nitrogen Dioxide (NO2)	Unclassified <sup>2</sup>	Attainment

Source: <sup>1</sup>California Air Resources Board, 2005

<sup>2</sup>U.S. Environmental Protection Agency, 2005

The EPA classified the MCAB portion of El Dorado County as “serious non-attainment” for the eight-hour federal ozone standard in April 2004. This classification requires attainment to be reached within nine years. The project site is located in a multi-county region referred to as the Sacramento Federal Ozone Nonattainment Area and the Air Quality and Air Control Districts within the area have developed a regional Ozone Attainment Plan that will become part of the State Implementation Plan (SIP). The focus of this regional plan is to reduce the emissions of ROG and NOx within the Sacramento metropolitan area with a goal of attainment by 2013. The regional air quality districts are required to submit a rate of progress plan detailing the progress in meeting the eight-hour ozone standard within two years of the designation of “serious non-attainment”. The regional air quality districts adopted the Rate of Progress (ROP) plan in February 2006.

#### **4.5.2.2 El Dorado County**

El Dorado County's Air Quality Management District (AQMD) is a Division of the Environmental Management Department. The AQMD administers the California and Federal Clean Air Acts via guidelines set forth by State and Federal Agencies and establishes emission thresholds of significance.

#### **4.5.3 Environmental Impact Thresholds/Criteria for Evaluation**

Impacts to air quality would normally be considered significant if the project would:

- Result in construction or operational emissions of ROG and NO<sub>x</sub> greater than the threshold of 82 lbs/day as established by the El Dorado County AQMD;
- Result in ambient pollutant concentrations of PM<sub>10</sub>, CO, SO<sub>2</sub> and NO<sub>x</sub> from construction or operational emissions that are in excess of applicable National or State Ambient Air Quality Standards;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

#### **4.5.4 Environmental Impacts**

Air Quality Impacts resulting from implementation of the project are categorized as follows:

1. Short-term impacts related to construction activities; and
2. Long-term impacts from the use of facilities, including additional vehicle trips from new visitors to SPRA due to the operation of new facilities.

The individual projects proposed as part of SPRA include a variety of recreational facility, educational, road and access, and natural resource protection and restoration projects. Many of these projects require little or no mechanized construction activity. Projects that are expected to require grading and building include facilities at the Sugarloaf Fine Arts Center, the Retreat and Event Center, the Scout/Youth Group Camp upgrade, and the Marina Parking Lot expansion. Road widening, paving, and alignment improvements would occur throughout SPRA. However, all projects would be constructed in phases as funding allows. See Chapter 3 of this document for a complete list of projects, descriptions, and anticipated phasing.

The largest area to be disturbed from any single project at one time is expected to be less than two acres. The longest road widening and/or paving is at any single time is expected to be less than one-half mile. Among the cabins, yurts, and event buildings, the largest solid walled building to be constructed is expected to be approximately 15,000 square feet. It is anticipated that the maximum daily additional vehicle trips to SPRA generated by the Master Plan projects, including the Sugarloaf Fine Arts Camp, the Retreat and Event Center, and the Scout/Youth Group Camp upgrade would be approximately 1,310 daily trips if all three of these event areas would be used at full capacity on the same day. However, on many days, one or more of these activity centers may not be used or would not be at full capacity.

**Construction-related emissions of ROG, NOx, PM10 and other criteria pollutants may exceed significance thresholds on a temporary basis during construction.**

Short-term air quality impacts are the result of the use of construction equipment, transport of materials (i.e. equipment, supplies, and construction material) to and from the site, and construction employee commute trips. Short-term air quality emissions typically consist of reactive organic gases (ROG), oxides of nitrogen (NOx), and fugitive dust. Fugitive dust and particulate matter is largely generated from earth moving activities and wind erosion.

The AQMD's Guide to Air Quality Assessment provides a methodology to determine potential significance of emissions resulting from construction of projects. Based upon the AQMD's experience with construction activities and the non-continuous and temporary nature of construction emissions, the District assumes that ROG and NOx emissions are not significant if:

The project encompasses 12 acres or less of ground that is being worked at one time and at least one of the District's proposed construction equipment exhaust mitigation measures (or an equivalent measure) is incorporated into the project.

None of the individual projects expected to be constructed as part of the SPRA Master Plan are expected to be near the 12 acre screening threshold. Proposed mitigation, including total number of acres to be disturbed from simultaneous projects and AQMD equipment mitigation would be proposed. This mitigation would ensure that the construction related emissions of ROG and NOx would be less than significant. A discussion of mitigation measures is provided in Section 4.5.5.

Per the AQMD Guide, if ROG and NOx emissions are determined to be not significant, then it can be assumed that exhaust emissions of other air pollutants from the operation of equipment and vehicles are also not significant. However, diesel exhaust health risks from exhaust particulate matter may still be possible even when ROG and NOx emissions are less than significant. The AQMD Guide assumes that construction projects that consume less than 3,700 gallons of fuel for pre-1996 equipment and less than 37,000 gallons of fuel for 1996 and post-1996 equipment reduce the diesel PM health risk to acceptable levels. The exact construction equipment needed for the individual projects is unknown at this time. However, the relatively small footprints of the Master Plan projects, the long time frame over which all of the projects would be constructed, and the incorporation of the mitigation measure for ROG and NOx that restricts the amount of disturbed acreage at any one time would all ensure that the projects requiring mechanized construction equipment would use less than the specified fuel limits over a typical construction period.

Per the AQMD Guide, mass emissions of fugitive dust (PM10) do not need to be quantified and can be assumed to be less than significant if the project includes measures that would prevent visible dust beyond the project property lines. Many of the SPRA Master Plan projects require no grading and little or no mechanized equipment. For projects that do require grading or earthwork, the relatively small footprints of the Master Plan projects, the long time frame over which all of the projects would be constructed, and the incorporation of the mitigation measure for ROG and NOx that restricts the amount of disturbed acreage at any one time, would all ensure that the projects requiring mechanized construction equipment would create minimal amounts of fugitive dust. All projects that require a County of El Dorado Grading Permit would meet all applicable

requirements of the AQMD's Rule 223, Fugitive Dust-General Requirements and Rule 223-1, Fugitive Dust-Construction Requirements.

The project site is not located in an area identified by the County as a Naturally Occurring Asbestos (NOA) Review Area and the potential for NOA occurring on the project site is very low. However, should naturally occurring asbestos be discovered during construction activities, the project would implement and follow AQMD Rule 223-2, Fugitive Dust-Asbestos Hazard Mitigation.

These fugitive dust control rules were updated as recently as October 2005 and contain specific measures that would prevent visible dust from migrating beyond the property line and would ensure that any impacts from fugitive dust would be less than significant.

**After construction and build out of the SPRA Master Plan projects, emissions of criteria pollutants from vehicle trips and operation of the projects will contribute to long-term emissions in the region.**

Long-term air quality impacts are associated with the operational characteristics of the project and typically are the result of the use of equipment that directly generates pollutants (e.g. diesel powered water pumps or electrical generators) and vehicle trips. It is expected that the primary long term air quality impact would be created by mobile emissions related to vehicle trips to and from the project site.

The AQMD's Guide to Air Quality Assessment also provides several methodologies to determine potential significance of emissions resulting from operation of projects after construction. For project screening purposes, the District's Guide contains a land use table with project size descriptions that would be expected to result in emissions greater than the 82 lbs/day significance thresholds of ROG or NOx. The size limits were calculated using the URBEMIS computer model. URBEMIS stands for "Urban Emissions Model", and estimates emissions in pounds per day (lbs/day) generated from both construction and operation of projects after construction. Long-term impacts include emissions from gas appliances, wood stoves, fireplaces, landscape maintenance equipment, and vehicle use. The URBEMIS model is widely used in California by air districts, local governments, project developers, and environmental consultants and is recommended and approved for use by multiple air quality districts throughout the state. The AQMD land use and emissions table is shown in Table 4.5-3.

The values provided in the table are based upon average and default assumptions and are therefore a screening guide only. Projects close to the limits would be expected to use a project specific URBEMIS model. Expected vehicle trips expected of each listed land use are based upon the square footage, rooms, and student limits in the AQMD table.

The anticipated projects for SPRA do not exactly correspond to any of the land development types listed in the table. However, the elementary school land use is potentially the most representative. To assess the accuracy of the methodology, three URBEMIS models were run. Using the current version of URBEMIS, version 8.7 (California Air Resources Board, 2005) with the same settings (Mountain Counties Air Basin; Rural location; Target year 2002; Maximum daily emissions for winter conditions (40°F average temperature) or summer conditions (85°F

average temperature), whichever is greater) can provide an accurate check of the methodology. An URBEMIS model for 350,000 square feet of manufacturing park use resulted in maximum projected daily NOx emissions of 83.90 lbs/day which closely corresponds to the AQMD table. An URBEMIS model for a 2100 student elementary school resulted in maximum projected daily NOx emissions of 78.52 lbs/day, also closely corresponding to the AQMD table. The daily trips calculated by the URBEMIS program for each of these land uses was 2,436 daily trips for the industrial park and 2,709 daily trips for the elementary school. The emissions differences between the two models are from differences in number of trips associated with the different land uses and also from the distances of trips associated with each land use. The URBEMIS models for these two land use screening level checks are in Appendix C.

**Table 4.5-3 — Projects With Potentially Significant ROG and NOx Operation Emissions**

Development Type	Project Size Likely to generate 82 lbs/day or more of ROG or NOx <sup>1</sup>
Single Family Housing (with fireplaces/wood stoves)	230 dwelling units (48 dwelling units)
Apartments, low-rise (with fireplaces/wood stoves)	350 dwelling units (47 dwelling units)
General Office	260,000 square feet
Medical Office Building	110,000 square feet
Warehousing	825,000 square feet
Manufacturing <sup>2</sup>	620,000 square feet
Industrial Park <sup>2</sup>	350,000 square feet
Hospital	125,000 square feet
Bank/Financial Institution	30,000 square feet
Quality Restaurant	55,000 square feet
Fast Food Restaurant (with drive-thru)	8,000 square feet
Office Park	210,000 square feet
Convenience Market (24 hr)	8,500 square feet
Convenience Market (24 hr) w/gasoline pumps	7,600 square feet
Supermarket	45,000 square feet
Shopping Center	62,000 square feet
Motel	480 rooms
Hotel	490 rooms
Elementary School	2,100 students
High School	2,300 students

<sup>1</sup>Based upon URBEMIS7G for Windows, Version 5.1.0; Mountain Counties Air Basin; Rural location; Target year 2002; Maximum daily emissions for Winter conditions (40°F average temperature) or Summer conditions (85°F average temperature), whichever is greater.

<sup>2</sup>Based on emission from indirect sources (motor vehicles) only. Emissions associated with manufacturing or industrial processes, if any, must also be accounted.

The Scout/Youth Group Camp, Sugarloaf Fine Arts Center, and Retreat and Event Center have a combined maximum capacity of 960 people. It is expected that the maximum additional daily trips generated from combined projects of SPRA would be approximately 1,310 trips (when the Scout/Youth Group Camp, Sugarloaf Fine Arts Camp, and Retreat and Event Center are all at maximum capacity on the same day). Based upon the emissions projected from land uses with over 2,000 trips, it is expected that ROG and NOx emissions generated from vehicle trips once all of SPRA projects are completed would be far below the significance screening thresholds. Also, with the completion of these facilities not expected until 2008 or beyond, emissions would be further reduced due to improvements (reductions) in vehicle emissions from a newer mix of vehicles. To more accurately represent the expected SPRA use, a third URBEMIS screening check model was run using the elementary school as the land use but changing the number of students to 960, the trip rate to reflect 1,310 daily trips, and the operational year to 2008. This model resulted in a maximum NOx emission of 23.96 lbs/day, well below the significance level of 82 lbs/day. This model is also located in Appendix C. Based upon the screening methodology recommended in the AQMD Guide, no further specific project analysis is necessary. It is expected that additional vehicle trip emissions generated from the SPRA Master Plan projects would be less than significant.

#### **4.5.5 Mitigation Measures**

**AQ-1:** Construction activities will limit the amount of actively disturbed ground areas to no more than 6 acres on any single day.

**AQ-2:**

- The construction contractor(s) shall maintain equipment in tune per manufacturer specifications.
- The construction contractor(s) shall use catalytic converters on gasoline-powered equipment.
- The construction contractor(s) shall not leave inactive construction equipment idling for prolonged periods (i.e., more than 5 minutes).

Implementation of the above Mitigation Measures will reduce the impacts from construction emissions to less than significant.

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## 4.6 Noise

Noise is often defined as unwanted sound. Sound is a mechanical form of radiant energy transmitted by pressure waves in air. It is defined as any pressure variation in air that the human ear can detect. Sound waves are typically characterized by amplitude (loudness) and frequency (tone) as described below.

The number of pressure variations (cycles) per second in air is referred to as the frequency. Frequency is typically expressed in cycles per second or Hertz (Hz). If the pressure variations in air occur frequently enough (at least 20 times per second), they can be heard and are called sound. The human ear is not equally sensitive to sound at different ranges of frequency. Sound frequencies below 16 Hz or above 20,000 Hz cannot be heard at all. The human ear is more sensitive to sound in the higher frequencies than the lower frequencies.

Amplitude is the difference between ambient air pressure and the peak pressure of the sound wave, and is measured in decibels (dB). Amplitude measurements in decibels are based on a logarithmic scale rather than a linear scale. Therefore, the pressure difference in a 10 dB sound is 10 times that of a zero dB sound, a 20 dB sound is 100 times the pressure difference of a zero dB sound, etc. This decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another feature of the decibel scale is the way in which sound amplitudes from multiple sources are combined. A 65 dB point source of sound (e.g., a boat) when joined with another similar source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by three dB). Amplitude is interpreted by the ear as corresponding to different degrees of loudness.

A three dB change in amplitude is the minimum audible change the average person can perceive. Humans cannot typically perceive an increase of one or two dB. A change in sound level of at least 5 dB is required before any noticeable change in community response is expected. A 10 dB change is subjectively heard as approximately doubling in loudness, and would likely cause an adverse community response.

The perceived loudness of sounds is dependent on many factors, including amplitude and frequency. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighting the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. Hence, the A-weighted sound level has become the standard measurement of environmental noise assessment. The normal range of hearing extends from about 0 dBA to about 140 dBA on the A-weighted decibel scale. Table 4.6-1 lists several examples of the A-weighted noise levels associated with common situations.

**Table 4.6-1 — Typical A-Weighted Sound Levels  
of Common Noise Sources**

A-weighted Sound Level (dBA)	Example
130	Threshold of pain
120	Jet aircraft take-off at 100 feet
110	Riveting machine at operators position
100	Shot-gun at 200 feet
90	Bulldozer at 50 feet
80	Diesel locomotive at 300 feet
70	Commercial jet aircraft interior during flight
60	Normal conversation speech at 5-10 feet
50	Open office background level
40	Background within a residence
30	Soft whisper at 2 feet
20	Interior of a recording studio

Environmental noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, boats, and airplanes, and stationary sources such as construction sites, machinery, stadiums, and amphitheaters. Noise generated by mobile sources typically attenuates at a rate between 3.0 and 4.5 dBA with a doubling of the distance from the source. The rate of attenuation depends on the ground surface and the number of objects between the noise source and the receiver. Hard and flat surfaces such as concrete or asphalt have an attenuation rate of 3.0 dBA per doubling of distance between the source and receiver. Soft surfaces such as uneven or vegetated terrain have an attenuation rate of approximately 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6.0 and 7.5 dBA per doubling of distance.

Environmental noise can be reduced by placing barriers between the noise source and the receiver (e.g., individuals in the community). The barriers contribute to reduced noise levels when the barrier breaks the line of sight between the source and the receiver. Buildings, walls, berms, and dense foliage can all act as noise barriers. Buildings, concrete walls, and berms are more effective at reducing noise level than wooden walls or dense foliage.

The intensity of environmental noise fluctuates over time, and several units of time-averaged noise levels are used. The three most commonly used units are Leq, Ldn and CNEL. The energy equivalent noise level, Leq, is a measure of the average energy content (intensity) of noise over any given period of time. Many communities use 24-hour units to regulate noise. The day-night average noise level, Ldn, is the 24-hour average of the noise intensity, with a 10 dBA “penalty” added for nighttime noise (10:00 p.m. to 7:00 a.m.) to account for the greater sensitivity to noise during this period.

The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. The community noise equivalent, CNEL, is similar to Ldn, but adds a 5 dBA penalty to evening noise (7:00 p.m. to 10:00 p.m.) based on a similar assumption.

The following sections address the existing noise conditions at the project site, the applicable regulatory requirements, potential environmental noise impacts, and an analysis of proposed mitigation measures for these potential impacts.

#### **4.6.1 Existing Conditions**

Bollard & Brennan, Inc. conducted an initial assessment of issues, opportunities, and constraints related to noise at Sly Park. The assessment is based on noise level data, observations conducted by Bollard & Brennan staff, and information obtained from Sly Park staff and nearby neighbors. The complete assessment is located in Appendix D of this document.

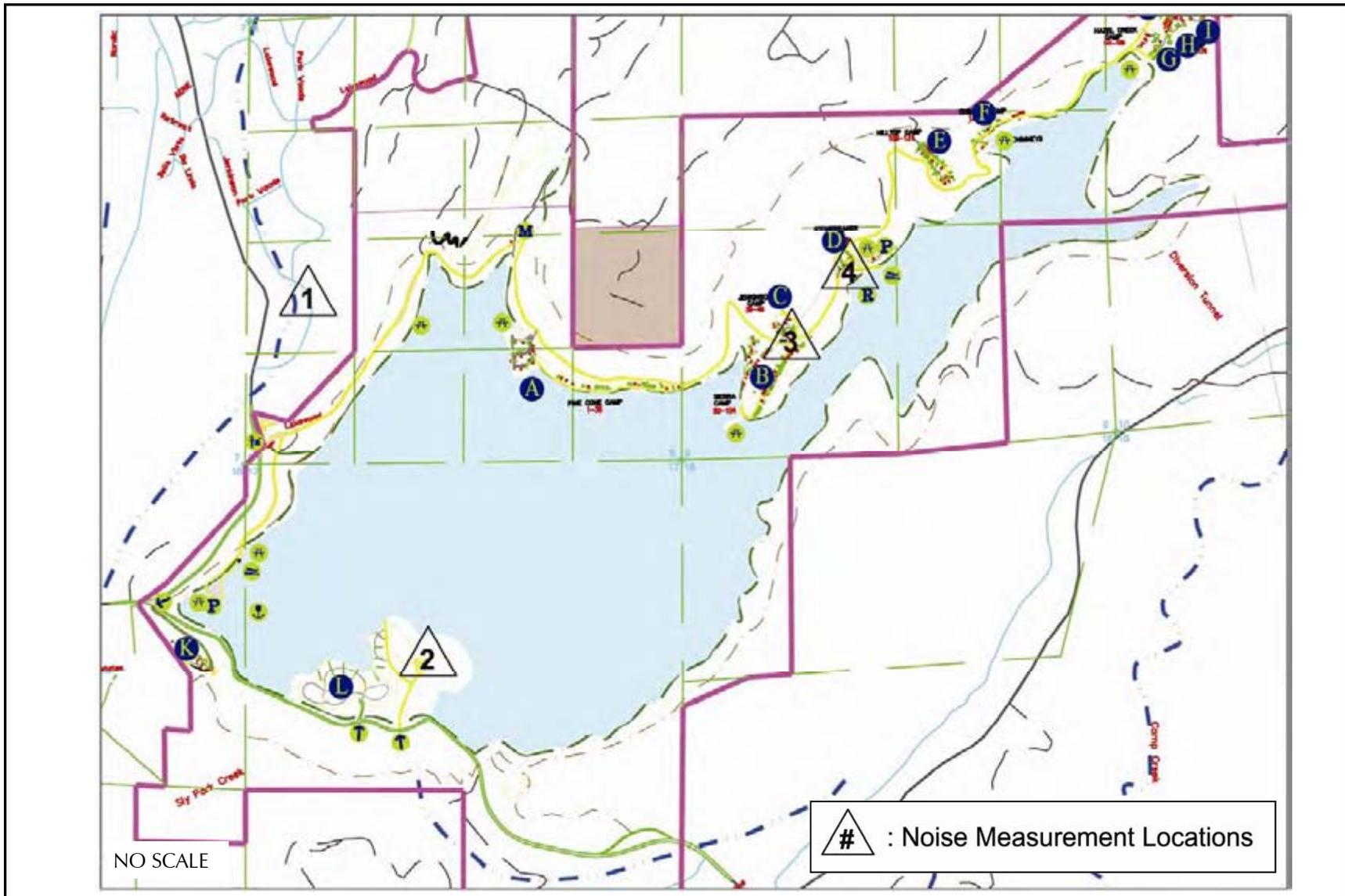
The primary noise sources in the immediate vicinity of SPRA consist of traffic on Sly Park Road, boat noise on Jenkinson Lake, and camping activities.

Existing ambient noise levels at SPRA were monitored and measured at four locations in and near the project site during the weekend of July 24-25, 2004. Park usage was at maximum capacity on this weekend and boating activity was heavy. Monitoring locations of the noise level measurements are shown in Figure 4.6-1.

Continuous 24-hour noise level measurements were conducted at each location with a Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter. The meters were calibrated before and after use with an LDL CAL200 acoustical calibrator to ensure the accuracy of the measurements. The measurement system meets all pertinent specifications of the American National Standards Institute (ANSI S1.4) for precision sound level measurement equipment.

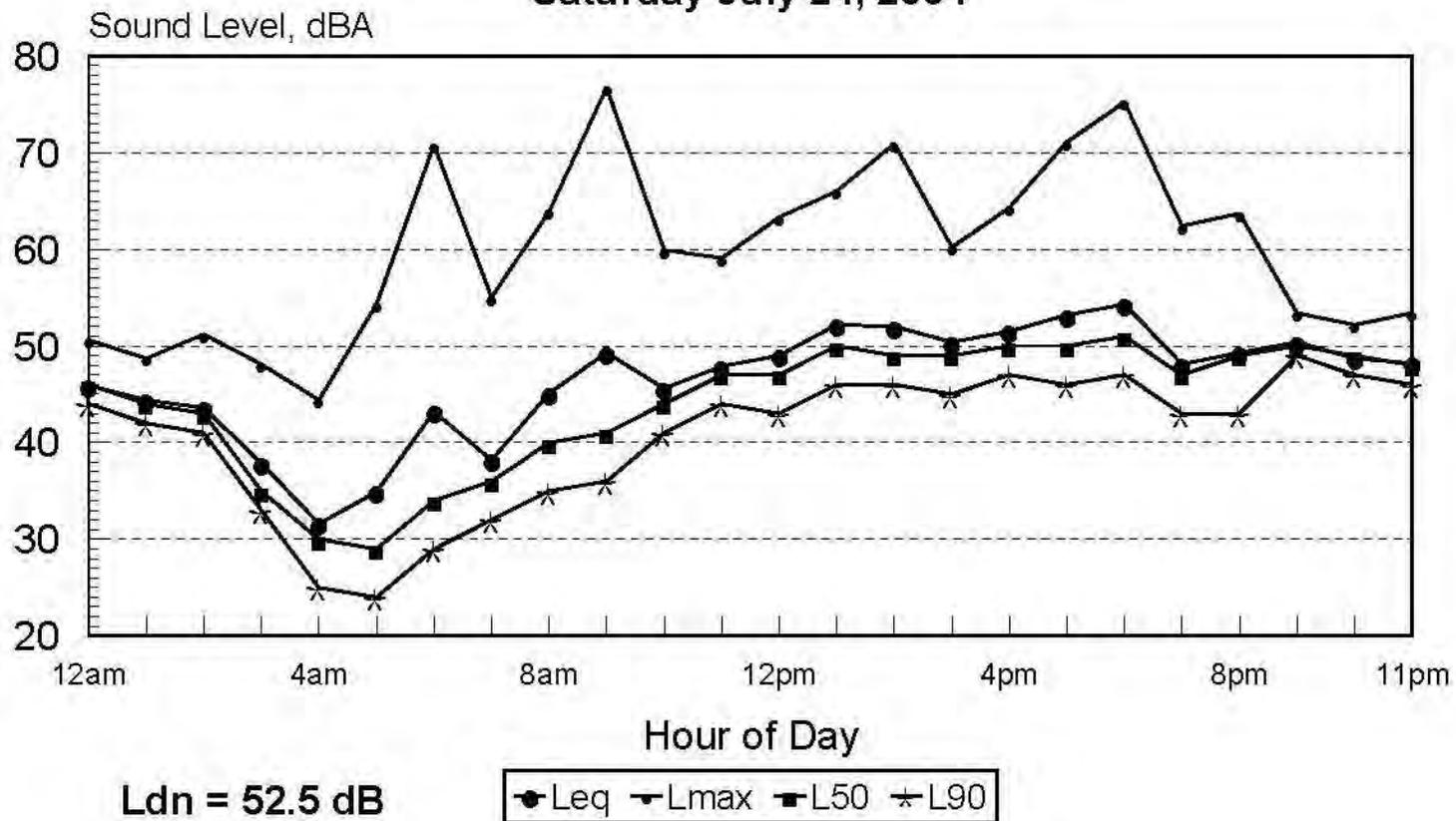
The hourly ambient noise monitoring results are shown in Figure 4.6-2 through Figure 4.6-9. Table 4.6-2 contains a summary of the results shown in these figures. The ambient noise monitoring results indicate that the measured daytime ambient noise level at the project site are fairly typical of recreation areas affected by intensive day usage, particularly boating in this case. Although Table 4.6-2 shows the maximum noise levels exceeded 70 dBA at times, examination of Figure 4.6-2 through Figure 4.6-9 indicates that the elevated maximums were intermittent and not constant.

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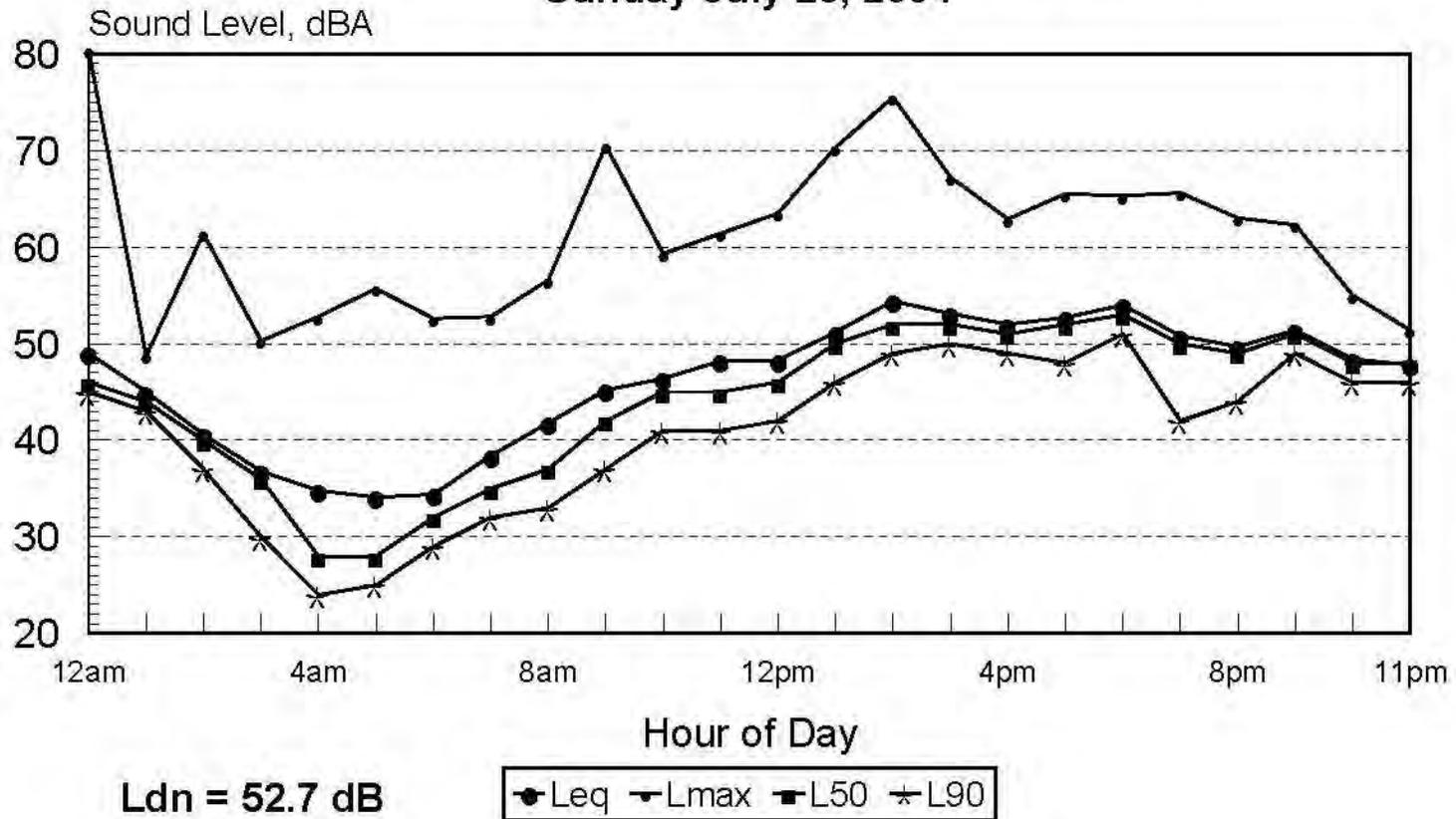
### NOISE MEASUREMENT LOCATIONS

**Continuously Measured Hourly Noise Levels  
Sly Park Master Plan - 4699 Jenkinson Circle  
Saturday July 24, 2004**



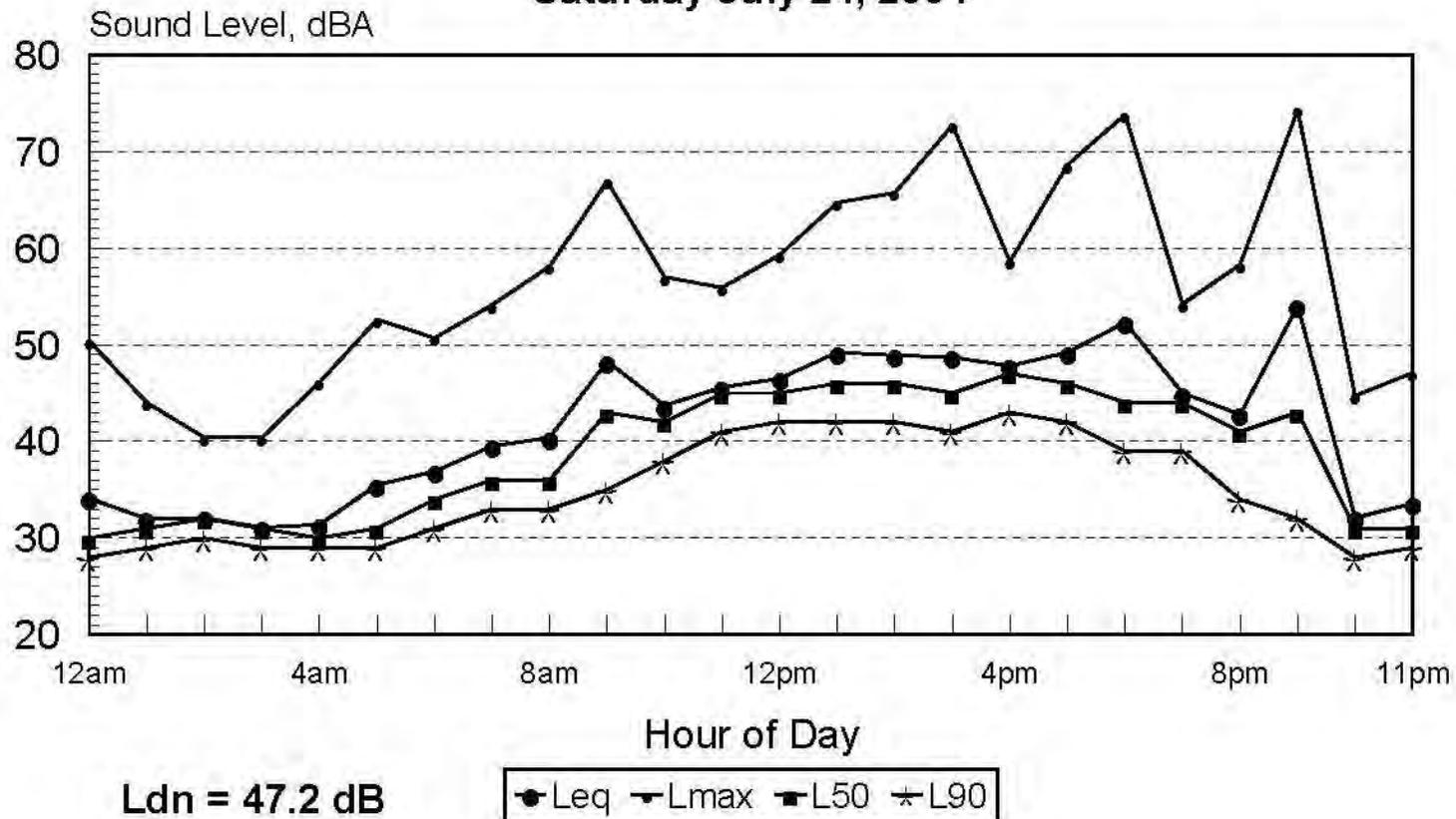
**NOISE LEVELS—JENKINSON CIRCLE, JULY 24, 2004**

**Continuously Measured Hourly Noise Levels  
Sly Park Master Plan - 4699 Jenkinson Circle  
Sunday July 25, 2004**



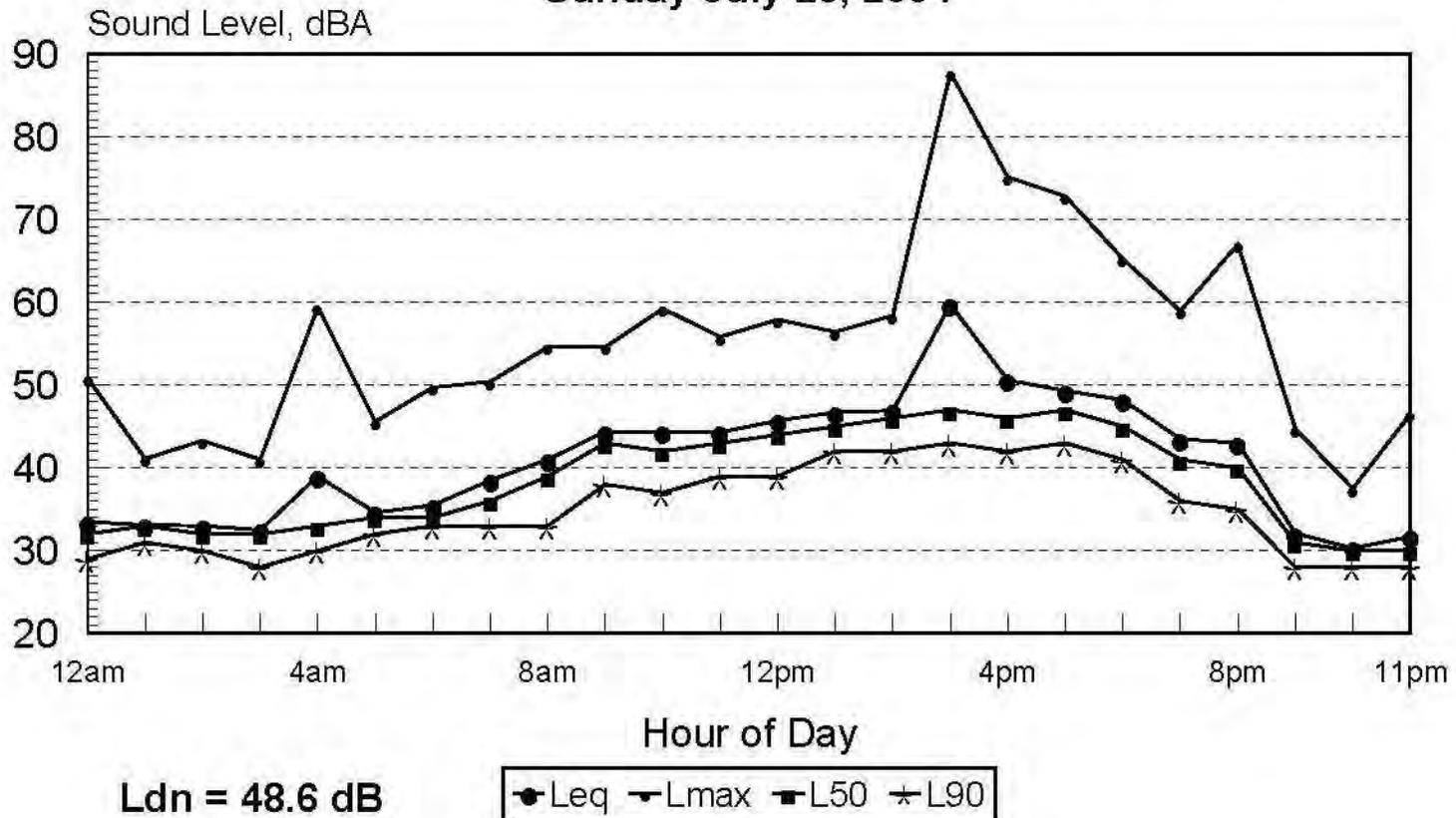
**NOISE LEVELS—JENKINSON CIRCLE, JULY 25, 2004**

**Continuously Measured Hourly Noise Levels  
Sly Park Master Plan - Unused Bldg. (Near Group Area 5)  
Saturday July 24, 2004**



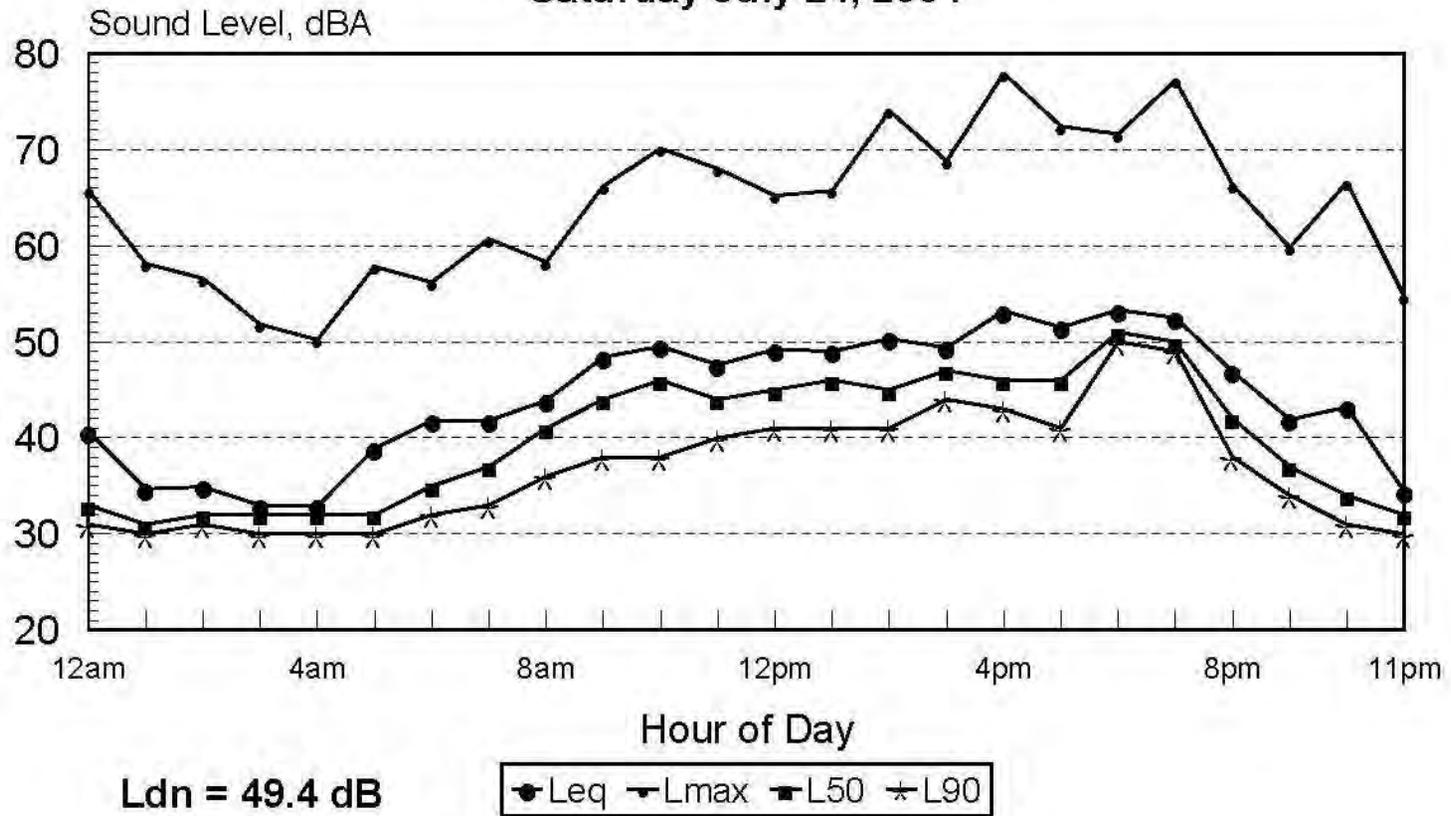
**NOISE LEVELS—NEAR GROUP AREA 5, JULY 24, 2004**

**Continuously Measured Hourly Noise Levels  
Sly Park Master Plan - Unused Bldg. (Near Group Area 5)  
Sunday July 25, 2004**



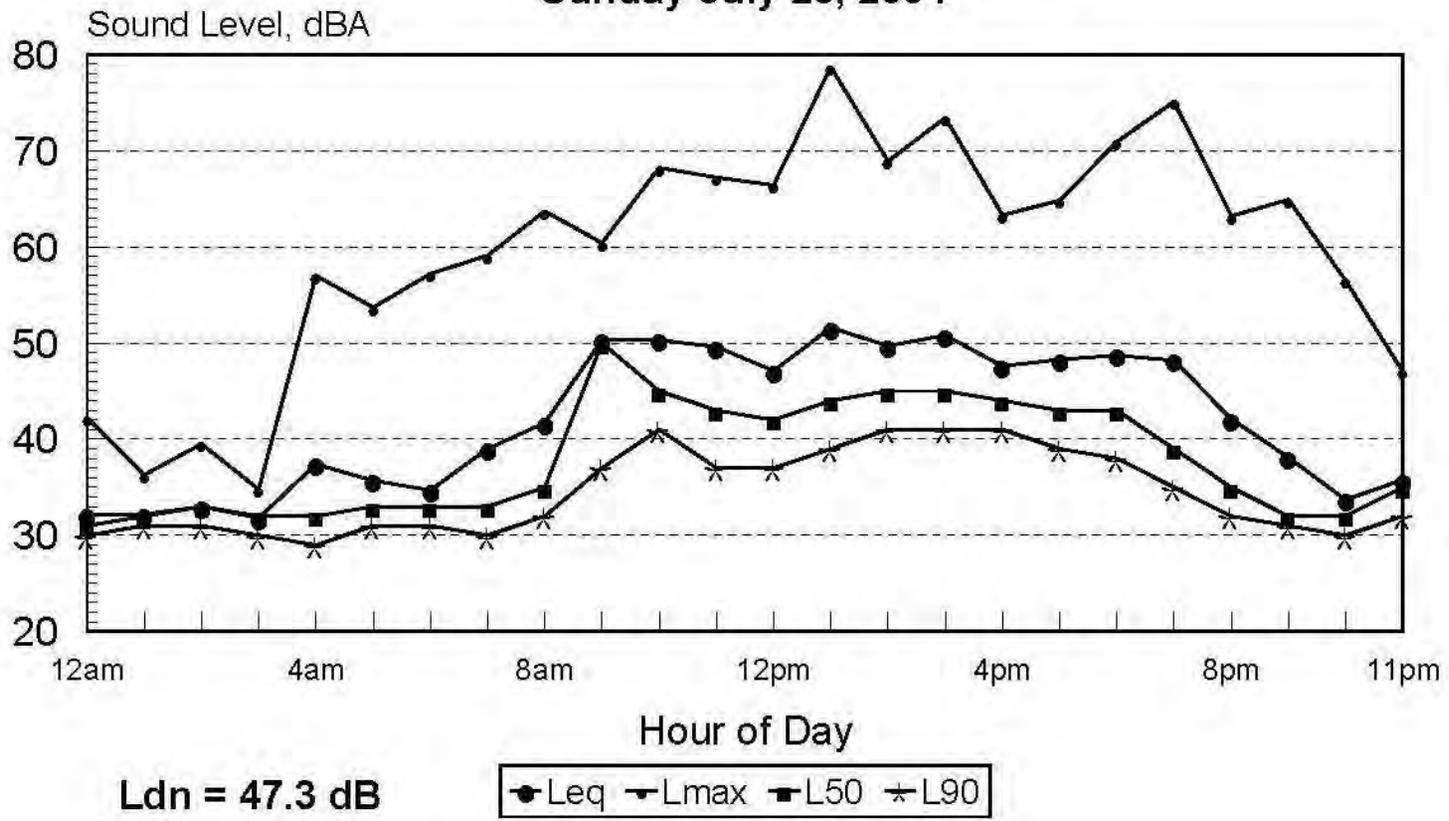
**NOISE LEVELS—NEAR GROUP AREA 5, JULY 25, 2004**

**Continuously Measured Hourly Noise Levels  
Sly Park Master Plan - Camp Host  
Saturday July 24, 2004**



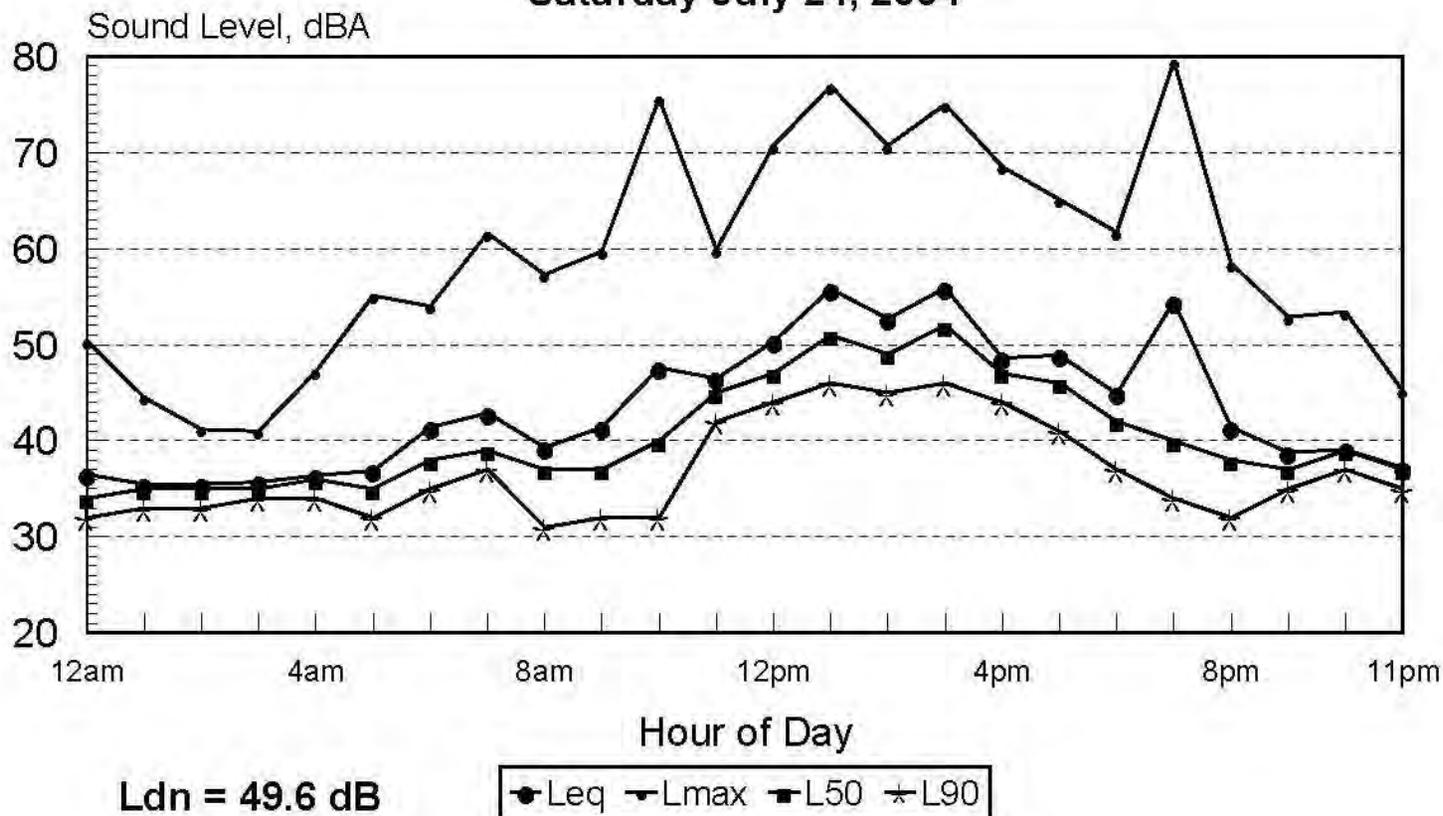
**NOISE LEVELS—CAMP HOST, JULY 24, 2004**

**Continuously Measured Hourly Noise Levels  
Sly Park Master Plan - Camp Host  
Sunday July 25, 2004**



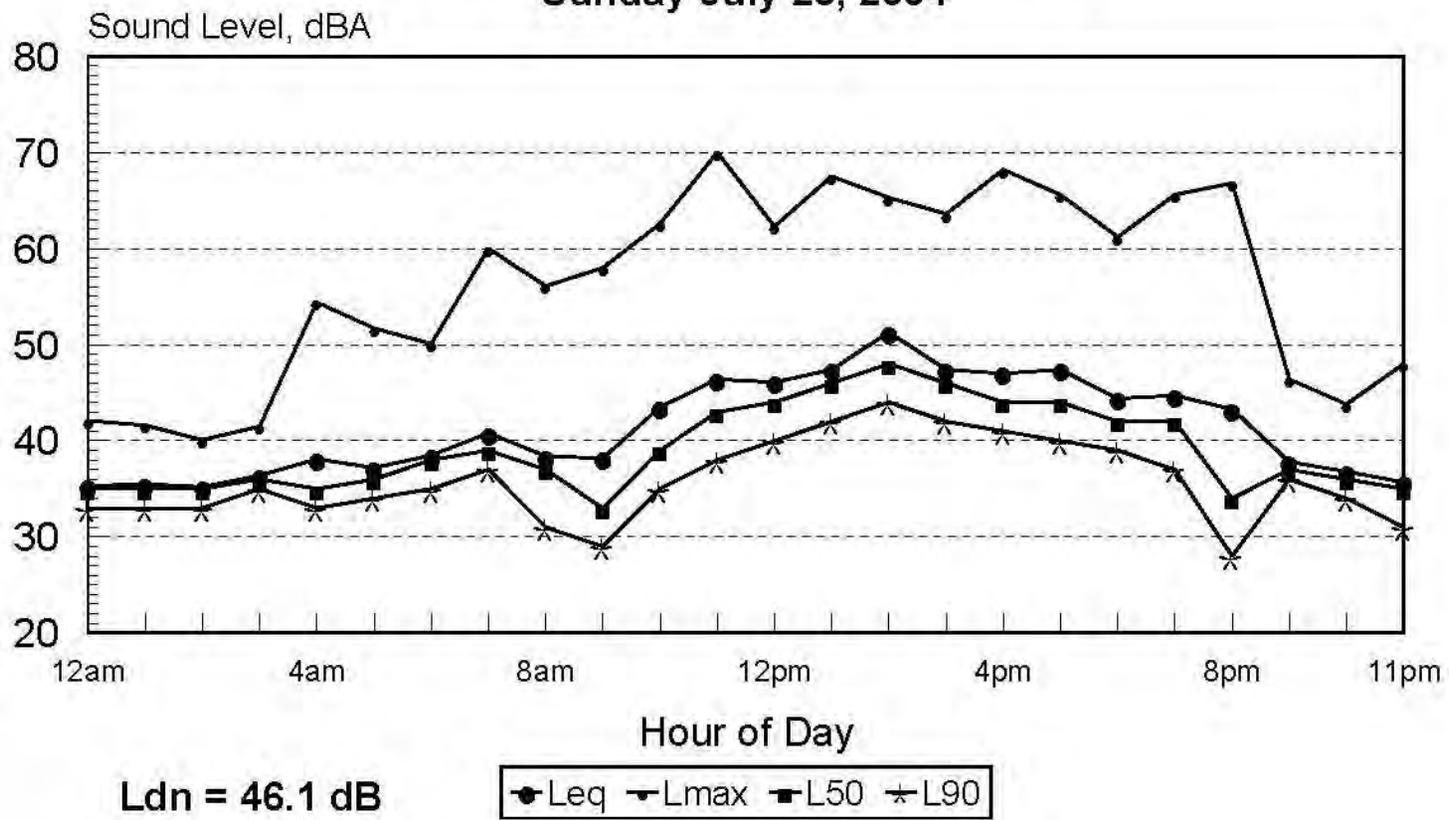
**NOISE LEVELS—CAMP HOST, JULY 25, 2004**

**Continuously Measured Hourly Noise Levels  
Sly Park Master Plan - Boat Rentals  
Saturday July 24, 2004**



**NOISE LEVELS—BOAT RENTALS, JULY 24, 2004**

**Continuously Measured Hourly Noise Levels  
Sly Park Master Plan - Boat Rentals  
Sunday July 25, 2004**



**NOISE LEVELS—BOAT RENTALS, JULY 25, 2004**

**Table 4.6-2 — Ambient Noise Monitoring Results Sly Park Recreation Area and Vicinity, July 24 – 25, 2004**

		Measured Sound Levels, dBA				
		Average ( $L_{eq}$ )		Measured ( $L_{max}$ )		
Site	Location	Daytime	Nighttime	Daytime	Nighttime	L <sub>dn</sub>
1	4699 Jenkinson Circle	50	45	53-77	44-80	53
2	Near Group Area 5	48-50	34	45-88	38-59	47-49
3	Camp Host Camp Area	48-50	35-39	58-78	35-67	47-49
4	Near Boathouse	46-51	37-38	46-80	40-55	46-50

Source: Bollard & Brennan, 2005.

## 4.6.2 Regulatory Setting

Responsibility for noise control varies among federal, state, and local levels of government depending on the type of source. Federal and state regulations require the mitigation of transportation noise impacts on adjacent and nearby residential areas. Federal agencies also regulate health based maximum noise exposure levels. Local jurisdictions have the responsibility for determining the land uses that are suitable for specific noise environments.

### **Federal**

The U.S. Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) have issued guidelines for the regulation of noise. Beyond these guidelines, the federal government has no enforceable standards or regulations governing environmental noise levels.

The EPA issued guidance in 1974 for the protection of public health and welfare in residential land use areas. The guidance specifies an outdoor L<sub>dn</sub> of 55 dBA and an indoor L<sub>dn</sub> of 45 dBA. It should be noted that these guidance levels are not considered to be standards or regulations. The levels were developed as guidance only and do not take technical and economic factors into consideration.

### **State**

The state does not promulgate standards or regulations for environmental noise. Instead, the state requires each county to include a noise element in its general plan (California Government Code Section 65302(f)). Title 4 of the California Code of Regulations contains guidelines for evaluating the compatibility of various land uses with respect to community noise exposure.

### **Local**

Standards regarding noise are included in the Noise Element of the El Dorado County General Plan. The goal of the noise element is to ensure that County residents are not subjected to noise beyond acceptable levels.

### ***El Dorado County General Plan and Standards of Significance***

The existing El Dorado County General Plan Noise Element (Noise Element), adopted July 19, 2004, establishes separate noise criteria for transportation-related noise sources and non-

transportation noise sources. El Dorado County standards for transportation noise are listed in Table 4.6-3. Table 4.6-4 lists El Dorado County standards for non-transportation noise.

Transportation noise sources are defined as “traffic on public roadways, railroad line operations and aircraft in flight.” The applicable El Dorado County standard for residential transportation noise is an Ldn of 60 dBA. Playgrounds and neighborhood parks are specified an Ldn of 70 dBA for transportation noise.

The Noise Element states that non-transportation sources may include outdoor recreation facilities. Therefore, it is assumed that the non-transportation noise standards are applicable to the recreational activities at SPRA. The non-transportation noise sources associated with SPRA include all outdoor activities such as camping, boating, group picnic activities, etc. The land use west of SPRA is primarily residential subdivisions of varying densities within the Camino/Pollack Pines designated Community Region. The acoustic character of the area is commensurate with a community setting. The areas north, east, and south of SPRA are primarily designated Rural Regions with most of the land use being defined as Natural Resource. Within the natural resource areas, residential agriculture zoning is allowed on 40 acre minimum parcels. The acoustic setting of these areas is primarily rural in nature. Much of the land to the immediate south of SPRA is part of the federal Eldorado National Forest.

**Table 4.6-3 — Maximum Allowable Noise Exposure for Transportation Noise Sources**

Land Use	Outdoor Activity Areas <sup>1</sup> L <sub>dnr</sub> /CNEL, dB	Interior Spaces	
		L <sub>dnr</sub> /CNEL, dB	L <sub>eq</sub> , dB <sup>2</sup>
Residential	60 <sup>3</sup>	45	--
Transient Lodging	60 <sup>3</sup>	45	--
Hospitals, Nursing Homes	60 <sup>3</sup>	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60 <sup>3</sup>	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Source: El Dorado County, 2004.

Note:

- (1) In Communities and Rural Centers, where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB Ldn shall be applied at the building facade, in addition to a 60 dB Ldn criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB Ldn shall be applied at a 100 foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB Ldn may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.
- (2) As determined for a typical worst-case hour during periods of use.
- (3) Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

**Table 4.6-4 — Noise Level Performance Standards for Noise Sensitive Land Uses Affected by Non-transportation\* Sources**

Noise Level Descriptor	Daytime 7 a.m. - 7 p.m.		Evening 7 p.m. - 10 p.m.		Night 10 p.m. - 7 a.m.	
	<i>Community</i>	<i>Rural</i>	<i>Community</i>	<i>Rural</i>	<i>Community</i>	<i>Rural</i>
Hourly $L_{eq}$ , dB	55	50	50	45	45	40
Maximum level, dB	70	60	60	55	55	50

Source: El Dorado County, 2004.

Note: Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site

### 4.6.3 Environmental Impact Thresholds/Criteria for Evaluation

The project would be considered to have a significant adverse impact due to noise if the project would result in:

- exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project; or
- substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

### 4.6.4 Environmental Impacts

This section identifies and discusses potential noise impacts resulting from the proposed project and suggests mitigation measures to reduce the levels of impact. A discussion of mitigation measures is provided in Section 4.6.5.

Improvements to existing facilities and the creation of additional recreational facilities have the potential to generate noise in the construction and use phases of the Master Plan elements. However, many of the Master Plan projects are designed to enhance the existing quality and character of SPRA features and do not add capacity to those features.

Potential impacts that may occur by either construction or operation of projects in the Master Plan are listed below. Impacts fall under three general areas: construction noise, noise created by use of upgraded or new SPRA facilities, and vehicular noise from increased traffic to the site.

Individual project type, size, location, distance from sensitive receptors, topography, and existing or planned vegetative barriers all influence whether or not the construction and/or use of the project will result in potentially significant noise impacts. Many of the proposed projects are

small in scope, are surrounded by significant vegetation and trees, and are separated from noise-sensitive land uses by distance and sound attenuating topography.

Each individual project that is part of the Master Plan is also listed in Table 4.6-5 with its associated potential to create construction noise, noise from operation, and vehicular noise that would be significant to noise sensitive land uses.

**Potential increase in construction noise associated with improvement of existing facilities and creation of new recreational facilities due to the project.**

Because of the small size of the individual projects, and the expectation that projects would be constructed over a multi-year time period, it is expected that construction noise impacts would be less than significant because a minimal amount of construction equipment would be operating at any single time. Many of the proposed projects would involve minimal site preparation and limited use of power equipment and would have no impact or less than significant impact due to construction noise. Larger projects that require more site grading and expected construction of larger structures may have construction noise impacts that are potentially significant. All proposed projects are evaluated in Table 4.6-5 for their potential to create significant levels of construction noise.

**Potential increase in noise associated with increased park usage due to improvement of existing facilities and creation of new recreational opportunities as a result of the project.**

SPRA currently has a number of rules and regulations in place that restrict noise generating activities. Quiet hours are established from 10pm to 6am, boat speeds are regulated, boats may be tested against state noise standards, and campground internal road speeds are regulated. The operation of many of the planned projects is not expected to create any additional noise impacts because most of the projects do not create increases in park-wide occupancy or noise generating activities. Rehabilitation of vegetation, campground reconfiguration, and trail improvements are examples of the many projects that would not result in significant noise generation from use of the facilities. Several projects, including the Sugarloaf Fine Arts Camp, the Retreat and Events Center, and the operation of Scout /Youth Group Camp have the potential for generating additional ambient noise. However, much of the land surrounding the Sugarloaf Fine Arts Camp and the Retreat and Events Center is within SPRA itself and the land to the south of these sites is part of the Eldorado National Forest. As such, there are no noise sensitive residential land uses near these locations. The Scout/Youth Group Camp is approximately 1,350 feet from the nearest residence and it is expected that at that distance activities from the site would not significantly affect noise-sensitive land uses. For these reasons, it is expected that noise from use of the proposed projects would result in a less than significant impact. All projects are evaluated in Table 4.6-5 for their potential to create significant levels of noise.

**Vehicular traffic impacts associated with the proposed project would result in increased noise levels.**

The operation of many of the planned projects is also not expected to create any additional traffic noise impacts because most of the projects do not create additional park-wide capacity or result in additional vehicular traffic. Rehabilitation of vegetation, campground reconfiguration, and

access road improvements are examples of projects that would not result in additional noise generation from traffic. Several projects, including the Sugarloaf Fine Arts Camp, the Retreat and Events Center, and the operation of the Scout/Youth Group Camp have the potential for generating additional traffic noise. However, these operational programs of these facilities would restrict arrival and departure traffic to hours outside the peak commute hours. Therefore, the noise impacts from traffic are expected to be less than significant. These projects, along with all other proposed projects, are evaluated in Table 4.6-5 for their potential to create significant levels of transportation noise.

**Table 4.6-5 — Impacts Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Construct New Campsites</b>                      13.04 Dogwood Camp                      16.02 Primitive Camp Area</p>	<p>The construction and use of two additional camp sites at Dogwood Camp and the construction and use of up to 10 primitive walk-in camp sites is not expected to create significant noise impacts from construction or operation, nor is it expected to create additional vehicular noise.</p>	<p>Less than Significant Impact</p>
<p><b>Construct Post/Pier Structures</b>                      2.09 Scout/Youth Group Camp Mess Hall                      2.12 Scout/Youth Group Camp (North)                      2.13 Scout/Youth Group Camp (South)                      2.17 Scout/Youth Group Camp Mess Hall                      5.02 Jenkinson Camp                      10.04 Chimney Camp                      20.03 Retreat and Event Center                      20.05 Retreat and Event Center (Phase I)                      20.06 Retreat and Event Center (Phase II)</p>	<p>The construction and use of five cabins at Jenkinson Camp and Chimney Camp is not expected to create significant noise impacts from construction or operation, nor is it expected to create additional vehicular noise. Construction of a covered pavilion and duplex cabins at the Retreat and Event Center, and the construction of two mess halls, cabins, and yurts at the Scout/Youth Group Camp would involve a larger amount of equipment although these projects would be built over a period of years and in different phases.</p> <p>Use of the Retreat and Event Center is not expected to create additional noise impacts as the nearest land outside of SPRA is part of the Eldorado National Forest and there are no noise sensitive residential land uses near this location. Within SPRA, use of this facility would be subject to all rules and regulations of SPRA, including those pertaining to noise.</p> <p>Use of the Scout/Youth Group Camp may involve gatherings of over 300 people. Due to the distance between this location and the residences to the east and southeast (1350 to 1500 feet) it is not expected that noise from the Scout/Youth Group Camp at maximum capacity would exceed the El Dorado County standard by increasing the ambient noise levels at the residential land uses by more than 3 dBA. The activities at this location would also be subject to all rules and regulations of SPRA, including those pertaining to noise. This includes an established quiet time from 10pm to 6am.</p> <p>Traffic to activities at the Scout/Youth Group Camp and the Retreat and Event Center is expected to result in approximately 1,310 trips on any day where both facilities are operating at full capacity and arrivals and departures are occurring on the same day. However, the programs for these facilities would restrict arrivals and departures to time frames outside the peak commute hours and therefore impacts from traffic noise is expected to be less than significant.</p>	<p>Potentially Significant Impact                      (Construction, 2.09, 2.12, 2.13, 2.17, 20.03, 20.06)</p>
<p><b>Reconfigure Campsites</b>                      2.07 Scout/Youth Group Camp                      2.11 Scout/Youth Group Camp                      2.14 Scout/Youth Group Camp                      2.16 Scout/Youth Group Camp                      4.03 Pine Cone Camp                      4.04 Pine Cone Camp                      4.05 Pine Cone Camp                      6.04 Sierra Camp (West)                      6.05 Sierra Camp (East)</p>	<p>Reconfiguration of individual campgrounds, including the defining of campground sites and locating tent, table and amenity sites appropriately, is not expected to create significant noise impacts from construction or operation, nor is it expected to create additional vehicular noise. Campsite reconfiguration at the Scout/Youth Group Camp would involve the construction of up to 25 tent pods and two open amphitheaters with bench seating and central fire rings. The small footprint of these tent pods and the approximately 80-foot diameter rustic amphitheaters are not expected to create significant noise impacts.</p>	<p>Less than Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
7.03 Stonebraker Camp 8.03 Hilltop Camp 9.02 Chimney/Hilltop Host Site 10.02 Chimney Camp 12.01 Hazel Creek Camp 13.02 Dogwood Camp 14.03 Rainbow Camp 15.03 Kamloop Camp 21.01 Main Group Campground (Relocate Host Site) 21.06 Main Group Campground (Tent Sites at Groups Sites #1 and #5) 21.09 Main Group Campground (Tent Sites at Group Site 32) 21.12 Main Group Campground (Tent Sites at Group Site #3 and #4) 21.14 Main Group Campground (Group Kitchens) 23.01 Black Oak Equestrian Camp		
<b>Construct New Day Use Area</b> 19.03 Bumpy Meadow Trailhead	Establishment of a 50' x 50' day use area with picnic tables would not create significant noise impacts from construction, use, or traffic.	Less than Significant Impact
<b>Reconfigure Day Use Area</b> 7.04 Stonebraker Camp	This reconfiguration of four day use sites would not create significant noise impacts from construction, use, or traffic.	Less than Significant Impact
<b>Trail Construction</b> 1.03 Main Park Entrance 2.05 Scout/Youth Group Camp 7.01 Stonebraker Camp 12.04 Hazel Creek Camp 16.01 Primitive Camp Area 18.01 Dog Park 22.01 Mountain Bike Trail 23.05 Black Oak Equestrian Camp	Upgrade of existing trails and construction of new trails may involve both hand labor and mechanized equipment. The limited amount of mechanized equipment needed to create 3-foot decomposed granite pedestrian trails, equestrian trails with clearance up to 6 feet, and the proposed Mountain Bike Trail, is not expected to create significant noise impacts, nor would use of the trails.	Less than Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
<b>Bridges at Trail Crossings</b> 2.20 Scout/Youth Group Camp 12.07 Hazel Creek Camp	These two bridges would be 10' wide minimum decks with clear spans over the channels. Their construction and use are not expected to create significant noise impacts.	Less than Significant Impact
<b>Infrastructure</b> 2.18 Scout/Youth Group Camp (North) 2.19 Scout/Youth Group Camp (South) 5.04 Jenkinson Camp SPRA13 Increased Phone Service	Extending water lines to the Scout/Youth Group Camp and from Jenkinson Camp to a pilot cabin site would require construction equipment to be used along the road alignments. Cellular and land phone line installation would require construction equipment for structures or underground line installation.	Potentially Significant Impact
<b>Waterless Toilets/Restrooms</b> 2.08 Scout/Youth Group (North) 2.14 Scout/Youth Group (South) 5.03 Jenkinson Camp 16.03 Primitive Camp Area 19.02 Bumpy Meadow Trailhead 20.04 Retreat and Event Center (1) 20.07 Retreat and Event Center (2) 24.02 Marina Parking Expansion	The construction of waterless toilet facilities and rest rooms at these individual sites should require minimal construction equipment for site preparation and building.	Less than Significant Impact
<b>Showers/Laundry Facilities</b> 2.10 Scout/Youth Group (North)- Showers Only 2.15 Scout/Youth Group (South)- Showers Only 6.06 Sierra Camp 21.02 Main Group Campground	The construction of one and two station shower facilities at the Scout/Youth Group Camp and shower and laundry facilities (approximate size 12' x 24') at the Sierra Camp and Main Group Campground sites should require minimal construction equipment for site preparation and building.	Less than Significant Impact
<b>Reconfigure Existing Parking</b> 1.05 Main Park Entrance 4.01 Pine Cone Camp 6.01 Sierra Camp 10.01 Chimney Camp (Day Use) 21.04 Main Group Campground (Group Site #1) 21.05 Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group	The reconfiguration of existing parking areas involve minor improvements and better defining of existing parking spaces at several locations (Pine Cone, Sierra, and Chimney Camps). The construction and use of these sites are not expected to create significant noise impacts.  Improvements that may require multiple pieces of construction equipment are proposed for the Main Group Campgrounds (paving for parking) and the Main Park Entrance (creation of 4 parking areas). Although the overall footprint of each of these site improvements is minimal, the construction of these improvements may result in noise impacts.	Less than Significant Impact (4.01, 6.01, and 10.01)  Potentially Significant Impact (Construction of 1.05, 21.04, 21.05, 21.08,

Component ID/Project Name	Impact Analysis	Level of Significance
Sites #3 and #4)		21.11)
<p><b>Construct New Parking Areas</b></p> <p>2.02 Scout/Youth Group Camp (North)</p> <p>3.01 Miwok Trailhead</p> <p>4.02 Pine Cone Camp</p> <p>6.07 Sierra Camp/Shower Parking</p> <p>11.02 Lake Drive Stabilization (Day Use)</p> <p>12.03 Hazel Creek Camp (Day Use and Trailhead)</p> <p>18.01 Dog Park</p> <p>19.01 Bumpy Meadow Trailhead</p> <p>20.01 Retreat and Event Center (East)</p> <p>20.02 Retreat and Event Center (West)</p> <p>21.03 Main Group Campground/Shower Parking</p>	<p>Construction of new parking areas would consist of sites as small as 7 parking spaces up to parking lots approximately 225' x 75' in size, as well as access and drop off roads to parking. The construction of these improvements would occur at various times throughout the planned phases of the SPRA Master Plan. Depending upon the size of the improvement, construction equipment is expected to create noise during the construction of these projects.</p> <p><i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	Potentially Significant Impact
<p><b>Marina Parking Expansion</b></p> <p>24.01 Marina Parking Expansion</p>	The construction of the new parking area for boat trailers and vehicles at the Marina would require grading and paving equipment and may result in noise impacts from construction equipment.	Potentially Significant Impact
<p><b>Realign/Improve Campground Access Roads</b></p> <p>2.01 Scout/Youth Group Camp</p> <p>2.03 Scout/Youth Group Camp (North)</p> <p>2.04 Scout/Youth Group Camp (South)</p> <p>2.06 Scout/Youth Group Camp (South)</p> <p>4.03 Pine Cone Camp</p> <p>5.01 Jenkinson Camp</p> <p>6.02 Sierra Camp (West)</p> <p>6.03 Sierra Camp (East)</p> <p>7.02 Stonebraker Camp</p> <p>8.01 Hilltop Camp</p> <p>9.01 Chimney/Hilltop Host Site</p> <p>12.02 Hazel Creek Camp</p> <p>13.03 Dogwood Camp</p> <p>19.01 Bumpy Meadow Trailhead</p> <p>21.04 Main Group Campground (Group Site #1)</p>	The access road improvements include regarding and resurfacing of existing road alignments, realigning curves for safety, and creating and surfacing of new alignments. The specific project improvements are expected to occur throughout the 20-year planning period with the majority expected to occur in Master Plan phases 1 and 2 as the road improvements allow for other Master Plan elements to be addressed. These activities would require grading and paving equipment and may result in noise impacts from construction equipment. No significant impacts are expected from use of these improvements.	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
21.05 Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group Sites #3 and #4) 23.02 Black Oak Equestrian Center 25.01 Lake Drive Access Improvements		
<b>Reconfigure Main Entrance</b> 1.01 Main Park Entrance 1.02 Main Park Entrance	This reconfiguration is expected to include widening of the existing road, adding paved bypass lanes and removing and relocating the existing dump station. These activities would require road construction equipment and may result in noise impacts from construction equipment.	Potentially Significant Impact
<b>Install Interpretive/Trail Signage/Kiosks</b> 1.06 Main Park Entrance 3.04 Miwok Trailhead 7.05 Stonebraker Camp 12.10 Hazel Creek Camp 19.05 Bumpy Meadow Trailhead	The construction and use of informational kiosks and trail signage is not expected to result in noise impacts.	Less than Significant Impact
<b>Construct Visitor Center/New Maintenance Shop</b> 1.04 Main Park Entrance 1.07 Main Park Entrance	The construction of a new two-story visitor center and headquarters as well as a new shop building may result in noise impacts. No significant impacts are expected from use of these improvements.	Potentially Significant Impact
<b>Construct New Facilities</b> 18.02 Dog Park	The fencing, installation of water fountain and benches, and use of a dog park west of the Sugarloaf Fine Arts Center is not expected to create significant noise impacts. The adjacent land to the south belongs to the Eldorado National Forest and the site location is distanced from other facilities.	Less than Significant Impact
<b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Camp	<p>The facilities for the Sugarloaf Fine Arts Camp include open classroom structures, cabins and yurts, showers, a multi-purpose building, amphitheater, a pool complex, and basketball and volleyball courts. The construction of these facilities may create noise impacts. The use of these facilities after construction is not expected to create significant noise impacts as much of the land surrounding the Center is within SPRA itself and the land to the south of this site is designated Natural Resources and is part of the Eldorado National Forest. As such, there are no noise sensitive residential land uses near this location.</p> <p>Vehicle trips generated by the use of the Sugarloaf Fine Arts Camp are expected to be approximately 300 trips per day when the facility is at full use. However, as with the traffic from operations at the Scout/Youth Group Camp and at the Retreat and Event Center, the arrivals and departures would be restricted to hours outside the peak commute hours and</p>	Less than Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
	therefore noise from the additional traffic along with the currently existing traffic is expected to be less than significant.	
<p><b>Rehabilitate Vegetation</b></p> <p>1.08 Main Park Entrance  4.07 Pine Cone Camp  6.08 Sierra Camp  7.06 Stonebraker Camp  8.04 Hilltop Camp  10.03 Chimney Camp  12.05 Hazel Creek Camp  12.06 Hazel Creek Camp  12.08 Hazel Creek Camp  12.09 Hazel Creek Camp  13.01 Dogwood Camp  14.02 Rainbow Camp  15.02 Kamloop Camp  21.07 Main Group Campground (Group Sites #1 and #5)  21.10 Main Group Campground (Group Site #2)  21.13 Main Group Campground (Group Sites #3 and #4)  23.03 Black Oak Equestrian Camp  FMP Plant/maintain Seedlings for Forest Health</p>	<p>Rehabilitation of vegetation consists of removing dead plants and invasive non-native species, loosening compacted soils, incorporating new topsoil and amendments, and replanting of a variety of native trees, shrubs, and groundcovers. These activities are not expected to create significant noise impacts.</p>	<p>Less than Significant Impact</p>
<p><b>Restrict Access</b></p> <p>3.02 Miwok Trailhead  3.03 Miwok Trailhead  4.06 Pine Cone Camp (Shore Access)  8.02 Hilltop Camp  14.01 Rainbow Camp (Creek Access Control)  15.01 Kamloop Camp (Creek Access Control)  19.04 Bumpy Meadow Trailhead  23.04 Black Oak Equestrian Center  23.06 Black Oak Equestrian Center</p>	<p>Access control at these locations consists of using fencing, fee stations, s, signage, and barriers to either restrict, direct, or allow access to SPRA features. The installation of these controls is not expected to create significant noise impacts.</p>	<p>Less than Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
<b>Dock Expansion</b> 7.07 Stonebraker Camp	The addition of 28' x 40' sections to the existing boat dock is not expected to create significant noise impacts.	Less than Significant Impact
<b>Lake Drive Stabilization</b> 11.01 Lake Drive Stabilization	This project allows for stabilization of approximately 500' of Lake Drive immediately northeast of Chimney Camp through a combination of moving the road back from shore and reinforcing bank to prevent undercutting. Revegetation will include the use bioengineering techniques to stabilize shoreline. The moving of the road has the potential to require construction equipment that may cause noise impacts.  <i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i>	Potentially Significant Impact
<b>SPRA Administration</b> SPRA01 Increased Staffing SPRA02 Staff Training SPRA03 Reservation Systems Software SPRA05 Website Development SPRA06 Proactive Maintenance SPRA07 Annual Maintenance Work Plan SPRA08 Volunteer Maintenance Events	Staffing, training, planning and associated administrative projects would not create additional noise impacts.	No Impact
<b>Planning</b> SPRA04 Day-Use Carrying Capacity SPRA09 Trail Maintenance Plan SPRA11 Emergency Preparedness Plan	The creation of planning documents would not create additional noise.	No Impact
<b>Fire Prevention</b> SPRA10 Fire Prevention	Removing dead vegetation and ladder fuels, providing adequate clearance around fire rings, and education of visitors to SPRA on the importance of fire safety are not expected to create significant noise impacts.	Less than Significant Impact
<b>Law Enforcement</b> SPRA12 Law Enforcement	The addition of a County Sheriff Deputy to SPRA facility on weekends during the May through September season is not expected to create significant noise impacts.	No impact

#### **4.6.5 Mitigation Measures**

**Noise-1:** Construction of potentially significant Master Plan projects shall occur only during the hours of 7am to 7pm Monday through Friday, between 8am and 5pm on weekends, and between 8am and 5pm on federally recognized holidays.

Implementation of this Mitigation Measure will reduce the impacts from construction noise to less than significant because construction activities for potentially significant projects will not take place during the more noise sensitive evening and nighttime hours.

**Table 4.6-6 — Proposed Mitigation Measures to Reduce or Eliminate Potential Impacts Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Construct Post/Pier Structures</b></p> <p>2.09 Scout/Youth Group Camp Mess Hall</p> <p>2.12 Scout/Youth Group Camp (North)</p> <p>2.13 Scout/Youth Group Camp (South)</p> <p>2.17 Scout/Youth Group Camp Mess Hall</p> <p>5.02 Jenkinson Camp</p> <p>10.04 Chimney Camp</p> <p>20.03 Retreat and Event Center</p> <p>20.05 Retreat and Event Center (Phase I)</p> <p>20.06 Retreat and Event Center (Phase II)</p>	<p>Implement Mitigation Measure Noise-1 for Project Component IDs 2.09, 2.12, 2.13, 2.17, 20.03, 20.05, and 20.06 to reduce construction noise impacts.</p> <p>Project Component IDs 5.02 and 10.04 do not require mitigation.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Infrastructure</b></p> <p>2.18 Scout/Youth Group Camp (North)</p> <p>2.19 Scout/Youth Group Camp (South)</p> <p>5.04 Jenkinson Camp</p> <p>SPRA13 Increased Phone Service</p>	<p>Implement Mitigation Measure Noise-1.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Reconfigure Existing Parking</b></p> <p>1.05 Main Park Entrance</p> <p>4.01 Pine Cone Camp</p> <p>6.01 Sierra Camp</p> <p>10.01 Chimney Camp (Day Use)</p> <p>21.04 Main Group Campground (Group Site #1)</p> <p>21.05 Main Group Campground (Group Site #5)</p> <p>21.08 Main Group Campground (Group Site #2)</p> <p>21.11 Main Group Campground (Group Sites #3 and #4)</p>	<p>Implement Mitigation Measure Noise-1 for Project Component IDs 1.05, 21.04, 21.05, 21.08, and 21.11.</p> <p>Project Component IDs 4.01, 6.01, and 10.01 do not require mitigation.</p>	<p>Less than Significant with Mitigation Incorporation</p>

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Construct New Parking Areas</b></p> <p>2.02 Scout/Youth Group Camp (North)  3.01 Miwok Trailhead  4.02 Pine Cone Camp  6.08 Sierra Camp/Shower Parking  11.02 Lake Drive Stabilization (Day Use)  12.03 Hazel Creek Camp (Day Use and Trailhead)  18.01 Dog Park  19.01 Bumpy Meadow Trailhead  20.01 Retreat and Event Center (East)  20.02 Retreat and Event Center (West)  21.03 Main Group Campground/Shower Parking</p>	<p>Implement Mitigation Measure Noise-1 for all components.</p> <p><i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Marina Parking Expansion</b></p> <p>24.01 Marina Parking Expansion</p>	<p>Implement Mitigation Measure Noise-1 for all components.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Realign/Improve Campground Access Roads</b></p> <p>2.01 Scout/Youth Group Camp  2.03 Scout/Youth Group Camp (North)  2.04 Scout/Youth Group Camp (South)  2.06 Scout/Youth Group Camp (South)  4.03 Pine Cone Camp  5.01 Jenkinson Camp  6.02 Sierra Camp (West)  6.03 Sierra Camp (East)  7.02 Stonebraker Camp  8.01 Hilltop Camp  9.01 Chimney/Hilltop Host Site  12.02 Hazel Creek Camp  13.03 Dogwood Camp  19.01 Bumpy Meadow Trailhead  21.04 Main Group Campground (Group Site #1)  21.05 Main Group Campground (Group</p>	<p>Implement Mitigation Measure Noise-1 for all components.</p>	<p>Less than Significant with Mitigation Incorporation</p>

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
21.08 Site #5) Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group Sites #3 and #4) 23.02 Black Oak Equestrian Center 25.01 Lake Drive Access Improvements		
<b>Reconfigure Main Entrance</b> 1.01 Main Park Entrance 1.02 Main Park Entrance	Implement Mitigation Measure Noise-1 for all components.	Less than Significant with Mitigation Incorporation
<b>Construct Visitor Center/New Maintenance Shop</b> 1.04 Main Park Entrance 1.07 Main Park Entrance	Implement Mitigation Measure Noise-1 for all components.	Less than Significant with Mitigation Incorporation
<b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Center	Implement Mitigation Measure Noise-1.	Less than Significant with Mitigation Incorporation
<b>Lake Drive Stabilization</b> 11.01 Lake Drive Stabilization	Implement Mitigation Measure Noise-1. <i>Note: Component 11.01 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i>	Less than Significant with Mitigation Incorporation

## 4.7 Biological Resources

The Biological Resources section of this Draft Master EIR examines the current biological resources within the SPRA Master Plan area. It describes the current environmental setting, including habitat and potentially occurring special-status species and the regulatory setting at federal, state, and local levels. This section describes how projects and uses addressed under the SPRA Master Plan will affect the biological resources; the degree and significance of those impacts; and measures necessary to mitigate or reduce the impacts. This section analyzes biological resource impacts and how the proposed mitigation measures will reduce impacts to biological resources to below the level of significance.

### 4.7.1 Existing Conditions

#### 4.7.1.1 Environmental Setting

The approximate 2,000-acre SPRA is located within El Dorado County, approximately three miles south of the community of Pollock Pines and approximately 14 miles east of Placerville. The elevation of SPRA ranges from 3,500 feet to 3,800 feet above mean sea level (MSL). SPRA is located within Township 10 North, Range 13 East, within portions of Sections 8, 9, 10, 16, 17, and 18.

#### **Plant Communities and Wildlife Habitats**

Foothill Associates biologists conducted field surveys in support of a biological resource assessment within SPRA on June 14, June 26, June 27, June 28, July 4, July 11, July 12, and July 18, 2004 (**Appendix E**). Aerial photography of the site was examined, and selected areas were systematically walked to distinguish vegetation communities, habitat types, and to identify areas that warranted more focused surveys.

Areas representative of each major habitat type were walked and general plant and wildlife observations were made to characterize the habitat. Plant and wildlife species identified during these surveys were recorded, and dominant plant species in each habitat type were noted. These habitats were then mapped in the field onto a 1-inch: 1,420-foot scale aerial photograph and later digitized into Geographical Information System (GIS) software. Geographic Positioning Systems (GPS) were not used to map habitat types within SPRA because of interference with satellite signals from the closed forest canopy, thereby resulting in inaccurate GPS data.

Vegetation within SPRA was classified using a combination of *CDFG's California Wildlife Habitat Relationship* (CWHR) system (Mayer and Laudenslayer 1988) and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995), as described below. Ten biological communities were identified within SPRA. These communities provide habitat for a number of common wildlife species and provide potentially suitable habitat for special-status species. Each biological community is described below. Figure 4.7-1 shows the location of each biotic community and habitat type occurring within SPRA.

#### ***Ponderosa Pine Series***

The ponderosa pine series is characterized by ponderosa pine (*Pinus ponderosa*) as the sole, dominating tree species within the tree canopy as well as black oak (*Quercus kelloggii*) or

incense cedar (*Calocedrus decurrens*) (Sawyer and Keeler-Wolf 1995). Ponderosa pine is a habitat type described in the CWHR system as consisting of stands of mixed coniferous species in which at least 50 percent of the canopy is ponderosa pine (Mayer and Laudenslayer 1988).

Ponderosa pine habitat is found throughout SPRA, but primarily on south-facing slopes north of Jenkinson Lake (Figure 4.7-1). This habitat type is dominated by ponderosa pine and other associated tree species such as black oak and incense cedar. Associated shrubs in the ponderosa pine series habitat include deerbrush (*Ceanothus integerrimus*), Sierra gooseberry (*Ribes roeslii*), and mountain misery (*Chamaebatia foliolosa*). Shrub cover in this habitat is generally 10 percent to 30 percent, although in many areas mountain misery forms a dense, low-growing carpet of 100 percent understory cover. The ponderosa pine series habitat has approximately 5 to 10 percent herbaceous cover consisting of grasses and forbs such as fragrant bedstraw (*Galium triflorum*), bracken fern (*Pteridium aquilinum*), self-heal (*Prunella vulgaris*), and lupines (*Lupinus* sp.).

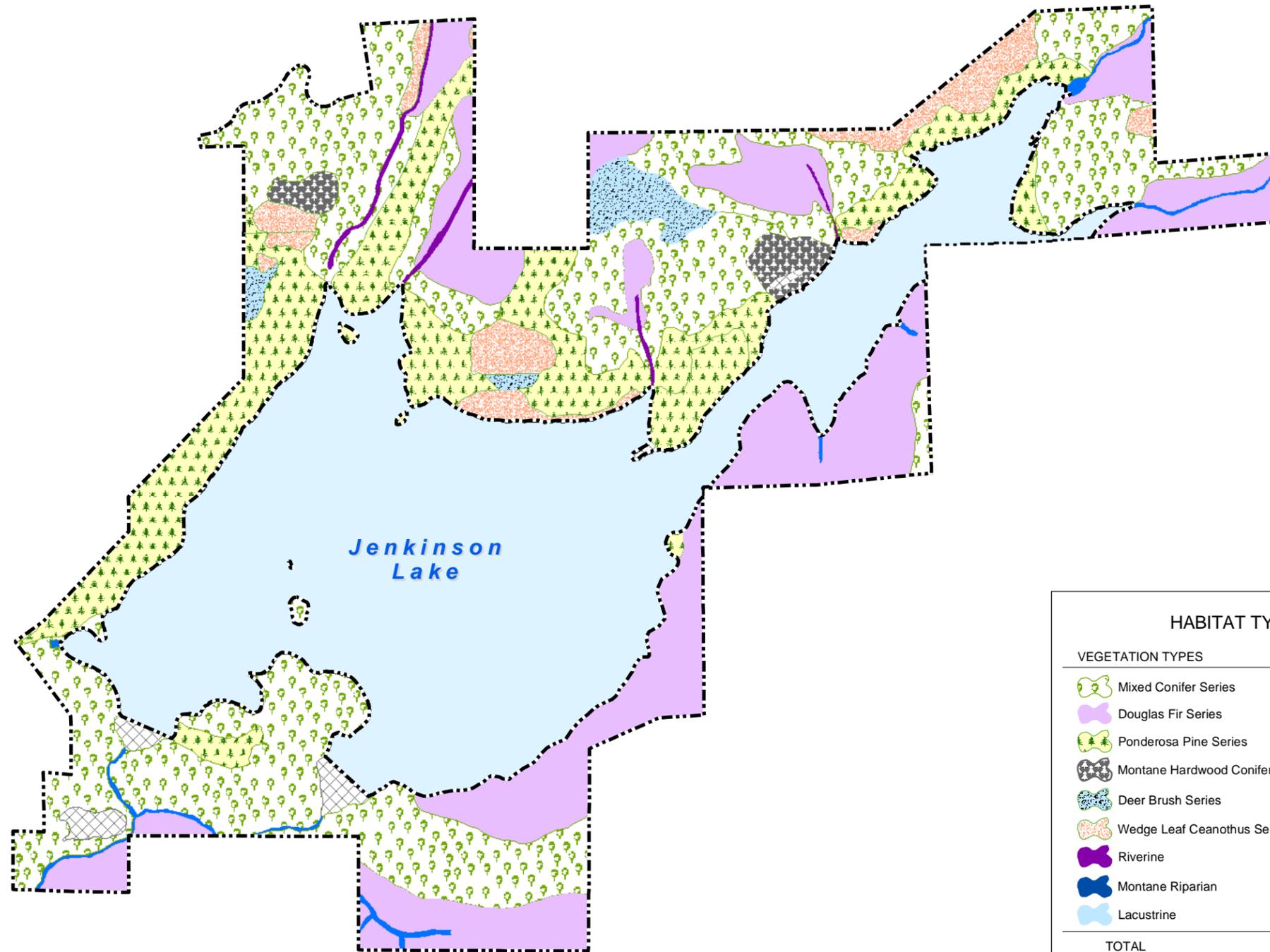
The ponderosa pine series habitat provides transitional or migratory habitat for deer and can be important to deer nutrition in migration holding areas. A mixture of early- and late-successional vegetation stages provides favorable wildlife habitat conditions (Mayer and Laudenslayer 1988). Some of the common wildlife species observed in this habitat during 2004 spring and summer field surveys include Stellar's jay (*Cyanositta stelari*), American robin (*Turdus migratorius*), mountain chickadee (*Poecile gambeli*), Oregon junco (*Junco hyemalis*), and western wood peewee (*Contopus virens*). Some of the mammals present in this habitat type include western gray squirrel (*Sciurus griseus*), Douglas squirrel (*Tamasciurus douglasii*), raccoon (*Procyon lotor*), and black-tailed deer (*Odocoileus hemionus*).

### **Mixed Conifer Series**

The mixed conifer series consists of three or more equally important coniferous tree species dominant in the canopy (Sawyer and Keeler-Wolf 1995). This habitat type corresponds to Sierran mixed conifer habitat and is described in the CWHR system as an assemblage of conifer and hardwood species within a multi-layered forest (Mayer and Laudenslayer 1988).

Sierran mixed conifer habitat within SPRA consists of approximately 30 percent ponderosa pine, 30 percent incense cedar, and 30 percent Douglas fir (*Pseudotsuga menziesii* var. *menziesii*). This habitat type generally occurs throughout the northern and southern portions of SPRA. It also includes some white fir (*Abies concolor*), sugar pine (*Pinus lambertiana*), and black oak. The understory consists of shrubs such as deerbrush, white-leaf manzanita (*Arctostaphylos viscida*), Sierra gooseberry, wood rose (*Rosa* sp.), and various herbaceous species.

The diversity of plant species in Sierran mixed conifer habitat, as described by CWHR, provides shelter and forage for many wildlife species. Many of the wildlife species described above for the ponderosa pine series are also associated with Sierran mixed conifer habitat.



HABITAT TYPES	
VEGETATION TYPES	ACREAGE
Mixed Conifer Series	426.82
Douglas Fir Series	285.21
Ponderosa Pine Series	214.22
Montane Hardwood Conifer	17.56
Deer Brush Series	24.21
Wedge Leaf Ceanothus Series/Grassland	56.08
Riverine	6.08
Montane Riparian	8.82
Lacustrine	651.62
<b>TOTAL</b>	<b>1690.62</b>

Other      Boundary

PLANT COMMUNITIES  
& HABITAT TYPES

SLY PARK  
RECREATION AREA  
MASTER PLAN  
MASTER EIR

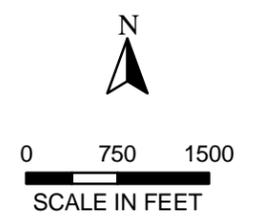


FIGURE 4.7-1

### **Douglas Fir Series**

The Douglas fir series is dominated by Douglas fir and other associated coniferous species (Sawyer and Keeler-Wolf 1995). Within SPRA, the Douglas fir series consists of approximately 50 percent Douglas fir with an association of incense cedar, ponderosa pine, sugar pine, and white fir. This habitat has a substantial understory dominated by mountain dogwood (*Cornus nuttallii*), deerbrush, and other shrub species. This vegetation type is found on SPRA primarily on north-facing slopes and within canyons (Figure 4.7-1). Commonly associated wildlife species for the Douglas fir series are similar to those described for the mixed conifer series as discussed above.

### **Montane Hardwood Conifer**

Montane hardwood conifer habitat is described as consisting of conifers and hardwoods such as oaks (*Quercus* sp.) often with closed canopy (Mayer and Laudenslayer 1988). To be classified as mixed hardwood-conifer habitat, at least one-third of the tree species must be conifer and at least one-third must be broad-leaved tree species (Mayer and Laudenslayer 1988).

Montane hardwood conifer habitat within SPRA occurs in localized areas north of Jenkinson Lake (Figure 4.7-1). Commonly associated wildlife species found within this habitat are black oak and ponderosa pine. Mature montane-hardwood conifer habitat is valuable to cavity-nesting birds. Some of the wildlife species found in this habitat during the field surveys include mountain chickadee, Oregon junco, American robin, white-breasted nuthatch (*Sitta carolinensis*), mountain quail (*Oreortyx pica*), spotted towhee (*Pipilo maculatus*), and red-breasted sapsucker (*Sphyrapicus varius*). Canopy cover and understory are highly variable in this habitat type so vegetation structure is not generally a strong indicator for the presence of any particular wildlife species (Mayer and Laudenslayer 1988).

### **Wedgeleaf Ceanothus Series/Grassland**

The wedgeleaf ceanothus series is described as consisting of wedgeleaf ceanothus (*Ceanothus cuneatus*) as the sole or dominant shrub within the canopy (Sawyer and Keeler-Wolf 1995). Within the SRPA, this biotic community is found north of Jenkinson Lake primarily on dry, south-facing slopes with thin soils, and is interspersed with patches of open grassland (Figure 4.7-1). This habitat type may also be classified as chaparral, as it is dominated by hard-leaved and woody vegetation.

### **Deerbrush Series**

The deerbrush series is described as consisting of deerbrush as the sole or dominant shrub in the tree canopy (Sawyer and Keeler-Wolf 1995). This biotic community is found north of Jenkinson Lake primarily on south-facing slopes but in areas with moister, deeper, or further developed soils than the wedgeleaf ceanothus series (Figure 4.7-1). Other species found within the deerbrush series include white-leaf manzanita, wedgeleaf ceanothus, and Klamath plum (*Prunus subcordata*), with an herbaceous layer of various species including mustang mint (*Monardella lanceolata*) and various species of perennial bunchgrasses. This habitat type may also be classified as chaparral, because it is dominated by hard-leaved vegetation.

### **Montane Riparian**

Montane riparian habitat is defined under the CWHR system as usually occurring as a narrow and often dense grove of broad-leaved, winter-deciduous trees up to 30 meters high with a sparse understory (Mayer and Laudenslayer 1988). At high mountain elevations, montane riparian habitat is usually less than 15 meters high with more shrubs within the understory.

The montane riparian habitat at SPRA occurs primarily along perennial creeks, including Sly Park Creek and Hazel Creek (Figure 4.7-1). Montane riparian habitat describes the woody species at the edge of these streams, while the streams themselves are classified as riverine, as described below; this habitat type occurs in scattered locations throughout SPRA. The montane riparian habitat within SPRA is dominated by several tree species including willows (*Salix* sp.), white-leaf alder (*Alnus rhombifolia*), bigleaf maple (*Acer macrophyllum*), and black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), with an understory of mountain dogwood, hazelnut (*Corylus cornuta* var. *californica*), and other herbaceous species. Also, Pacific yew (*Taxus brevifolia*), is a coniferous tree that occurs within several forest cover types and is found along Sly Park Creek. Montane riparian habitat has an exceptionally high value for many wildlife species, by providing a source of water, thermal cover, and nesting and feeding opportunities (Mayer and Laudenslayer 1988).

### **Riverine**

Riverine habitat is defined in the CWHR system as intermittent or continually running water (Mayer and Laudenslayer 1988). Various unnamed drainages are classified as riverine habitat within Figure 4.7-1. Riverine habitat provides a water source for wildlife species and a food source for various waterfowl and shorebird species including belted kingfisher (*Megaceryle alcyon*) and American dipper (*Cinclus mexicanus*).

### **Lacustrine**

Lacustrine habitat is defined in the CWHR system as inland depressions or dammed riverine channels containing standing water (Mayer and Laudenslayer 1988). Jenkinson Lake constitutes lacustrine habitat (Figure 4.7-1). Bald eagles (*Haliaeetus leucocephalus*) and ospreys (*Pandion haliaetus*) feed on fish and other aquatic species that inhabit the reservoir. Belted kingfisher was also observed foraging over the lake during the 2004 field surveys. Other wildlife species associated with lacustrine habitat within SPRA include mallard (*Anas platyrhynchos*), Canada goose (*Branta canadensis*), and common merganser (*Mergus merganser*). Small, wooded islands in the middle of Jenkinson Lake provide refuge and nesting habitat for the Canada geese and other wildlife species using the lake.

### **Other Mesic Habitat**

In addition to montane riparian, riverine, and lacustrine habitats within SPRA, there are scattered, isolated mesic areas that are not shown on Figure 4.7-1. Portions of these drainages have springs or seeps dominated by herbaceous vegetation indicative of wetland features. However, these mesic areas are too small to be identified at the scale of mapping used for the SPRA Master Plan. Common plant species found within mesic areas include columbine (*Aquilegia formosa*), water plantain (*Alisma plantago-aquatum*), miner's lettuce (*Montia perfoliata*), wild ginger (*Asarum hartwegii*), lady fern (*Athyrium filix-femina*), and horsetail (*Equisetum laevigatum*).

## **Special-Status Species**

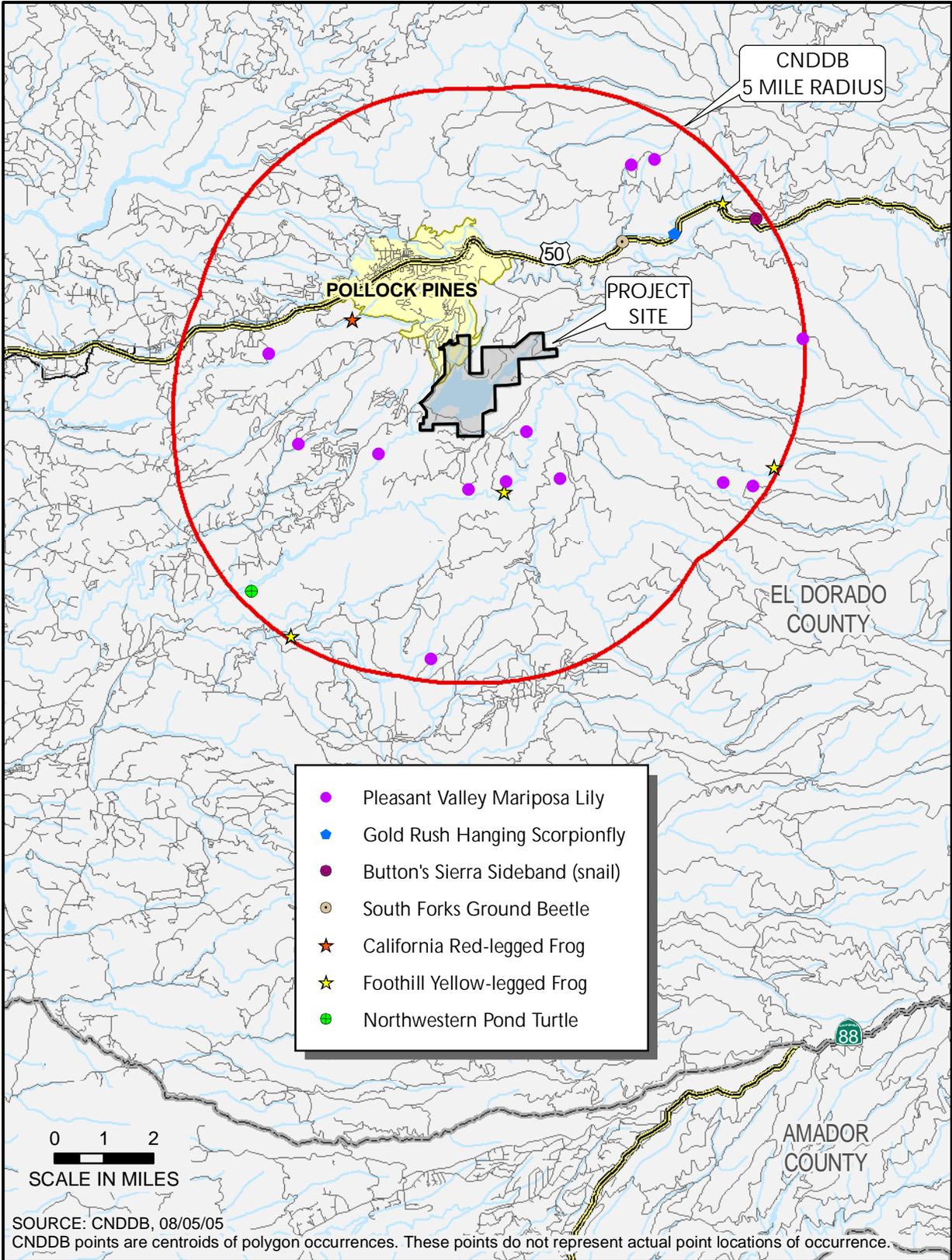
Special-status species are plant and wildlife species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Listed and special-status species discussed within this Draft Master EIR are defined as:

- Listed or proposed for listing under the California Endangered Species Act (CESA) and/or the Federally Endangered Species Act (FESA);
- Protected under other regulations (e.g. Migratory Bird Treaty Act, MBTA);
- Listed by the California Department of Fish and Game (CDFG) as a Species of Special Concern;
- Listed by the U.S. Fish and Wildlife Service (USFWS) as a Species of Concern;
- Listed by the U.S. Forest Service (USFS) as Sensitive;
- Listed by the California Native Plant Society (CNPS) as being rare (a ranking of 1A, 1B, or 2); or
- Any other species that would receive consideration according to California Environmental Quality Act (CEQA) Guidelines.

Special-status species considered for this analysis are based on queries of the California Natural Diversity Database (CNDDDB) and the online versions of the USFWS and CNPS species occurrence lists for the USGS 7.5-minute *Sly Park, CA* topographic quadrangle and eight surrounding quadrangles. Additionally, the USFS was consulted in consideration of potentially occurring special-status species. Table 4.7-1 and Table 4.7-2 include the common name and scientific name for each species, regulatory status, habitat descriptions, and potential for occurrence within SPRA. Figure 4.7-2 depicts the approximate locations of special-status species recorded in the CNDDDB within five miles of SPRA. The following set of criteria has been used to determine the potential for occurrence of each species within SPRA:

- **Present:** Species known to occur onsite, based on CNDDDB records, and/or was observed onsite during the field survey(s).
- **Likely:** Species is known to occur on or near the site or within the site (based on CNDDDB records within five miles, and/or based on professional expertise specific to the site or species) and there is suitable habitat onsite.
- **Low:** Species is known to occur in the vicinity of the site and there is marginal habitat onsite **-OR-** Species is not known to occur in the vicinity of the site; however there is suitable habitat onsite.
- **No:** Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species onsite **-OR-** Species was surveyed for during the appropriate season with negative results for the species occurrence onsite.

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**CNDDb**



Sly Park Recreation Area Master Plan  
Master EIR

FIGURE 4.7-2

Only those species that are known to be present are likely to occur, or have a low potential for occurrence will be discussed further following Table 4.7-1 and Table 4.7-2. Species that are state or federally listed as threatened or endangered have a greater level of legal protection than other species-status species. Therefore, listed species are discussed separately in the text below Table 4.7-1 and Table 4.7-2.

**Table 4.7-1 — Listed and Special-Status Plant Species Potentially Occurring Onsite or in the Project Vicinity**

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Growth Habit, Blooming Period	Potential for Occurrence
Broad-nerved hump-moss <i>Meesia uliginosa</i>	--;--;2	Meadows and seeps, upper montane coniferous forest, damp soil, 3,900 to 7,500 feet. Known to occur in Fresno, Siskiyou, Tulare counties and possibly Mariposa County. Scattered occurrences throughout California primarily in Sierra Nevada and southern Cascade Range.	Moss.	<b>No</b> ; this species typically occurs at higher elevations at an average elevation of 4,200 feet. There is no suitable meadow habitat within SPRA and there are no CNNDDB records within five miles of SPRA.
Clustered lady's-slipper <i>Cypripedium fasciculatum</i>	FSC;--;4	Lower montane coniferous forest. Typically north coast coniferous forest, usually serpentine soils along seeps and stream-banks at elevations from 300 to 7,300 feet. Known from several counties in northern California and elsewhere outside of California. Not known from El Dorado County. Widely scattered and most occurrences are small and localized.	Perennial herb (rhizomatous), blooms March - July	<b>No</b> ; appropriate soils not present onsite and species was not observed during field surveys. Site is not located within known elevation range of this species.
Dissected-leaved toothwort <i>Cardamine pachystigma</i> var. <i>dissectifolia</i>	USFS Watchlist; --;--;3	Chaparral, lower montane coniferous forest, usually serpentine, rocky soils from 765 to 6,300 feet elevation. Known to occur within Butte, Glenn, Mendocino, Placer, Sonoma, and Tehama counties.	Perennial herb (rhizomatous), blooms February - May.	<b>No</b> ; appropriate soils not present onsite and species not observed during field surveys. No CNDDDB records for El Dorado County.
El Dorado bedstraw <i>Galium californicum sierrae</i>	FE,CR,--;1B	Chaparral, oak woodland, lower montane coniferous forest / gabbroic soils; occurs from 300 to 1,800 feet elevation. Known only from El Dorado County.	Perennial herb; blooms May - June	<b>No</b> ; appropriate soils not present onsite and project site is not located within known elevation range.

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Growth Habit, Blooming Period	Potential for Occurrence
Felt-leaved violet <i>Viola tomentosa</i>	--;SLC;--;4	Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest, gravelly soils at elevations from 4,300 to 6,000 feet. Known from El Dorado, Nevada, Placer, Plumas, and Sierra counties. Threatened by road building, vehicles, logging, and proposed reservoir construction.	Perennial herb, blooms May - October	<b>No</b> ; SPRA is not located within the elevation range of this species and no CNDDDB records occur for this species within the SPRA project vicinity.
Humboldt lily <i>Lillium humboldtii</i> ssp. <i>humboldtii</i>	USFS Watchlist; --;--;4	Chaparral, cismontane woodland, lower montane coniferous forest, openings from 270 to 3,300 feet elevation. Known from Amador, Butte, Calaveras, El Dorado, Fresno, Madera, Mariposa, Nevada, Placer, Tehama, Tuolumne, and Yuba counties.	Perennial herb (bulbiferous), blooms May - July	<b>Low.</b>
Layne's butterweed <i>Senecio layneae</i>	FT;CR;--;1B	Chaparral, cismontane woodland / serpentine or gabbroic, 600-3,000 feet elevation. Known from El Dorado, Tuolumne, and Yuba counties.	Perennial herb; blooms April - July	<b>No</b> ; appropriate soils not present onsite and site is not located within typical elevation range.
Marsh skullcap <i>Scutellaria galericulata</i>	USFS Watchlist; --;--;2	Lower montane coniferous forest, meadows and seeps (mesic), marshes and swamps, 0 to 6,300 feet elevation. Known from El Dorado, Lassen, Modoc, Nevada, Placer, Plumas, Shasta, San Joaquin and possibly Siskiyou counties and elsewhere outside of California.	Perennial herb (rhizomatous), blooms June - September	<b>Low.</b>
Nissenan manzanita <i>Arctostaphylos nissenana</i>	--;--;--;1B	Closed-cone coniferous forest, chaparral / rocky; 1,350 to 3,300 feet elevation. Known from El Dorado and Tuolumne counties.	Shrub (evergreen); blooms February - March	<b>Low.</b>

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Growth Habit, Blooming Period	Potential for Occurrence
Parry's horkelia <i>Horkelia parryi</i>	--;--;--;1B	Open chaparral, foothill woodlands, especially lone formation; 240 to 3,100 feet elevation. Known from Amador, Calaveras, El Dorado and Mariposa counties.	Perennial herb; blooms April - June	<b>No</b> ; SPRA is not located within elevation range of this plant species and no CNDDDB records occur within the SPRA project area.
Pine Hill ceanothus <i>Ceanothus roderickii</i>	FE,CR,--;1B	Chaparral, cismontane woodland/serpentine or gabbroic; 780 to 1,890 feet.	Shrub (evergreen) blooms May - June	<b>No</b> ; appropriate soils not present onsite. Site is not located within known elevation range.
Pine Hill flannelbush <i>Fremontodendron californicum</i> ssp. <i>decumbens</i>	FE,CR,--;1B	Chaparral, cismontane woodland/serpentine or gabbroic, rocky from 1,200 to 2,280 feet elevation. Known to occur in El Dorado and Nevada counties.	Shrub (evergreen) blooms April - July	<b>No</b> ; appropriate soils not present onsite. Site is not located within known elevation range.
Pleasant Valley mariposa lily <i>Calochortus clavatus</i> var. <i>avius</i>	--;--;--;1B	Lower montane coniferous forest (Josephine silt loam and volcanic); 915 to 5,400 feet. Known from Amador, El Dorado and possibly Mariposa counties.	Perennial herb (bulbiferous), blooms May - July	<b>Likely.</b>
Red Hills soaproot <i>Chlorogalum grandiflorum</i>	--;--;--;1B	Chaparral, cismontane woodland, lower montane coniferous forest on serpentinite or gabbroic soils at elevations of 735 to 3,000 feet elevation. Known from Amador, El Dorado, Placer, and Tuolumne counties.	Perennial herb (bulbiferous), blooms May - June.	<b>No</b> ; appropriate soils not present onsite. Species not observed. Site is not located within typical elevation range.
Sanborn's onion <i>Allium sanbornii</i> var. <i>sanbornii</i>	USFS Watchlist; --;--;--;4	Chaparral, cismontane woodland, serpentine soils from 900 to 2,100 feet elevation. Known from Butte, Calaveras, El Dorado, Nevada, Placer, Shasta, Tehama, Yuba counties and elsewhere outside of California.	Perennial herb (bulbiferous), blooms April - July	<b>No</b> ; appropriate soils not present onsite and site is not located within known elevation range.

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Growth Habit, Blooming Period	Potential for Occurrence
Saw-toothed lewisia <i>Lewisia serrata</i>	--;--;1B	North-facing, mostly shaded, moss-covered and metamorphic rock cliffs and ledges in steep gorges; 2,700 to 4,300 feet elevation. Known from El Dorado and Placer counties.	Perennial herb, blooms May - June	<b>Low.</b>
Slender-leaved pondweed <i>Potamogeton filiformis</i>	USFS Watchlist; --;--;2	Marshes and swamps (assorted shallow freshwater); 15 to 3,900 feet elevation. Known from Contra Costa, Lasses, Merced, Mono, Sierra counties, possibly Santa Clara County and elsewhere outside California.	Perennial herb (rhizomatous, aquatic), blooms May - July	<b>Low.</b>
Stebbins' morning-glory <i>Calystegia stebbinsii</i>	FE;CE;--;1B	Chaparral (openings), cismontane woodland/serpentine or gabbroic from 550 to 2,200 feet elevation. Known from western El Dorado and western Nevada counties. Localized range from Salmon Falls on the South fork of the American River south to Cameron Park on Highway 50.	Perennial herb (rhizomatous), blooms April - July	<b>No;</b> appropriate soils not present onsite and site is not located within known elevation range.
Stebbins' phacelia <i>Phacelia stebbinsii</i>	--;--;1B	Cismontane woodland, lower montane coniferous forest, metamorphic soils, especially northern exposure slopes; 1,800 to 6,000 feet elevation. Known from El Dorado, Placer, and Nevada counties.	Annual herb; blooms March - June	<b>Low.</b>
Three-ranked hump-moss <i>Meesia triquetra</i>	--;--;2	Bogs and fens, meadows and seeps, upper montane coniferous forest (mesic); 3,900 to 7,500 feet elevation. Known from Butte, El Dorado, Fresno, Humboldt, Plumas, Siskiyou and Tulare counties and elsewhere outside California. Infrequently encountered in California.	Moss.	<b>Low.</b>

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Growth Habit, Blooming Period	Potential for Occurrence
Tripod buckwheat <i>Eriogonum tripodum</i>	--;--;4	Chaparral, cismontane woodland, often serpentine from 600 to 4,800 feet elevation. Known to occur in Amador, Colusa, El Dorado, Lake Mariposa, Napa, Placer, Tehama, and Tuolumne counties.	Perennial herb, blooms May - July	<b>Low.</b>
Upswept moonwort <i>Botrychium ascendens</i>	--;--;2	Lower montane coniferous forest and grassy fields near streams (mesic) from 4,500 to 5,500 feet elevation. Known from Butte, El Dorado, Tehama counties and elsewhere outside California.	Perennial herb (rhizomatous), fertile (July - August)	<b>No;</b> SPRA is not located within the known elevation range for this species.
Yellow burr navarretia <i>Navarretia prolifera lutea</i>	--;--;4	Chaparral, cismontane woodland from 2,700 to 4,200 feet elevation. Known from El Dorado and Placer counties.	Annual herb, blooms May-July	<b>Low.</b>
<b>Federally Listed Species:</b>				
<b>California State Listed Species:</b>				
<b>CNPS* List Categories:</b>				
FE = federal endangered	FC = candidate	CE = California state endangered	1A = plants presumed extinct in California	
FT = federal threatened	PT = proposed threatened	CT = California state threatened	1B = plants rare, threatened, or endangered in California and elsewhere	
FSC = federal species of concern	FPD = proposed for delisting	CR = California state rare	2 = plants rare, threatened, or endangered in California, but common elsewhere	
CFP = California fully protected	FD = delisted	CSC = California Species of Special Concern	3 = plants about which we need more information	
FS Sensitive = US Forest Service Sensitive			4 = plants of limited distribution	
<b>Other Special-status Listing:</b>				
Source: Foothill Associates			SLC = species of local or regional concern or conservation significance	

### **Listed Plant Species**

Based on field observations and literature review specific to the special-status plants species listed in Table 4.7-1, there are no state or federally listed plant species with a potential to occur within SPRA. Federally listed plant species occur in El Dorado County within the Pine Hills Preserve area, but appropriate soils (Gabbro soil) and habitat conditions are not present within SPRA.

### **Other Special-Status Plant Species**

Based on observations made during field surveys, species range information and habitat requirements, potential habitat for the following special-status plant species occurs within SPRA: Humboldt lilly (*Lillium humboldtii* ssp. *humboldtii*), marsh skullcap (*Scutellaria galericulata*), Nissenan manzanita (*Arctostaphylos nissenana*), Pleasant Valley mariposa lilly (*Calochortus clavatus* var. *avius*), saw-toothed lewisia (*Lewisia serrata*), slender-leaved pondweed (*Potamogeton filiformis*), Stebbins' phacelia (*Phacelia stebbinsii*), three-ranked hump moss (*Meesia triquetra*), tripod buckwheat (*Eriogonum tripodum*), and yellow burr navarretia (*Navarretia prolifera lutea*).

### **Special-Status Plant Species Likely to Occur**

#### *Pleasant Valley Mariposa Lily*

Pleasant Valley mariposa lily is a CNPS 1B plant species. This species tends to occur in rocky, cobbly soils. Most locations where this species is found show evidence of recent and repeated low intensity fires (Foster 2004). The species is found in open stands of mixed conifer forest, scrubby areas on lava caps, and mixed oak/pine communities, between 3,000 and 5,000 feet on south-facing slopes. Pleasant Valley mariposa lily is often found in semi-open, pine forests with an understory of mountain misery (Urie and Van Zuuk 2000).

Pleasant Valley mariposa lily blooms during July, which is later than other *Calochortus* species (Urie and Van Zuuk 2000). This species has a conspicuous yellow flower that is quite evident when the plant is blooming. However, in a given year about 85 percent of the plants in a population produce nothing more than a single, inconspicuous leaf with no flower. The single leaf is typically visible from March through June; after the leaf dries, it spends the remaining summer and fall months as a dormant bulb.

Appropriate habitat for Pleasant Valley mariposa lily is present within SPRA, primarily north of Jenkinson Lake on dry, south-facing slopes as well as the open forest and brushy areas north of the lake, especially areas with an understory of mountain misery. Directed surveys for Pleasant Valley mariposa lily were performed within areas exhibiting suitable habitat (open areas on forest floor) characteristics on June 14 and July 4, 2004. Transects through appropriate habitat were slowly walked to provide 100 percent visual coverage of these areas. Although Pleasant Valley mariposa lily was not observed during directed surveys, this species may not have been evident during the 2004 surveys because of its inconspicuous nature as described above. Because there are 13 CNDDDB records for this species occurring within five miles of SPRA (CNDDDB 2005) (Figure 4.7-2), and the presence of suitable habitat, this species is likely to occur within SPRA.

## ***Special-Status Plant Species with a Low Potential to Occur***

### *Humboldt Lily*

The Humboldt lily is a CNPS 4 plant species and a USFS Watchlist plant species. Its blooming period occurs from May through July. This Humboldt lily is a tall (up to 8 feet), stout-stemmed, perennial that grows from a large, underground bulb. This lily prefers shaded wooded areas often near seasonal moist places within chaparral, oak woodland, and yellow pine forests up to 5,500 feet elevation. This species is associated with riparian corridors in lower montane coniferous forest and coastal chaparral. It typically occurs on lower stream benches but can also occur on shaded, dry slopes beneath a dense coniferous canopy and cismontane woodland. Humboldt lily is threatened mostly from collection by recreational hikers.

There are no CNDDDB records for this species within five miles of the site and this species was not observed during field surveys. Field surveys were conducted during the blooming period of this species. However, the onsite coniferous forests, hardwood forests, and riparian woodland habitat provide potential habitat for this species. Therefore, Humboldt lily has a low potential to occur within SPRA.

### *Marsh Skullcap*

Marsh skullcap is a CNPS 1B plant species and is a USFS Watch-list plant species. Marsh skullcap is a member of the mint family. This perennial herb grows upright and is 1 to 3 feet tall. It produces a blue flower and generally blooms from June through September. It occurs within meadows and swamps of lower montane coniferous forests as well as along stream courses at moderate elevations.

There are no CNDDDB records for this species within five miles of the SRPA and this species was not observed during field surveys. Field surveys were conducted during June and July and therefore did not cover the complete blooming period of this species. Coniferous forest, hardwood forest and riparian woodland habitat provide potential habitat for this species. Therefore, this species has a low potential to occur within SPRA.

### *Nissenan Manzanita*

Nissenan manzanita is a federal species of concern and is a CNPS 1B plant species. This is a California endemic species known from only two counties, El Dorado and Tuolumne counties, specifically the North and South Forks of the American River watershed, Upper Tuolumne and Upper Cosumnes River watersheds. There are fewer than 10 known occurrences (NatureServe 2005). This species occurs at elevations ranging from 1,400 to 3,600 feet above mean sea level. Development poses the largest threat to this species, as well as trail use, roads, and timber harvest.

There are no records within the CNDDDB within five miles of SPRA and this species was not observed during field surveys. However, the field surveys were not performed during the blooming period of this evergreen shrub. Nissenan manzanita occurs on open, rocky ridges in coniferous forest and chaparral, and is most likely to occur within SPRA on dry, open slopes north of Jenkinson Lake. The coniferous forests onsite provide potential habitat for this species, although SPRA is located above the typical elevation range of this species. Therefore, this species has a low potential to occur within SPRA.

### *Saw-Toothed Lewisia*

Saw-toothed lewisia is a perennial, succulent herb that blooms from May through June. It is endemic to California and is only known from approximately 10 occurrences in El Dorado and Placer counties. It is confined to shady, mossy cliffs within steep gorges of rivers draining from the Sierra Nevada, specifically the American River watershed. Several scattered locations occur within Tahoe National Forest between the North and Middle Forks of the American River. Also, there are four locations within the El Dorado National Forest between the South and Middle Forks of the American River. There may be additional occurrences within the rugged canyons of the American and Rubicon River drainages (USFWS International Affairs 2005). Habitat for this species is further described as steep, metasedimentary bedrock outcrops with northerly aspects and elevations ranging from 1,850 to 5,000 feet. Plants are typically found on the inner gorges of perennial streams, although a few occurrences occur along intermittent streams. Of the four El Dorado National Forest populations, one has been believed extirpated while the other three populations consist of approximately 3,800 individuals (USFWS International Affairs 2005). The four populations within Tahoe National Forest are presumed extant. Potential threats to this species are believed to be over-collection for horticultural purposes, road construction, and hydroelectric power development (USFWS International Affairs 2005). Generally, habitat consists of broad-leaved upland forest, lower montane coniferous forest, riparian forest, and shaded north-facing cliffs on metamorphic rock..

Appropriate habitat for saw-toothed lewisia occurs within SPRA although it is localized within the gorges along Sly Park Creek at the far eastern and western ends of SPRA. This species was not observed during field surveys and there are no CNDDDB records within five miles of SPRA. Because the site is located south of the South Fork of the American River and therefore, south of the expected El Dorado National Forest populations, lack of CNDDDB records within five miles of SPRA, and lack of findings during field surveys that were performed during its blooming period, this species has a low potential to occur within SPRA.

### *Slender-Leaved Pondweed*

This CNPS plant species is a submerged, aquatic-growing plant. It has long, narrow underwater leaves and no floating leaves. This species occurs in shallow areas of hard-water lakes, marshes, swamps, and other assorted shallow freshwater habitats from approximately 15 to 4,000 feet elevation. Generally, this species occurs in lakes and rivers with depths of up to at least a meter. The species apparently fruits best in shallow water over sandy soils (Ohio Department of Natural Resources 1983). This species blooms from May through July.

There are no CNDDDB records for this species within five miles of the site and it was not observed during field surveys. Field surveys were performed during the blooming period of this species. However, suitable habitat does occur for this species along the shallow margins of Jenkinson Lake where other emergent vegetation grows. Because this species was not observed along the lake margins during previous field surveys and potential habitat is present, this species has a low potential to occur within SPRA.

### *Stebbin's Phacelia*

Stebbins phacelia is an annual herb and is a CNPS 1B plant species. This California endemic is known from the North and South Fork of the American River watershed as well as the Upper

Yuba watershed. This annual herb blooms from March through June. It typically occurs in openings in cismontane woodlands and lower montane coniferous forests.

There are no CNDDDB records within five miles of the site and this species was not observed during field surveys. Field surveys were conducted within the blooming period of this species. Within the site, Stebbins phacelia is most likely to occur in areas with northern exposure slopes, such as woodlands south of the Jenkinson Lake. Because there are no CNDDDB records within the vicinity of SPRA, but suitable coniferous forest habitat is present, this species has a low potential to occur within SPRA.

#### *Three-Ranked Hump Moss*

This CNPS 2 moss grows in permanently wet habitats. This moss seems to prefer acidic meadows with sundew (*Drosera* sp.) and huckleberry (*Vaccinium* sp.). Specifically, cold, spring-fed portions of meadows are preferred (Urie and Van Zuuk 2000). Occurrences are known from Sierra, Sequoia, and Tahoe National Forests as well as Sequoia National Park. A required habitat element is permanent saturated meadows; it does not occur in meadows that dry out. It is associated with bog and fen, meadow, and seep habitat. The trend of this moss appears to be declining as it is sensitive to even mild alterations of meadow hydrology (Urie and Van Zuuk 2000). Threats from management activities that may alter meadow hydrology include trampling from livestock, road construction and maintenance, timber harvest, fuel reduction activities, and recreation use.

There are no CNDDDB records for this species within five miles of the site and this moss was not observed during field surveys. However, limited potential habitat occurs within the site associated with riparian habitats along Hazel and Sly Creeks at the western and eastern portions of SPRA. Because of a lack of suitable meadow habitat occurring within the site, lack of CNDDDB records, and lack of finding during field surveys, this species has a low potential to occur within SPRA.

#### *Tripod Buckwheat*

This low-spreading perennial herb occurs in widely scattered locations on the inner Coast Range of California and along the Sierra Nevada foothills. It typically blooms from May through July. Tripod buckwheat occurs often on serpentinite flats, slopes, and outcrops, mainly in grassland communities as well as oak and conifer woodlands (University of Maryland 2002).

There are no CNDDDB records for this species within five miles of the site, and this species was not observed during field surveys; field surveys were performed during the blooming period of this species. Because the SPRA site does not contain serpentinite soils, lack of CNDDDB records and lack of field observations, this species has a low potential to occur within SPRA.

#### *Yellow Burr Navarretia*

Yellow-burr navarretia is a CNPS 4 plant species that occurs in dry, open areas within chaparral and woodlands habitats. Yellow burr navarretia generally occurs from 2,700 to 4,200 feet elevation. This species is threatened by urbanization and to a lesser extent, timber harvest, because this species responds well to disturbance. It blooms from May through July.

There are no CNDDDB records for this species within five miles of SPRA, and this species was not observed during field surveys; field surveys were performed during the complete blooming period of this species. However, this species could potentially occur in dry, open disturbed areas of chaparral, deerbrush, and woodland habitats within SPRA. Because potential habitat occurs onsite, lack of CNDDDB records within five miles of the site and lack of field observations, this species has a low potential to occur within SPRA.

**Table 4.7-2 — Listed and Special-Status Wildlife Species Potentially Occurring Onsite or in the Project Vicinity**

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
<b>Invertebrates</b>			
Button's Sierra sideband snail <i>Monadenia mormonum buttoni</i>	FSC;--;--;	Moist wooded areas in foothills of the Sierra Nevada.	<b>Likely.</b>
Gold rush hanging scorpionfly <i>Orobittacus obscurus</i>	FSC;--;--;	Known only from a small section of western slopes of central Sierra Nevada. Occurs in darkly shaded areas with high humidity along stream, often under tree roots in overhanging banks with rock outcrops.	<b>Likely.</b>
South Forks ground beetle <i>Nebria darlingtoni</i>	FSC;--;--;	Little research or available information on species habitat requirements. Prefers rocky margins along cool streams.	<b>Likely.</b>
Spiny rhyacophilan caddisfly <i>Rhyacophila spinata</i>	FSC;--;--;	Mid- to high-elevation streams and rivers.	<b>Likely.</b>
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT;--;--;	Elderberry shrubs, typically in riparian habitat.	<b>No;</b> appropriate habitat not detected onsite. No elderberry shrubs were identified onsite.
<b>Amphibians/Reptiles</b>			
California horned lizard <i>Phrynosoma coronatum frontale</i>	FSC;CSC;--;--;	Found in open oak and conifer woodlands, grasslands, and riparian areas. Most often found in areas with sandy soil types and often observed with rocky areas or outcroppings. Can occur from sea level to 6,500 feet elevation.	<b>Low.</b>

<sup>1</sup> For plants, CNPS 2001

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
California red-legged frog <i>Rana aurara draytoni</i>	FT;CSC;--;--	Typically requires a permanent water source and is typically found along quiet, slow-moving streams, ponds, or marsh communities with emergent vegetation.	<b>Low.</b>
Foothill yellow-legged frog <i>Rana boylei</i>	FSC;CSC;--;--	Shallow, flowing, small- to medium-sized streams with cobble substrate.	<b>Present.</b>
Mount Lyell salamander <i>Hydromantes platycephalus</i>	FSC;CSC;--;--	Restricted to alpine and subalpine biotic communities. Also prefers habitats with scattered boulders and rock outcrops. Standing water such as permanent stream, creek, seep or melting snow runoff almost always present within few meters of occurrences. Known range extends from Smith Lake in El Dorado County to Franklin Pass area in Tulare County. Known elevation range from 3,800 to 10,900 feet.	<b>No;</b> site is located at the lowest elevation this species typically occurs in. The site is located at too low an elevation for this primarily upper montane, subalpine salamander species. This species was not detected during 2004 field surveys. There are no CNDDDB records for this species within five miles of SPRA.
Mountain yellow-legged frog <i>Rana muscosa</i>	FE;CSC;--;--	Prefers sunny riverbanks, meadow streams, isolated pools, and lake borders in high Sierra Nevada. Prefers sloping banks with rocks or vegetation to waters edge. Seldom found more than few feet from water. Also occurs in ponds and low gradient streams with deep pools and undercut banks, generally above 4,500 to 12,000 feet elevation.	<b>No;</b> SPRA is not located within the elevation range of this species and no CNDDDB records occur within the immediate SPRA vicinity.
Western pond turtle <i>Clemmys marmorata</i>	FSC;CSC;--;--	Still or slow-moving water with basking sites and suitable upland habitat for nesting.	<b>Present.</b>
Western spadefoot <i>Spea hammondi</i>	FSC;CSC;--;--	Open foothill grasslands, pine oak woodlands and chaparral. Requires vernal pools or seasonal wetlands for breeding which occurs during winter and spring months. Primarily a species of lowlands, frequenting washes, floodplains of rivers, alluvial fans, and alkali flats. In Central Valley, occurs along foothills mostly below 3,000 feet elevation.	<b>No;</b> site is not located within known elevation range of this species and no CNDDDB records occur in immediate area.
<b>Fish</b>			

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
Central Valley steelhead <i>Oncorhynchus mykiss</i>	FT;--; --;--	Sacramento River and perennial tributaries.	<b>No</b> ; the site does not contain any tributaries to the Sacramento River.
Central Valley fall/late fall-run chinook salmon <i>Oncorhynchus tshawytscha</i>	FC;CSC;--;--	Sacramento River and tributaries below Keswick Dam.	<b>No</b> ; the site does not contain any tributaries to the Sacramento River.
Central Valley spring-run chinook salmon <i>Oncorhynchus tshawytscha</i>	FT;CT;--;--	Sacramento River and tributaries below Keswick Dam.	<b>No</b> ; the site does not contain any tributaries to the Sacramento River.
Central Valley winter-run chinook salmon <i>Oncorhynchus tshawytscha</i>	FE;CE;--;--	Sacramento River and tributaries below Keswick Dam.	<b>No</b> ; the site does not contain any tributaries to the Sacramento River.
Delta smelt <i>Hypomesus transpacificus</i>	FT;CT;--;--	Concentrated in Sacramento River channel between Collinsville and Rio Vista.	<b>No</b> ; the site does not contain any tributaries to the Sacramento River.
Hardhead <i>Mylopharodon conocephalus</i>	--;CSC;--;--	Deep pools with sand and gravel or boulder substrates in large streams at middle and high elevations, in undisturbed areas. Has been found within low elevation reservoirs.	<b>Low</b> .
Longfin smelt <i>Spirinchus thaleichthys</i>	FSC;CSC;--;--	Concentrated in Suisun, San Pablo, and North San Francisco bays, lower reaches of Sacramento and San Joaquin rivers, and Delta region.	<b>No</b> ; the site does not contain any tributaries to the Sacramento River.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	FSC;--;--;--	Sacramento and San Joaquin Rivers and their tributaries.	<b>No</b> ; the site does not contain any tributaries to the Sacramento River.
<b>Birds</b>			
American peregrine falcon <i>Falco peregrinus anatum</i>	FD(FSC),USFS Sensitive; CE;--;--	Nests in a wide variety of habitats including woodlands, dense coniferous forest, and coastal habitats near wetlands, lakes, or rivers on high cliffs, banks, dunes or mounds.	<b>No</b> ; this species has not been recorded within SPRA before. There are no CNDDB records for this species within five miles of the site; site also lacks cliff-nesting habitat.
American dipper <i>Cinclus mexicanus</i>	--;--;SLC;--	Occurs as a year-round resident in California along higher elevation, fast-flowing mountain streams.	<b>Low</b> .
Bald Eagle <i>Haliaeetus leucocephalus</i>	FT,FPD;CFP,CE; --;--	Large trees close to lakes and large rivers.	<b>Present</b> .
Bank swallow <i>Riparia riparia</i>	--;CT;--;--	Banks or bluffs near streams or other wetlands	<b>Low</b> .

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
Bell's sage sparrow <i>Amphispiza belli belli</i>	FSC;--;--	Localized, resident breeder in dry, open chaparral and coastal sage scrub along coastal lowlands and inland valleys.	<b>No</b> ; site does not contain suitable habitat and located at too high elevation for this species to nest.
Black swift <i>Cypseloides niger</i>	FSC;CSC;--	Nests within cliff ledges behind water falls associated with perennial water ways or damp coastal cliffs.	<b>No</b> ; site does not contain waterfall or cliff ledges that are required for this species to nest.
California spotted owl <i>Strix occidentalis occidentalis</i>	FSC,USFS Sensitive; CSC;--; --	Old-growth forest associated with multi-layered canopies; associated with mixed coniferous forest, redwood, and Douglas fir forest habitats.	<b>Present.</b>
California thrasher <i>Toxostoma redivivum</i>	FSC;--;--	Found in dense chaparral or thickets in riparian corridors.	<b>No</b> ; site does not contain suitable and located at too high elevation for this species to occur for nesting.
Cooper's hawk <i>Accipiter cooperii</i>	--;CSC;--; (nesting)	Nests in riparian corridors. Forages in woodlands and riparian areas.	<b>Likely.</b>
Flammulated owl <i>Otus flammeolus</i>	FSC; --; --; -- (nesting)	Nests in oak woodlands. Roosts during day in cavities of trees. Occurs in montane regions from 6,000 to 10,000 feet elevation and prefers low to intermediate canopy closure.	<b>Low.</b>
Lawrence's goldfinch <i>Carduelis lawrencei</i>	FSC;--;--	Nests in open oak or other arid woodland and chaparral habitats near water.	<b>Low.</b>
Lewis' woodpecker <i>Melanerpes lewis</i>	FSC;--;--; (nesting)	Breeds in Sierra Nevada and other local mountains within coniferous forests and oak woodlands. May occur in eruptive patterns in lower valley elevations following winter storms. Most commonly observed in the Central Valley during winter months.	<b>Low.</b>
Little willow flycatcher <i>Empidonax traillii brewsteri</i>	FSC;--;--	Nests in dense riparian vegetation such as willows and alders.	<b>Low.</b>
Loggerhead Shrike <i>Lanius ludovicianus</i>	FSC;CSC;--; (nesting)	Nests in desert, savanna, and open-canopied hardwood, hardwood-conifer, and riparian habitats. Often observed in open grassland or agricultural areas with perch sites available for hunting.	<b>No</b> ; site does not contain suitable open grassland habitat and does not provide suitable perch sites for foraging.
Long-billed curlew <i>Numenius americanus</i>	FSC;CSC;--; (nesting)	Mudflats and shallow marsh areas.	<b>No</b> ; site does not contain suitable habitat for this species.

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
Northern goshawk <i>Accipiter gentilis</i>	FSC,USFS Sensitive; CSC;--;--	Mixed coniferous and deciduous forests with dense canopy.	<b>Present.</b>
Nuttall's woodpecker <i>Picoides nuttallii</i>	--;--;SLC;--	Permanent resident of low-elevation riparian deciduous and oak habitats.	<b>Low.</b>
Oak titmouse <i>Baeolophus inornatus</i>	FSC;--;--; (nesting)	Oak savannah and oak woodlands.	<b>Low.</b>
Osprey <i>Pandion haliaetus</i>	--;CSC;--;-- (nesting)	Nests on cliffs, large snags, and man-made structures near large bodies of water.	<b>Present.</b>
Rufous hummingbird <i>Selasphorus rufus</i>	FSC;--;--; (nesting)	Nests in a wide variety of habitat; including hardwood, hardwood-conifer, meadow, riparian, meadow and chaparral; occur in the Trinity Mountains of Trinity and Humboldt counties.	<b>No;</b> site is not located within known breeding range of this species.
Sharp-shinned hawk <i>Accipiter striatus</i>	--;CSC;--;-- (nesting)	Nests in riparian corridors. Forages in woodlands and riparian areas.	<b>Present.</b>
Tricolored blackbird <i>Agelaius tricolor</i>	FSC;CSC;--;--	Nests in dense blackberry, cattail, tules, willow, or wild rose within emergent wetlands throughout the Central Valley and foothills.	<b>No;</b> site does not contain suitable habitat for this species.
Western burrowing owl <i>Athene cunicularia hypugaea</i>	FSC;CSC;--;-- (burrow sites)	Nests in burrows in the ground, often in old ground squirrel or badger burrows, within open dry grassland and desert habitat.	<b>No;</b> site does not contain suitable habitat for this species.
White-headed woodpecker <i>Picoides albolarvatus</i>	FSC;--;SLC;--	Nests in mature coniferous woods.	<b>Low.</b>
Other Raptors (Hawks, Owls and Vultures)	MBTA and §3503.5 Department of Fish and Game Code	Nests in a variety of communities including cismontane woodland, mixed coniferous forest, chaparral, montane meadow, riparian, and urban communities.	<b>Present.</b>
<b>Mammals</b>			

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
California wolverine <i>Gulo gulo luteus</i>	USFS Sensitive; CT;--;--	Primarily a sub-alpine species, believed to be extirpated throughout much of historic range in Sierra Nevada. This species is known to occur based on sightings from a variety of habitats in the elevation range from 1,600 to 14,200 feet with over 150 sightings at the mean elevation of 8,000 feet. Occurs in coniferous forests at higher elevations, generally with open areas at or above timber line. Habitat typically consists of open terrain above the timber line and generally include remote forested and alpine areas. Elevations within the northern Sierra Nevada range from 4,300 to 7,300 feet in red fir, mixed conifer, lodgepole, subalpine, conifer and probably montane meadow, chaparral and pine habitats.	<b>No</b> ; SPRA is not located within known elevation range of this species; no suitable old-growth forest habitat is present. No CNDDDB records within five miles of site.
Fringed myotis <i>Myotis thysanodes</i>	FSC;--;--;--	Found in a variety of habitats in California except in the Central Valley and desert areas. Roosts in caves, buildings, and rock crevices.	<b>Low.</b>
Greater western mastiff bat <i>Eumops perotis californicus</i>	FSC;CSC;--;--	Roosts on cliff faces, trees, buildings, and rock outcrops. Forages in a variety of habitats.	<b>Low.</b>
Long-eared myotis <i>Myotis evotis</i>	FSC;--;--;--	Found throughout California except for the Central Valley and desert areas. Roosts in buildings, snags, and rock crevices.	<b>Low.</b>
Long-legged myotis bat <i>Myotis volans</i>	FSC;--;---;--	Woodland and forest communities above approximately 4,000 feet elevation. Roosts in rock crevices, buildings, under tree bark, in snags, mines, and caves.	<b>Low.</b>

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
Pacific fisher <i>Martes pennati pacifica</i>	USFS Sensitive; CSC;--;--	Occurs in old-growth forests and once range from British Columbia through northern California and the Sierra Nevada. Species dens in rotting logs, hollow trees, and rock crevices in old-growth forests. This species occurs in dense, closed canopy coniferous forest and riparian habitats in the Sierra Nevada, Cascade Range, and Klamath Mountains. Only two native populations are known to occur today, one around the western California/Oregon border and the other, a southern Sierra Nevada population.	<b>No</b> ; SPRA is not located within a known current population and old-growth forest habitat is not present within the site. No CNDDDB records occur within five miles of site for this species.
Pallid bat <i>Antrozous pallidus</i>	USFS Sensitive; CSC;--;--	A wide variety of low-elevation habitats such as grasslands, shrublands, and woodlands.	<b>Low.</b>
Pine marten <i>Martes americana</i>	FSC,USFS Sensitive;--;--	Occurs in dense coniferous forests or mixed conifer-hardwood forests, and deciduous trees including spruce, hemlock, birch, maple, white pine, and fir.	<b>Low.</b>
Townsend's big-eared bat <i>Plecotus townsendii townsendii</i>	USFS Sensitive; CSC;--;--	Variety of habitats throughout California, including coniferous forests. Requires caves, mines, tunnels, or other manmade structures.	<b>Low.</b>
Sierra Nevada red fox <i>Vulpes vulpes necator</i>	USFS Sensitive; CT;--;--	Coniferous forests above 7,000 feet elevation with open meadows. Prefers meadow complexes interspersed with a variety of forest types for optimum hunting and foraging opportunities. The availability of prey items such as rabbits and rodents limit populations. Fire exclusion is thought to have resulted in dense forests adjacent to meadows.	<b>No</b> ; SPRA is not located within known elevation range of this species and suitable open, meadow intermixed with forested habitat is not present. No CNDDDB records within five miles of site.
Sierra Nevada snowshoe hare <i>Lepus americanus tahoensis</i>	--;CSC;--;--	Known from mid-elevation of Sierra Nevada from the vicinity of Mount Lassen southward to Mono and Tulare counties. Known from Nevada only in the vicinity of Lake Tahoe. They occupy altitudes above 4,800 feet and typically below 8,000 feet. Prefers riparian forest in the Sierra Nevada with willows and alder. May also occupy immature mixed conifer, subalpine conifer, red fir, Jeffrey pine, lodgepole pine, aspen forests, and often use habitats characterized with dense understory growth along forest edges in close proximity to meadows.	<b>No</b> ; SPRA does not contain suitable habitat and is not located within known elevation range. No CNDDDB records for this species within five miles of the site.

Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
Small-footed myotis <i>Myotis ciliolabrum</i>	FSC;--;--;--	Roosts in a wide variety of habitats (i.e., riparian scrub, woodland), in abandoned buildings, and bridges.	Low.
Spotted bat <i>Euderma maculatum</i>	FSC;CSC;--;--	Roosts in rock crevices and occasional buildings of foothills and desert areas.	Low.
Yuma myotis <i>Myotis yumanensis</i>	FSC;--;--;--	Reside in open forests and woodland habitats with sources of water over which to feed. Roost in buildings, mines, caves, and crevices.	Low.
<b>Federally Listed Species:</b>		<b>California State Listed Species:</b>	<b>CNPS* List Categories:</b>
FE = federal endangered	FC = candidate	CE = California state endangered	1A = plants presumed extinct in California
FT = federal threatened	PT = proposed threatened	CT = California state threatened	1B = plants rare, threatened, or endangered in California and elsewhere
FSC = federal species of concern	FPD = proposed for delisting	CR = California state rare	2 = plants rare, threatened, or endangered in California, but common elsewhere
CFP = California fully protected	FD = delisted	CSC = California Species of Special Concern	3 = plants about which we need more information
USFS Sensitive = US Forest Service Sensitive			4 = plants of limited distribution
			<b>Other Special-Status Listing:</b>
			SLC = species of local or regional concern or conservation significance
Source: Foothill Associates			

### **Listed Wildlife Species**

Based on field observations and literature review specific to the special-status wildlife species listed in Table 4.7-2, federally and/or state listed wildlife species were determined to have a potential to occur within SPRA based on the presence of potential habitat. These species include bald eagle (*Haliaeetus leucocephalus*), bank swallow (*Riparia riparia*), and California red-legged frog (*Rana aurora draytonii*). Only bald eagle has been observed onsite and, therefore, determined present. California red-legged frog and bank swallow have a low potential to occur within SPRA. All the aforementioned species are discussed below.

#### Listed Wildlife Species Determined Present

##### *Bald Eagle*

The bald eagle was down-listed from federally endangered to threatened throughout the lower 48 states in 1995. A proposed rule to federally de-list the species was published in 1999, but a final decision has not been made regarding the de-listing. Critical habitat has not been designated for this federally listed species. The bald eagle is listed as endangered under the California Endangered Species Act and designated as a California fully protected species. This species is also protected under the Migratory Bird Treaty Act and the Bald Eagle Protection Act.

The bald eagle is an opportunistic predator and scavenger adapted to aquatic ecosystems such as estuaries, lakes, reservoirs, major rivers, and some coastal habitats. Bald eagles feed on fish (either alive or as carrion), waterfowl, mammalian carrion, small birds, and small mammals. These raptors are highly maneuverable in flight and often hunt from perches. They forage diurnally using perch sites which often consist of the highest perch sites available with a view of the surrounding area (USFWS 1999). Suitable foraging habitat typically consists of large bodies of water or rivers with abundant fish and adjacent snags or other perches (Zeiner *et al.* 1990).

The bald eagle breeding season generally lasts from February to July, but courtship, pair bonding, and territory establishment can begin as early as January. Fledglings may not begin to disperse from the immediate nest site until the end of August (Zeiner *et al.* 1990). Stick platform nests are built 50 to 200 feet above the ground, usually below the tree crown (Zeiner *et al.* 1990). Nesting territories are normally associated within two miles from water bodies that support an adequate food supply (Lehman 1979). Most nests in California are located in ponderosa pine and mixed-conifer stands and nest trees are most often in mature ponderosa pines (Jurek 1988). Snags and trees with exposed lateral limbs or trees with dead tops are often present in nesting territories and are used for perching and as points of access to and from the nest (Jurek 1988).

Human interface, such as recreational activity, has been shown to disrupt foraging behavior of bald eagles. Effects of human disturbance include decreased feeding and energy intake (Stalmaster and Newman 1978). However, bald eagles can become habituated to routine human activities, and are less likely to be negatively affected by such activities in areas where eagles regularly occur (Stalmaster and Newman 1978).

Bald eagles are known to winter at Sly Park. Eagles were observed during a study conducted on SPRA in 1995, and wintering bald eagles had been observed by Mike Reeves, Park Ranger for SPRA, during ten consecutive winters previous to the 1995 study (Merriam Green Associates 1995). Wintering bald eagles were also observed by Reeves and typically arrive in late-October or early-November and remain until early-March (Merriam Green Associates 1995).

A study on bald eagles at SPRA was conducted from January to March 1995, to address eagle use of the area and potential effects resulting from a proposed Marina expansion (Merriam Green Associates 1995). Ten surveys were conducted during the study period. Bald eagles were observed during seven consecutive surveys from January 16 to February 15. No eagles were observed during the subsequent three surveys, although other observers noted presence of eagles on February 25 and April 2 and April 16. Two adults were present during each of four Merriam Green Associates surveys, and a single adult was observed during each of three surveys. During these winter observations, perching was observed on the island in the middle of Jenkinson Lake. No courtship or nesting behavior was observed as part of this study, and courtship behavior should have been observable during January and February if birds were nesting at SPRA (Merriam Green Associates 1995). The 1995 eagle study also involved soliciting personal observations from EID staff, Sly Park Recreation Staff, and USFS staff. Other park personnel have noted that bald eagles winter at SRPA (Starns and Goss 2001); they indicate that bald eagles do winter at the park and may visit the park during the summer from a nearby breeding site in Union Valley (Starns and Goss 2001). The USFS has a record of eagles nesting on USFS property in the SPRA vicinity, south of Jenkinson Lake, during the spring and summer of 2004 (USDA, USFS, pers. comm., Susan Yasuda, 2004 and 2006). This year (2006) is the third

consecutive year of an active bald eagle nest in this area. The nest is located southeast of the reservoir on USFS land. Additionally, a post fledging area is located within the park on EID property (USDA, USFS, pers. Comm., Susan Yasuda 2006).

During winter observations, bald eagles were found to perch most frequently on the islands in the southwestern portion of Jenkinson Lake. Eagles were also observed perched along the south shore of the lake near the second dam; in a tree at the eastern end of the lake; in trees across from the Marina site on Mormon Emigrant Trail; in a dead cedar in Miwok Cove; and in trees on the south side of Jenkinson Lake across from Sierra Point and Stonebraker launch. A bald eagle was observed foraging over Jenkinson Lake on two occasions during the field surveys (June 14 and 28, 2004). No active nesting activity was observed during field surveys; however, because bald eagles were confirmed to successfully nest at Jenkinson Lake in 2004 and for the previous two years, and are known to winter at Jenkinson Lake, bald eagles are present within SPRA.

#### Listed Wildlife Species with a Low Potential to Occur

##### *Bank Swallow*

The bank swallow was state listed as a state threatened species in March 1989. This species is a colonial breeder, nesting in burrows of steep, sandy riverbanks and in the sides of man-made excavations near rivers and streams, up to 7,000 feet in elevation (Fix and Beezner 2000).

There are no current CNDDDB records for this species within five miles of the site, and this species was not observed during field surveys. Suitable nesting habitat for this species is present west of Jenkinson Lake and the first dam at the old quarry site. Swallows were observed nesting in burrows on the steep banks of this quarry on July 12 and July 18, 2004. However, these were identified as rough-winged swallows (*Stelgidopteryz serripennis*). Additionally, this species has not been recorded as occurring within SPRA (El Dorado Irrigation District 1991). Because potential habitat occurs immediately west of Jenkinson Lake, lack of CNDDDB records within five miles of the site, and lack of field observations, this species has a low potential to occur within SPRA. Projects proposed under the SPRA Master Plan are not anticipated to occur within the area of the old quarry site and therefore, impacts would not occur to potentially nesting bank swallows. No mitigation is expected to be necessary.

##### *California Red-legged Frog*

The California red-legged frog (CRLF) was federally listed as threatened in 1996 (USFWS 1996). CRLF breed from November through April and eggs hatch in 6 to 14 days depending on water temperature. Larvae typically metamorphose between July and September, 3 ½ to 7 months after eggs hatch (USFWS 2002). Males can reach sexual maturity in two years while females reach sexual maturity in three years (USFWS 2002). Habitat for the CRLF consists of aquatic breeding sites within a matrix of riparian and upland dispersal habitat. Breeding habitat for the species includes pools and backwaters within streams, creeks, ponds, marshes, springs, lagoons, and artificially impounded stock ponds (USFWS 2002). California red-legged frogs are known to aestivate in upland habitat in rodent burrows, under rocks and logs, and in leaf litter in areas adjacent to aquatic habitat. California red-legged frogs are seldom found far from aquatic habitat during dry periods, but some individuals may disperse through upland habitats after the first fall rains.

In the Sierra Nevada mountain range, this species is thought to occur from Shasta to Mariposa counties at elevations from sea level to 5,000 feet although recent surveys indicate that CRLF are virtually extirpated from the Sierra Nevada mountains (USDA Forest Service 2003). There are believed to be at least three extant occurrences of CRLF in the Sierra Nevada; one occurrence at approximately 3,500 feet elevation from Pinkard Creek (Butte County) in 1991 as well as an unverified sighting in Sierra County in 1998 within the Pine Creek Grove channel at approximately 5,200 feet (USFWS 2002). Additionally, there is one CNDDDB record for this species within two miles northwest of SPRA (CNDDDB 2005), an occurrence from Spivey Pond on the north fork of Weber Creek, located approximately 2.2 miles northwest of Jenkinson Lake (Figure 4.7-2).

Critical habitat for the California red-legged frog was formally designated on March 13, 2001 (USFWS 2001) and SPRA was within Critical Habitat Unit 1 (Sierra Nevada Foothills and Central Valley). However, in light of a court decision, most of the critical habitat units designated for this species were subsequently dismissed. The USFWS subsequently published a proposed rule to re-establish critical habitat in El Dorado County (Critical Habitat Unit 3) and other areas where critical habitat was originally designated. Based on a revised proposal for critical habitat designation, the USFWS designated El Dorado-1, Spivey Pond as critical habitat, one of the five remaining extant California red-legged frog populations in the Sierra Nevada foothills (USFWS November 2005). In April 2006, the boundary of ELD-1 was revised and the final designation excluded the SPRA (April 2006). The final critical habitat designation for ELD-1 includes the following revised boundary: Pony Expressway Trail on the north, Newton Road on the west, Pleasant Valley Road on the south, and County Highway E-16 on the east. Approximately five percent of lands originally designated were removed based on the premise that these areas, including the Spivey Pond CRLF population, are under the management of the U.S. Forest Service, specifically the El Dorado, Plumas, and Tahoe National Forests. The El Dorado National Forests are managed through implementation of the Sierra Nevada Forest Plan Amendment (SNFPA) Record of Decision (ROD) (USFWS 2006). In summary, the SPRA is not located within a final critical habitat unit designated for CRLF.

The USFWS approved a recovery plan for this species on May 28, 2002 (USFWS 2002). The Sierra Nevada foothills recovery unit is bound by an eastern limit of 5,000 feet elevation (USFWS 2002); therefore, SPRA is located within a recovery unit for CRLF. The watersheds included in this recovery unit include the North Fork of the American River, the Lower Cosumnes-Lower Mokelumne and Upper Cosumnes River watersheds among several other watersheds found within the Sierra Nevada mountain range. Overall, the recovery potential of the Sierra Nevada unit is low given few existing populations, high levels of threats, and general low habitat suitability for CRLF (USFWS 2002). Within this unit are two identified core areas, Weber Creek and the North and Middle Forks of the Cosumnes River basin. The goal of the Weber Creek Core Area is to protect occupied pond and streams within dispersal distances by implementing focused recovery efforts. Additionally, the goal of the North and Middle Forks of the Cosumnes River basin is to control non-native aquatic species. This watershed has been identified as a core area for recovery of the species because the watershed historically supported CRLF and restoration and re-establishment needs are necessary (USFWS 2002).

The USFWS has identified primary constituent elements for CRLF as physical and biological elements that are essential to the conservation of the species. These elements include aquatic

breeding habitat, non-breeding aquatic habitat, upland habitat, and dispersal habitat. Adult CRLF can survive in moist upland habitat after aquatic habitats have dried and can live several years to make new breeding attempts. Therefore, aquatic breeding habitat need not be present every year, but it must hold water often enough to support a CRLF population (USFWS 2006). Aquatic habitat is essential for providing space, food, and cover requirements necessary to sustain all life stages of CRLF. Non-breeding aquatic habitat includes all aquatic breeding habitat types identified above as well as intermittent creeks, seeps, and springs. CRLF can use cracks in the bottom of dried ponds as refugia to maintain moisture and avoid heat exposure (USFWS 2006). The associated upland and riparian habitat provide food and shelter sites for CRLF and assist in maintaining the integrity of aquatic sites by protecting them from disturbance and supporting the normal functions of aquatic habitat. Upland habitat is described as natural areas within 200 feet of the edge of riparian vegetation or no farther than the watershed boundary. CRLF often disperse from their breeding habitat in search of upland habitat if aquatic habitat is not available.

Dispersal distances are believed to be dependent upon habitat availability and environmental conditions, but radio-tagged frogs in coastal areas have been documented to move approximately one mile over upland habitat during the wet season (USFWS 2002). CRLF have been documented to travel as far as 2.2 miles from non-breeding to breeding habitats, a long distance movement that is considered more of a migration of the species from breeding to non-breeding habitats. These large movements are typically made in disregard to topography, vegetation type, or riparian corridors. Dispersal habitat provides connectivity between CRLF breeding habitat. Dispersal habitat can be of several habitat types, but must be free of barriers that would prevent frog dispersal. Barriers include heavily traveled roads without bridges or culverts and large urban developments with vast areas of pavement. Agricultural fields such as row crops, vineyards, and orchards do not constitute barriers to CRLF dispersal (USFWS 2006). Dispersal corridors do not require a particular type of habitat, although it is necessary the corridor connect two aquatic habitats and is free of barriers. As the result of CRLF movement studies, it has been determined the range of dispersal distances is an upper limit of 2.2 miles and that 0.70 miles of dispersal habitat will provide the lower extent to ensure that connectivity between breeding habitats will be maintained (USFWS 2006). Therefore, dispersal habitat is defined as habitat connecting two or more patches of breeding habitat within 0.7-mile of one another.

The fluctuating water levels of the reservoir make the mouths of Sly Park and Hazel creeks where the creeks enter the reservoir along the eastern portion of SPRA unsuitable for CRLF breeding. Sly Park Reservoir itself provides no aquatic breeding habitat for CRLF because of the presence of predatory fish and fluctuating water levels. However, the upstream portions of Sly Park and Hazel creeks may support slow-moving, deep-water pools with upland riparian habitat which may be potential aquatic breeding, non-breeding aquatic habitat, and/or upland habitat for CRLF. These creeks as well as other seasonal or perennial drainages such as Carpenter Creek that hold adequate water beyond the rainy season may provide potential non-breeding aquatic habitat for CRLF. Although an existing CRLF population must occur that is moving from aquatic breeding habitats to other breeding pools or upland areas in order for the riparian corridor to be used. Therefore, riparian areas located along Sly Park and Hazel creeks may be potential upland habitat or serve as a connector dispersal corridor between occupied areas. Camp creek is a perennial creek south of SPRA that may also represent potential CRLF habitat. However, State Route 5 runs in an eastern to western manner and would be a large physical barrier to CRLF movement from Camp Creek to riparian drainages along the southern portion of Jenkinson Lake.

Additionally, the diversion tunnel in this area would not allow passage of CRLF from these drainages. The western extension of Sly Park Creek that exits the reservoir on the west side is not anticipated to support potential CRLF habitat due to fluctuating water release levels from dams 1 and 2.

The Weber Creek CRLF population does not show hydrologic connectivity to Sly Park or Hazel Creeks via a riparian corridor connection and is approximately two miles west of SPRA, a distance beyond the average maximum dispersal or migration distance of CRLF from breeding habitats. Additionally, barriers to movement between the two areas include various forest service logging and other access roads and a large residential development with past pavement sections immediately west of Sly Park Road and west of SPRA. Therefore, CRLF is not likely to migrate or disperse from the presumed extant Weber Creek population.

As discussed, SPRA may support potential aquatic breeding and non-breeding aquatic habitats for CRLF. Upstream habitats of Sly Park and Hazel creeks as well as unnamed drainage along the northern and southern portions of Jenkinson Lake may provide deep-water slowing pools for this species. Additionally, riparian habitat occurs in these areas that may be used as upland habitat. Given the distance of the nearest known CRLF occurrence (approximately two miles) to SPRA, barriers to movement, and lack of a contiguous connecting riparian corridor, CRLF is not expected to use SPRA and project site as dispersal habitat. Additionally, two areas have been identified as core recovery areas within a designated recovery unit for preservation of the species, Weber Creek and the North and Middle Forks Cosumnes River both in proximity to SPRA. Because of presence of potential aquatic and upland habitat within SPRA and proximity of core areas within a recovery unit, CRLF has a low potential to occur.

### ***Other Special-Status Wildlife Species***

Based on literature review, field observations, species range information, and species habitat requirements, other special-status wildlife species have a potential to occur onsite because of the presence of suitable habitat occurring within the site including American dipper (*Cinclus mexicanus*), Button's Sierra sideband (*Monadenia mormonum buttoni*), California horned lizard (*Phrynosoma coronatum frontale*), California spotted owl (*Strix occidentalis occidentalis*), Cooper's hawk (*Accipiter cooperi*), flammulated owl (*Otus flammeolus*), foothill yellow-legged frog (*Rana boylei*), gold rush hanging scorpionfly (*Orobittacus obscurus*), hardhead (*Mylopharadon conocephalus*), Lawrence's goldfinch (*Carduelis lawrencei*), Lewis' woodpecker (*Melanerpes lewis*), little willow flycatcher (*Empidonax traillii brewsteri*), northern goshawk (*Accipiter gentilis*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), osprey (*Pandion haliaetus*), pine marten (*Martes americana*), sharp-shinned hawk (*Accipiter striatus*), South Fork's ground beetle (*Nebria darlingtoni*), spiny rhyacophilan caddisfly (*Rhyacophila spinata*), western pond turtle (*Clemmys marmorata*), white-headed woodpecker (*Picoides albolarvatus*), other raptor species as well as special-status bat species.

### **Other Special-Status Wildlife Species Determined Present**

#### ***California Spotted Owl***

The California spotted owl is a CDFG Species of Special Concern. The breeding range of this species extends from west of the Cascade Range through the north Coast Range, the Sierra

Nevada, and in localized portions of the Transverse and Peninsular ranges. California spotted owls may move down-slope during winter, along the eastern and western slopes of the Sierra Nevada.

This species resides in dense, often mature, multi-layered mixed conifer, redwood, and Douglas-fir habitats, from sea level to approximately 7,600 feet in elevation. The preference of spotted owls for multi-layered forest is attributed to a need for temperature gradients for roosting. Spotted owls are intolerant of high temperatures, and therefore they roost in areas with dense overhead canopy on north-facing slopes during summer months. Also, multi-layered habitat supports suitable prey species for spotted owl such as wood rats (*Neotoma* sp.). Spotted owls usually nest in tree or snag cavities, in broken tops of large trees, or sometimes abandoned raptor nests.

Appropriate nesting and foraging habitat for California spotted owl is present in the densely forested areas on most of the slopes south of Jenkinson Lake. The southeast corner of the lake including EID and USFS lands is the most suitable habitat for California spotted owl because of an overall mature forest structure, steep slopes, and well-developed understory. A California spotted owl protected activity center is identified by the USFS in the southeastern corner of SPRA (USDA, USFS, pers. comm, Susan Yasuda, 2004). There are no CNDDDB records for this species within five miles of the site; however this species was detected during 2004 field surveys. One California spotted owl was heard onsite, south of Jenkinson Lake on July 11, 2004. Also on this day, a spotted owl was observed by a Foothill Associates biologist and park ranger south of SPRA, near the property boundary on adjacent USFS land. Therefore, this species is present within SPRA.

#### *Foothill Yellow-legged Frog*

Foothill yellow-legged frog is a CDFG Species of Special Concern and is a USFS sensitive species. This species occurs along the western slope of the Sierra Nevada at elevations of up to 6,000 feet. Foothill yellow-legged frogs occur predominantly along cobble or gravelly perennial streams with shallow riffles, but also in backwater pools with slow-moving water and mud substrate.

A Foothill Associates' biologist found foothill yellow-legged frogs during 2004 field surveys performed within the portion of Sly Park Creek that occurs within the SPRA, which also included night surveys using a spotlight. Foothill yellow-legged frogs were found within the gravelly, swift current, upstream portion of Sly Park Creek and bullfrogs (*Rana catesbeiana*) were also found in this portion of the creek. There are four CNDDDB records occurring within five miles of SPRA for this species. One record is from 1997 within Camp Creek approximately 1.5 miles southeast of Jenkinson Lake; two records from 1994 occur from the Middle Fork and North Fork of the Cosumnes River; and a 2002 record from the South Fork of the American River, just downstream from Blackbird campground within El Dorado National Forest (CNDDDB 2005). Additionally, foothill yellow-legged frogs have been observed on USFS lands in the vicinity of SPRA. Therefore, this species is present within SPRA.

#### *Northern Goshawk*

The northern goshawk is a CDFG Species of Special Concern and is a USFS sensitive species. Northern goshawk is a year-round resident in Eldorado National Forest. The northern goshawk

preys on small birds and mammals and tends to inhabit mature forest stands. Suitable nesting habitat for northern goshawk is present in forested areas south of Jenkinson Lake and within SPRA.

No goshawks were observed within SPRA during the 2004 surveys. However, goshawks are known to occur on USFS land in the project vicinity (pers. comm., Susan Ysuda, USFS, August 2004 and 2006). Goshawks have been sighted in SPRA in the past (Starns and Goss 2001) and are included in the 1991 bird list for SPRA (EID 1991). Therefore, goshawks are present within SPRA.

### *Osprey*

Ospreys occur around open water that harbors fish. Ospreys breed in California from the Cascade Range south to Lake Tahoe, along the coast south to Marin County. There are known breeding locations within Shasta Lake, Eagle Lake, and many inland lakes, reservoirs, and river systems. This raptor requires open water for foraging and uses large trees, snags, and dead-topped trees in open forest habitats for nesting and cover. Nests are made of a platform of sticks at the tops of large snags, cliffs, or human-made platform structures. In California, this species occurs mostly as a breeding raptor during spring and summer months and during migration as it migrates south to Central and South America along the coast and slopes of the Sierra Nevada. Ospreys arrive on nesting grounds around mid-March to early-April.

There are no CNDDDB records for this species; however a Foothill Associates biologist observed an osprey pair foraging over Jenkinson Lake in June and July 2004 and an active osprey nest is known on adjacent USFS land south of Jenkinson Lake, Sly Park Creek, and the SPRA. Therefore, this species is present within SPRA.

### *Sharp-Shinned Hawk*

The sharp-shinned hawk is the smallest hawk of the genus *Accipiter* with a relatively small head and short tail. Accipiters hunt from perches and fly low through woodland canopies for prey. It often hunts around houses, birdfeeders, and hedgerows for small bird prey. It most commonly prefers to nest within pine forests, riparian mixed conifer forests, and to a lesser extent, deciduous forests. Sharp-shinned hawks are commonly observed within foothill woodlands in the Sierra Nevada foothills. There are no CNDDDB records for this species within five miles of the site. However, a Foothill Associates biologist observed a sharp-shinned hawk within the project site near the quarry in July 2004, although no nest was found. Additionally, this species is included in the 1991 bird list for SPRA (EID 1991). Therefore, this species is present within SPRA.

### *Western Pond Turtle*

The western pond turtle is currently divided into two subspecies, the northwestern pond turtle which occurs from the vicinity of the American River in California northward to the lower Columbia River in Oregon and Washington and the southwestern pond turtle which occurs in coastal drainages from the vicinity of Monterey, California south to northwestern Baja California, Mexico. There is an intergraded zone of both subspecies south of the American River and north of Monterey (Stebbins 1985).

Western pond turtles are habitat generalists and occur in a wide variety of permanent or nearly permanent aquatic habitats, normally ponds, lakes, streams, and irrigation ditches, with basking

sites. Basking sites are typically submerged logs, rocks, mats of floating vegetation, or open mud banks (Zeiner *et al.* 1990). Western pond turtles typically leave aquatic sites to reproduce, aestivate, and over-winter in upland habitats such as annual grasslands and oak woodlands. Breeding occurs in late-April or early-May, and eggs may be laid from April through August (Stebbins 1985). Nests are typically dug in a substrate with a high clay or silt content and located on an unshaded slope. Females lay between 3 and 11 eggs and may lay additional clutches during a year. Because hatchling turtles have almost never been observed in aquatic sites during the fall, it is thought that hatchling turtles hatch and over-winter in the nest (Jennings and Hayes 1994). Western pond turtles can be seen from February through mid-November in the north and all year in the south. As an omnivorous species, this species feeds on aquatic plant material and a variety of aquatic invertebrates (Stebbins 1985).

A western pond turtle was observed by a Foothill Associates biologist during spring 2004 surveys along the open, mudflat lower reach portions of Sly Park Creek. The more upstream portion of Sly Park Creek is characterized as marsh habitat with typical emergent marsh vegetation which would also be potential pond turtle habitat, but the pond turtle was observed along the mudflat portion of Sly Park Creek during low lake water levels. Additionally, there is one CNDDDB record for this species within five miles of SPRA (CNDDDB 2005). Therefore, this species is present within SPRA.

#### *Other Raptor Species*

Raptor nests are protected under the MBTA and Section 3503.5 of the California Fish and Game Code, which makes it illegal to destroy any active raptor nest. Other raptor species forage and nest in forested habitats in El Dorado County and could potentially nest in SPRA. Inactive stick nests were observed in trees at several locations in SPRA. No active raptor nests were observed, but ample suitable raptor nesting and foraging habitat occurs onsite. Large trees onsite and in the vicinity of SPRA may provide potential nesting habitat for raptor species. Consequently, other raptor species are present within SPRA.

## Other Special-Status Wildlife Species Likely to Occur

### *Cooper's Hawk*

Cooper's hawks are usually found in riparian woodlands near stream courses. The breeding season for this species is typically between March and August (Zeiner *et. al.* 1990). Nests are typically built in woodlands or riparian areas and consist of a platform of sticks. Cooper's hawks will also sometimes use abandoned corvid nests (Ehrlich *et. al.* 1988). Cooper's hawks feed primarily on small birds and mammals. There are no CNDDDB records for this species within five miles of SPRA and this species was not observed during field surveys. SPRA provides moderate nesting and foraging habitat for this species although this species typically prefers an open canopy. Additionally, this species is included on the 1991 bird list for SPRA (El Dorado Irrigation District 1991). Therefore, this species is likely to occur within SPRA.

### *Freshwater Invertebrates*

Special-status freshwater invertebrate species have a potential to occur within the perennial creeks including Button's Sierra sideband, gold rush hanging scorpionfly, South Forks ground beetle, and spiny rhyacophilan caddisfly. All four of these invertebrates are federal species of concern. Little research has been performed or is available on habitat requirements and distribution. Button's Sierra sideband is a terrestrial snail that generally occurs in moist wooded areas in the foothills of the Sierra Nevada. Gold rush hanging scorpionfly is known from only a small section of the western slopes of the central Sierra Nevada within shaded canyons with high humidity, overhanging tree roots, and rock outcrops. South Forks ground beetle prefers rocky margins along cool streams and spiny rhyacophilan caddisfly is thought to occur in mid- to high-elevation streams and rivers. Spiny rhyacophilan caddisfly is known from Placer, Sierra, and El Dorado counties and from the Upper Yuba and North Fork American River watersheds. Typical habitat for this caddisfly genus is cool running-water, clear, creeks or rivers and sometimes transient streams.

Gold rush hanging scorpionfly, Button's Sierra sideband, and South Forks ground beetle each have one CNDDDB record occurring within five miles of SPRA. Gold rush hanging scorpionfly was recorded in 1979 from the American River, 11.7 miles west of Kyburz and Shirttail Creek near the community Foresthill within Tahoe National Forest; Button's Sierra sideband was recorded at an unknown date from Riverton; and South Forks ground beetle was recorded in 1979 from China Flat campground, approximately two miles south of Kyburz (CNDDDB 2005). Because suitable habitat occurs within SPRA mostly with the perennial creeks associated with Jenkinson Lake, known CNDDDB records within the immediate SPRA vicinity, these freshwater invertebrates are likely to occur within SPRA.

## Other Special-Status Wildlife Species with a Low Potential to Occur

### *American Dipper*

The American dipper is a species of local concern. This species nests in clear, fast-flowing river and stream habitats in montane regions. Nests are typically located on a raised site overlooking water such as on rocks in streams and rivers, behind waterfalls, or in stumps or logs in banks. No occurrences of this species are recorded in the CNDDDB within five miles of SPRA and this species is not included on the 1991 bird list for SPRA (EID 1991). Hazel and Sly Park Creeks most likely do not support fast-moving waters preferred by this species. Therefore, this species

has a low potential to occur within SPRA. Any project-related impacts would not likely significantly affect the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

#### *California Horned Lizard*

California horned lizard is a federal and state species of concern. This California endemic species historically occurred in a spotty range from Lake Shasta southward along the Sacramento Valley into the South Coast Range, San Joaquin Valley and Sierra Nevada foothills to northern Los Angeles, Santa Barbara, and Ventura counties. This species' current range includes the Sierra Nevada foothills from Butte County south to Tulare County below 4,000 feet elevation. There is one isolated population in Siskiyou County, California. California horned lizard is known to occur in valley-foothill hardwood, conifer, and riparian habitats, as well as in pine-cypress, juniper, and annual grassland habitats.

There are no CNDDDB records for this species within five miles of SPRA, and this species was not observed during field surveys. However, potential habitat areas with loose, friable soils and occasional rock outcrops occur within the wooded and chaparral habitats. Therefore, California horned lizard has a low potential to occur within SPRA. Any project-related impacts would not likely significantly affect the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

#### *Flammulated Owl*

The flammulated owl is one of the smallest North American owls. It is a federal species of concern. Because it is almost completely insectivorous, the northern population must migrate at least partially out of its breeding range to meet seasonal food requirements. Flammulated owls winter in Mexico and South America. In California, this owl occurs as a migrating and breeding raptor and may be observed during spring and fall months during migration from summer breeding grounds. This owl is found in forested, mountain environments, especially ponderosa pine forests with low-growing shrubs. This owl species roosts during the day in cavities and actively forages for insects at night, therefore making it difficult to observe. Flammulated owls prefer old-growth forests and are secondary-cavity nesters, meaning they depend on abandoned woodpecker cavities or excavated, dead limbs for nesting. There are no CNDDDB records for this species within five miles of the site and this species was not detected during 2004 field surveys. However, because suitable woodland habitat occurs within SPRA, this species has a low potential to occur and could potentially be affected by recreation development activities within SPRA.

#### *Hardhead*

Hardhead are large members of the minnow family typically found in larger mid- and low-elevation streams. Hardhead are a warm-water fish native to the Sacramento, San Joaquin River, and Russian River watersheds. These fish prefer deep pools with sand, gravel, or boulder substrates where they feed on small invertebrates or aquatic plants in quiet waters. While hardhead are typically found in riverine habitats, they have become established in some low-elevation reservoirs. Hardhead may spawn in granite riffles. Hardhead are found in less disturbed streams with few predatory fish such as bass (*Micropterus* sp.) and competitors such as carp (*Cyprinus carpio*).

This species has not been recorded from Jenkinson Lake and there are no CNDDDB records within five miles of SPRA. Additionally, deep pools with favorable substrate are not present within SPRA site, although given the presence of predatory fish within Jenkinson Lake such as various trout species, smallmouth bass, and bluegill, this species has a low potential to occur within the reservoir and creeks. Any project-related impacts are not expected to affect this species and no further mitigation is expected to be necessary.

#### *Lawrence's Goldfinch*

Lawrence's goldfinch is a federal species of concern. It is endemic to the arid woodlands of California and northern Baja, California. This species typically shows erratic breeding patterns from season to season and often exhibits an eruptive pattern. The breeding range is restricted to the Central Valley and coastal foothills of California and northern Baja; however breeding territories characteristically vary from year to year in their location given this species sporadic nature. Lawrence's goldfinch typically nest in arid, open woodland environments near chaparral, weedy fields, or near bodies of water, with a strong preference for fiddlenecks (*Amsinckia* spp.) for feeding on seeds. Breeding typically takes place from mid-April through mid-July. There are no CNDDDB records for this species occurring within five miles of the site and this species was not observed during field surveys. This species is not included on the 1991 bird list for SPRA (EID 1991). Although woodland habitat is present within SPRA, this species has not been known to occur in the project vicinity; therefore this species has a low potential to occur. Any project-related impacts would not likely significantly affect the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

#### *Lewis' Woodpecker*

Lewis's woodpeckers are associated with open canopied, pine forests and riparian woodlands dominated by cottonwoods. In the Central Valley, they can be found within oak-pine woodlands in the foothills throughout the year, although most commonly in the winter. Habitats are typically open woodlands or recently burned forests. They breed in the Sierra Nevada and migrate to lower foothill and valley elevations during winter months; they often appear in eruptive patterns as they are flushed from higher elevations to lower valleys after winter snow storms. They winter in the Central Valley and Transverse Range in southern California; they are known to breed along the eastern slopes of the Coast Range, Sierra Nevada, Klamath Mountains and Cascade Range. There are no CNDDDB records for this species and this species was not detected during 2004 field surveys. This species is not included on the 1991 bird list for SPRA (EID 1991). Because potential woodland habitat is present within SPRA and this species has not been known to occur in the project vicinity, this species has a low potential to occur. Any project-related impacts would not likely significantly affect the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

#### *Little Willow Flycatcher*

The little willow flycatcher is similar in appearance to many of the species of the *Empidonax* species. Positive identification of this species in the field is often made by vocalizations. Willow flycatchers winter in Mexico and Central America. This subspecies breeds throughout the western slope of the Sierra Nevada and Cascade ranges. This species typically returns to breeding grounds in May and June. Breeding habitat for this species includes montane riparian and willow scrub habitat. This species is known to breed in the foothills and Sierra Nevada range

from approximately 2,000 feet to 8,000 feet elevation (Zeiner *et. al.* 1990). Nests are typically built in the fork of willow shrubs or other suitable riparian or wet meadow vegetation. Flycatchers forage primarily on insects but will also eat some seeds and berries. There are no CNDDDB records for this species and this species was not detected during 2004 field surveys. This species is not included on the 1991 bird list for SPRA (EID 1991). Hazel and Sly Park creeks do not support dense riparian willow thickets required for this species to nest. Therefore, this species has a low potential to occur within SPRA. Any project-related impacts would not likely significantly affect the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

#### *Nuttall's Woodpecker*

The Nuttall's woodpecker is a species of local concern and is a year-round resident in oak woodlands and riparian woodlands throughout the Central Valley, Coast Range, and lower elevations of the Sierra Nevada and Cascade Range. Nuttall's woodpeckers can be found in a variety of habitats including urban environments and riparian areas but are most often associated with oak woodlands. Nuttall's woodpecker is a cavity nester in snags or dead limbs of willow, cottonwood (*Populus* sp.), alder and sycamore (*Platanus* sp.) trees, but rarely oak trees. Breeding typically occurs between March and July (Zeiner *et al.* 1990).

There are no CNDDDB records for this species occurring within five miles of the site and this species was not recorded during field surveys. However, Nuttall's woodpecker is a commonly observed woodpecker species within the Sierra Nevada foothill region and suitable nesting habitat is present within SPRA. This species has a low potential to occur within SPRA given the presence of potential habitat and fairly widespread distribution of this species. Any project-related impacts would not likely significantly affect the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

#### *Oak Titmouse*

Formerly the plain titmouse, the genus *Baeolophus* was recently split into juniper titmouse and oak titmouse. The oak titmouse is a year-round resident in northern California of a variety of habitats and is most often associated with oaks, but also occurs in montane hardwood, oak woodlands, and mixed conifer habitats. It occurs in cismontane California from Humboldt County south to the Mexican border. It nests in tree cavities or old woodpecker holes, natural cavities, or nest boxes. Breeding typically occurs between March and July (Zeiner *et. al.* 1990). Oak titmice are common in foothill oak woodland communities and are frequently observed within woodland areas of the Sierra Nevada foothills.

Given the lack of CNDDDB records and suitable oak woodland habitat within the site, this species has a low potential to occur. However, oak titmouse is a commonly observed bird species within the Sierra Nevada foothill region and any project-related impacts would not likely significantly affect the local or regional population of this species. Consequently, no mitigation measures are expected to be necessary.

#### *Pine Marten*

Pine marten is a federal species of concern and USFS sensitive species. It is predominantly a predator of small mammals and birds, but will also eat fruits and insects actively during day and night. Suitable habitats include dense coniferous forests or mixed conifer-hardwood forests, and

deciduous trees including spruce, hemlock, birch, maple, white pine, and fir. Required habitat elements are believed to include several large limbs and fallen trees in the forest understory, which provide prey, protection, and den sites. This species is threatened largely by habitat loss due to logging.

There are no CNDDDB records for this species within five miles of SPRA and no evidence of this species was detected during field surveys. Based on research performed on behalf of EID, potential habitat for pine marten has been identified within the SPRA vicinity (EIP 2002a). Although SPRA is most likely located at too low an elevation for pine marten to occur, as this species occurs more often in upper montane, sub-alpine forest types. Therefore, pine marten has a low potential to occur within SPRA. Any project-related impacts would not likely significantly affect the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

#### *Special-Status Bat Species*

The following federally sensitive bat species have a potential to occur within SPRA: fringed myotis (*Myotis thysanodes*), greater western mastiff bat (*Eumops perotis californicus*), long-eared myotis (*Myotis evotis*), long-legged myotis (*Myotis volans*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Plecotus townsendii townsendii*), small-footed myotis (*Myotis ciliolabrum*), spotted bat (*Euderma maculatum*), and Yuma myotis (*Myotis yumanensis*). No evidence of bat roosts was detected during 2004 field surveys. Habitat ranges for these bat species are widespread throughout California; however, many of these species are rare within their habitats. Habitat for bat species consists of foraging habitat, night roosting sites, maternity roosting sites, and winter hibernacula.

Bat surveys were performed by the USFS on behalf of EID's project re-license application for Project 184. Surveys were performed during fall 1999 and June and July 2000; surveys included visual observations, mist netting, and an Anabat remote recorder that collects ultrasonic echolocation signals emitted by bats to allow for bat species identification. Bat survey locations consisted of tunnels and canals in need of damage repair and included an area immediately south of South Fork American River and north of Highway 50. The study area included locations in close proximity to SPRA. The bat study concluded that the woodlands within the study area is within the range of pallid bat, Townsends's big-eared bat, small-footed myotis, long-eared myotis, and Yuma myotis and woodland habitats provide suitable foraging habitat for these bat species. Also, the following special-status bat species were detected by Anabat acoustic monitoring: fringed myotis, Yuma myotis, long-legged myotis, and small-footed myotis (EIP 2002b).

No evidence of bat roosts was observed during 2004 field surveys and no CNDDDB records occur for within five miles of SPRA for special-status bat species. Because suitable foraging and roosting habitats occur within the woodland habitats within SPRA and special-status species were detected for EID's infrastructure improvement study within proximity to SPRA, special-status bat species have a low potential to occur within SPRA.

#### *White-Headed Woodpecker*

The white-headed woodpecker is a species of local concern. This species is a year-round resident of montane coniferous forest and lodgepole pine and red fir habitats in the higher elevations of

the Sierra Nevada. This species nests in open conifer habitats, often near edges of roads, natural openings, or edges of small clearings. There are no CNDDDB records for this species occurring within five miles of the site, and this species was not observed during field surveys. Also, this species is identified as a commonly occurring, year-round resident on the 1991 bird list for the Sly Park Recreation Area (EID 1991). Due to the presence of potential nesting and foraging habitat, this species has a low potential to occur within SPRA. However, any project-related impacts would not likely significantly affect the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

### **Wetlands and Waters of the United States**

Jurisdictional waters of the U.S. preliminarily identified within SPRA based on reconnaissance-level field surveys include Hazel Creek, Sly Park Creek, other unnamed tributaries to Jenkinson Lake, as well as the lake itself. Potential jurisdictional wetland areas including riparian, aquatic, other mesic areas, and seeps have been identified within SPRA but have not been formally delineated. These areas are indicated as montane riparian areas on Figure 4.7-1.

Jurisdictional waters of the U.S. include jurisdictional wetlands as well as all other waters of the U.S. such as creeks, ponds, and intermittent drainages. Wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (Corps 1987). The majority of jurisdictional wetlands in the United States meet three wetland assessment criteria: hydrophytic vegetation, hydric soils, and wetland hydrology. Jurisdictional waters of the U.S. can also be defined by exhibiting a defined bed and bank and ordinary high-water mark (OHWM). As discussed in Regulatory Framework, jurisdictional waters of the U.S. are subject to Section 404 of CWA and are regulated by the Corps.

### **Other Sensitive Biological Resources**

#### ***Oak Trees and Forest Resources***

Oak woodlands and forest resources are protected by El Dorado County, and protection is outlined in the El Dorado County General Plan, Conservation and Open Space Element and Agriculture and Forestry Element. Table 4.1-1 describes all County policies that are relevant to biological resources.

#### ***Fisheries***

Jenkinson Lake, Hazel Creek, and Sly Park Creek provide fisheries habitat for native and introduced fish, including rainbow trout, brown trout, and mackinaw, kamloop, bluegill, crappie, and bass. The California Department of Fish and Game (CDFG) periodically stocks the lake with rainbow trout in May. The condition of native fisheries in the lake was not evaluated for the SPRA Master Plan, although the upstream reaches of Hazel and Sly Park Creeks may still support a native trout population. Management of the lake as a domestic water supply limits its long term viability as a fishery. Anadromous fish do not occur in the project area because of downstream barriers to fish passage. The lake is excluded from the National Oceanic and Atmospheric Association's designation of critical habitat for steelhead and salmon, which are presumed absent from the lake. Activities proposed under the SPRA Master Plan are expected to be compatible with recreation fishery activities, and would not impose additional impacts to fish

resources that are currently regulated by CDFG. Therefore, no mitigation is expected to be necessary.

### ***Wildlife Migration Corridors***

Wildlife migration corridors are important for the movement of migratory wildlife populations. Corridors provide foraging opportunities and shelter during migration. Generally, wildlife migration corridors are established migration routes for many species of wildlife. In wooded areas, these corridors often occur in open meadow or riparian habitats and provide a clear route for migration in addition to supporting ample food and water sources during movement. Wildlife migration corridors are protected under the El Dorado County General Plan and are required for environmental review during the CEQA process. Table 4.1-1 describes County policies that are relevant to biological resources.

Specifically, CDFG is concerned with protection of deer migration corridors where urban expansion may pose a threat, and has mapped mule deer critical habitat and migration patterns in El Dorado County (El Dorado County 2004). Critical habitat is defined by CDFG as habitat that is essential to the long-term productivity of the herd. Mule deer were sighted during 2004 surveys of SPRA, as well as an abundance of tracks, scat, trails, and bedding areas, especially south of Jenkinson Lake. The CDFG deer migration corridor map designates critical winter and holding habitat on lands surrounding SPRA, and some of these areas may overlap slightly with SPRA boundaries. However, the activities proposed under the SPRA Master Plan are expected to be compatible with deer conservation, and would not hinder deer movement or migration corridors. Therefore, no mitigation is expected to be necessary.

### ***Riparian Habitat***

Riparian habitat has been mapped within SPRA along Hazel Creek, Sly Park Creek, and other unnamed tributaries south of Jenkinson Lake (Figure 4.7-1). Riparian habitat provides habitat value for a number of wildlife species. The riparian habitat identified within SPRA is subject to the jurisdiction of Section 1600 of the California Fish and Game Code. Section 1600 applies to projects that may potentially affect any portion of a stream with a defined bed, bank, or any riparian habitat associated with the stream.

## **4.7.2 Regulatory Setting**

The following section includes information on federal, state, and local regulations that apply to project area biological resources.

### **4.7.2.1 Federal Regulations**

Federal regulations that apply to the biological resources present at the project site include the Federal Endangered Species Act and Section 404 of the Clean Water Act.

#### **Federal Endangered Species Act**

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. The FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3)(19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harassment is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

FESA and the Clean Water Act (CWA) Section 404 guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species. The U.S. Army Corps of Engineers (Corps) must consult with the USFWS and/or the National Marine Fisheries Service (NMFS) when threatened or endangered species under their jurisdiction may be affected by a proposed project. In the context of the proposed project, FESA would be initiated if development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

### **Migratory Bird Treaty Act**

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.”

### **Bald Eagle Protection Act**

This 1940 Act prohibits the taking of bald or golden eagles or their nests or eggs. Under this Act, “take” is defined as “to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.”

### **Section 404 of the Clean Water Act**

The Corps regulates discharge of dredged or fill material into waters of the United States under Section 404 of the CWA. “Discharges of fill material” are defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of waters is present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [33 C.F.R. §328.3(b)]. Currently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the “normal circumstances” for the site.
- The lateral extent of non-tidal waters is determined by delineating the ordinary high-water mark (OHWM) [33 C.F.R. §328.4(c)(1)]. The OHWM is defined by the Corps as “that line on the shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 C.F.R. §328.3(e)].

#### **4.7.2.2 State Regulations**

State of California regulations that apply to biological resources at the project site include the California Endangered Species Act and Section 1600 of the California Fish and Game Code.

##### **California Endangered Species Act**

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the FESA but pertains to state-listed endangered and threatened species. CESA requires state agencies to consult with CDFG when preparing CEQA documents. The purpose is to ensure that the state lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). The CESA directs agencies to consult with CDFG on projects or actions that could affect listed species, directs CDFG to determine whether jeopardy would occur, and allows CDFG to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows CDFG to authorize exceptions to the state’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

##### **Fish and Game Code Section 1600: Streambed Alteration Agreements**

CDFG is a trustee agency that has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code. Under Section 1602, a private party must notify CDFG if a proposed project will “substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds...except when the department has been notified pursuant to Section 1601.” If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFG may propose reasonable measures that will allow protection of those resources. If these measures

are agreeable to the parties involved, they may enter into an agreement with CDFG identifying the approved activities and associated mitigation measures.

## **Local Regulations**

### ***El Dorado County Regulations***

Table 4.1-1 discusses County regulations that pertain to biological resources.

### **4.7.3 Environmental Impact Thresholds/Criteria for Evaluation**

The project would be considered to have a significant adverse impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFG;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plan, policies, regulations, or by CDFG or USFWS;
- Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means;
- Interfere substantially with the movement of any resident or migratory fish or wildlife species, or with established resident or migratory wildlife corridors, or impede use of wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

### **4.7.4 Environmental Impacts**

This section identifies and discusses potential impacts to biological resources resulting from the proposed project, and suggests mitigation measures to reduce the levels of impact. A detailed discussion of mitigation measures is found in Section 4.7.4.

**Table 4.7-3 — Impacts Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Construct New Campsites</b>                      13.04 Dogwood Camp                      16.02 Primitive Camp Area</p>	<p>The construction of new campsites at Dogwood Camp and the primitive camp area are not anticipated to remove any trees. Therefore, no impacts to protected trees, raptors, or roosting bats are expected to occur.</p> <p>As mentioned previously special-status plant species have a potential to occur within SPRA including Humboldt lilly, marsh skullcap, Nissenan manzanita, Pleasant Valley mariposa lily, saw-toothed lewisia, slender-leaved pondweed, Stebbin's phacelia, three-ranked hump moss, tripod buckwheat, and yellow burr navarretia. Eight field surveys were performed during the months of June and July 2004 and no special-status plant species were observed within SPRA; however, special-status plant species and suitable habitat may still occur in the vicinity of campsite construction. Therefore, the construction of new campsites at Dogwood Camp within mixed conifer and chaparral habitat may potentially affect special-status plant species and/or habitat.</p> <p>No impacts are anticipated to occur to special-status amphibian or reptile species from the construction new campsites at either camp area.</p> <p>Construction of ten new primitive campsites may result in indirect impacts to waters of the U.S. (Jenkinson Lake). Construction of primitive campsites is not expected to directly affect Jenkinson Lake as work is occurring above the ordinary high-water mark (OHWM); however indirect impacts have a potential to occur from construction runoff. Indirect impacts to the water quality of Jenkinson Lake would be temporary and would be expected to last the duration of construction activities.</p>	<p>Potentially Significant Impact</p>
<p><b>Construct Post/Pier Structures</b>                      2.09 Scout/Youth Group Camp Mess Hall                      2.12 Scout/Youth Group Camp (North)                      2.13 Scout/Youth Group Camp (South)                      2.17 Scout/Youth Group Camp Mess Hall                      5.02 Jenkinson Camp                      10.04 Chimney Camp                      20.03 Retreat and Event Center                      20.05 Retreat and Event Center (Phase I)</p>	<p>Construction of camping structures at Scout/Youth Group Camp may result in indirect impacts to Carpenter Creek, a potentially jurisdictional waters of the U.S. subject to Section 404 of the Clean Water Act. Work will not occur directly within the creek corridor therefore only indirect impacts from construction runoff are possible. Indirect impacts to the water quality of Carpenter Creek would be temporary and would be expected to last the duration of construction activities. Also, no impacts to any riparian habitat are anticipated to occur along Carpenter Creek under Section 1600 of the California Fish and Game Code.</p> <p>Special-status amphibian species (California red-legged frog or foothill yellow-legged frog) could occur within Carpenter Creek or could use upland habitat areas as winter aestivation sites. Although work associated with the construction of camp structures at Scout/Youth Group Camp is not expected to occur near Carpenter Creek, therefore no impacts are anticipated to occur to these aforementioned frog species.</p>	<p>Potentially Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
20.06 Retreat and Event Center (Phase II)	<p>Construction of camping structures within suitable mixed conifer habitat has the potential to affect special-status plant species. Specifically, the proposed Retreat and Event Center site has been identified as suitable Pleasant Valley mariposa lily habitat; however, this plant was not observed within this area of SPRA during directed floristic surveys.</p> <p>Trees will be avoided to the extent practical in the construction of camp structures; however tree removal may occur for the proper location of some structures. Also, trees planned for removal under these projects may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur during tree removal. Construction of campground structures has the potential to affect active raptor nests, and/or remove potential raptor nest trees. Bald eagles are known to use an area as a wintering perch site in the vicinity of the proposed events center (near Mormon Emigrant Trail) (Merriam Green Associates Environmental Consultants 1995). Sharp-shinned hawk, osprey, northern goshawk, and California spotted owl are also present within SPRA and a potential nest could be removed during tree removal under the prescribed Master Plan projects.</p>	
<p><b>Reconfigure Campsites</b></p> 2.07 Scout/Youth Group Camp 2.11 Scout/Youth Group Camp 2.16 Scout/Youth Group Camp 4.04 Pine Cone Camp 4.05 Pine Cone Camp 6.04 Sierra Camp (West) 6.05 Sierra Camp (East) 7.03 Stonebraker Camp 8.03 Hilltop Camp 9.02 Chimney/Hilltop Host Site 10.02 Chimney Camp 12.01 Hazel Creek Camp 13.02 Dogwood Camp 14.03 Rainbow Camp 15.03 Kamloop Camp 21.01 Main Group Campground (Relocate Host Site) 21.06 Main Group Campground (Tent Sites at Groups Sites #1 and #5)	<p>Currently, several sites within Rainbow and Kamloop camps are located within 50 feet of Hazel Creek and are planned for removal under the SPRA Master Plan in an effort to widen the buffer between campsites and riparian habitat associated with Hazel Creek. Removal of existing campsites within the 50-foot buffer of Hazel Creek could potentially affect upland winter aestivation habitat for special-status amphibian species including California red-legged frog and foothill yellow-legged frog, although because these existing campground areas are disturbed from human use, the potential for impacts to these species and/or habitat is minimal</p> <p>Also, the re-configuration of campgrounds would not allow construction of new sites within 50 feet from the ordinary high-water mark of any creeks. The reconfiguration of campsites could encourage recreational collection of special-status amphibian species as well; however, the 50-foot setback from new campsite construction would assist in preventing collection.</p> <p>Western pond turtle has the potential to be impacted from campsite reconfiguration activities near Hazel Creek, although pond turtle has not been observed within Hazel Creek during previous surveys. The portion of Hazel Creek where campground reconfiguration and campsite removal is occurring is not expected to be potential marsh habitat for pond turtle and impacts are not expected to occur to this species.</p> <p>The reconfiguring of campsites at Kamloop and Rainbow camps has the potential to</p>	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
21.09 Main Group Campground (Tent Sites at Group Site 32) 21.12 Main Group Campground (Tent Sites at Group Site #3 and #4) 21.14 Main Group Campground (Group Kitchens) 23.01 Black Oak Equestrian Camp	<p>affect Hazel Creek, a waters of the U.S.,and regulated waterway by the Corps. The Hazel Creek riparian corridor is also regulated under Section 1600 of the California Fish and Game Code. Additionally, the El Dorado County General Plan includes policies for wetland protection as described in Table 4.1-1. Work associated with campsite reconfiguration would involve the removal of existing campsites and work below the ordinary high water mark of Hazel Creek. Work occurring within the stream corridor may also affect federally sensitive freshwater invertebrates.</p> <p>As discussed in Section 3.3.1.1, any reconfiguration improvements would avoid removal of healthy native trees greater than six inches in diameter at breast height (DBH); however, some trees may require removal to meet the goals of the reconfiguration of campgrounds. If trees are proposed for removal, these trees maybe used by raptors as a nest tree. Also, trees planned for removal under these project elements may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur upon implementation.</p> <p>The reconfiguration of campsites within mixed conifer habitat is not expected to be potential habitat for special-status species and impacts are not expected to occur to sensitive plant species..</p>	
<b>Construct New Day Use Area</b> 19.03 Bumpy Meadow Trailhead	No impacts are anticipated to occur to sensitive biological resources from construction of a new day use area at Bumpy Meadow. No trees are anticipated to be removed for this work and work will not be performed near Jenkinson Lake or other waterway.	No Impact
<b>Reconfigure Day Use Area</b> 7.04 Stonebraker Camp	No impacts to biological resources are anticipated by the reconfiguration of the day use area at Stonebreaker Camp.	No Impact
<b>Trail Construction</b> 1.03 Main Park Entrance 2.05 Scout/Youth Group Camp 7.01 Stonebraker Camp 12.04 Hazel Creek Camp 16.01 Primitive Camp Area 22.01 Mountain Bike Trail 23.05 Black Oak Equestrian Camp	<p>Trail construction at Hazel Creek Campground could result in impacts to special-status amphibian species (California red-legged frog and foothill yellow-legged frog) due to its proximity of the proposed work to Hazel Creek and mapped riparian habitat. The remaining campgrounds are not expected to be potential special-status amphibian habitat therefore impacts to these species are not expected to occur from trail construction in these areas.</p> <p>Specifically, the construction of the new mountain bike trail along the southern portion of the lake may affect potential riparian habitat where the trail is proposed to cross the two mapped riparian drainages in this area, although these stream crossings would be fitted with bridge crossings. These areas may be regulated under Section 1600 of the California Fish and Game Code and indirect impacts to water quality could occur during trail construction. The portions where the new bike trail is proposed to cross Sly Park and Hazel creeks at the eastern portion of the lake are potential special-status</p>	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
	<p>amphibian species and western pond turtle habitat. The portion of the mountain bike trail proposed at the southeast corner of the lake may occur in proximity to the bald eagle and osprey nest that have been located on USFS land.</p> <p>Trail construction is expected to avoid trees and tree removal to extent practical by designing new trails around any trees; however, minor tree removal may be necessary. Any trees planned for removal may also be used by a nesting raptor and/or roosting bat species. Any trees planned for removal may be used as a bat roost site or by a nesting raptor.</p> <p>Due to fluctuating water levels, the areas along the margin of the lake are not anticipated to be potential special-status plant species habitat; therefore, trail construction, specifically the construction of the mountain bike trail along the eastern portion of the park, is not anticipated to affect sensitive plant habitat. However, along the northern portion of the lake where the proposed mountain bike trail will occur in more undisturbed and undeveloped portions (open forest areas) may represent potential sensitive plant species habitat and therefore impacts may occur to special-status plant species</p>	
<p><b>Bridges at Trail Crossings</b>  2.20 Scout/Youth Group Camp  12.07 Hazel Creek Camp</p>	<p>Although the SPRA Design Standards and Guidelines identify clear span bridges where feasible to minimize impacts to drainage corridors, it may be infeasible to keep all bridge construction out of the 100-year flood hazard area and ordinary high water mark in individual locations, based on site-specific characteristics. Therefore, construction of span bridges at Scout/Youth Group Camp and Hazel Creek Camp may result in indirect impacts to Carpenter Creek and Hazel Creek, both jurisdictional waters of the U.S. subject to Section 404 of the Clean Water Act. Both creeks and riparian habitat are also subject to regulation under the California Fish and Game Code Section 1600. Any indirect impacts that may occur to the water quality of Hazel Creek would be temporary and would be expected to last the duration of construction activities. Additionally, the El Dorado County General Plan includes policies for wetland protection as discussed in Table 4.1-1.</p> <p>Construction of span bridges proposed for the trail crossing at Hazel Creek and Carpenter Creek could potentially affect any special-status amphibian species (California red-legged frog and foothill yellow-legged frog) occurring within the immediate upland banks of the creeks. Also, bridge construction could affect potential western pond turtle if marsh habitat occurs in this portion of Hazel Creek as the creek opens up into the lake. The construction of new bridges could encourage recreational collection of special-status amphibian species. Additionally, western pond turtle has the potential to be impacted by the construction of span bridges at Hazel Creek Campground and Scout/Youth Camp.</p>	<p>Potentially Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
	<p>Construction of span bridges will avoid tree removal to the extent practical; however minor tree removal may be necessary to allow for proper bridge fittings. Therefore, tree removal may have the potential to affect active raptor nests if the tree is used as a nest tree.. Trees planned for removal under these project elements may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur upon implementation.</p> <p>Bridge construction within suitable mixed conifer habitat has the potential to affect special-status plant species.</p>	
<p><b>Infrastructure</b>  2.18 Scout/Youth Group Camp (North)  2.19 Scout/Youth Group Camp (South)  5.04 Jenkinson Camp  SPRA13 Increased Phone Service</p>	<p>No impacts are expected to occur to other biological resources from infrastructure projects.</p>	<p>No Impact</p>
<p><b>Waterless Toilets/Restrooms</b>  2.08 Scout/Youth Group (North)  2.14 Scout/Youth Group (South)  5.03 Jenkinson Camp  16.03 Primitive Camp Area  19.02 Bumpy Meadow Trailhead  20.04 Retreat and Event Center (1)  20.07 Retreat and Event Center (2)  24.02 Marina Parking Expansion</p>	<p>No impacts to sensitive biological resources are expected to occur from construction of waterless toilets. The new toilets proposed for the primitive camp area are proposed in an area that is not potential California red-legged frog, foothill yellow-legged frog, or western pond turtle habitat; therefore, no impacts to California red-legged frog are anticipated from the construction of waterless toilets in this area.</p> <p>The construction of waterless toilet structures within mixed conifer and Ponderosa Pine habitat are not anticipated to be habitat for special-status plant species therefore no impacts would occur to plant species.</p> <p>Tree removal is not expected to be necessary for the construction of waterless toilets.</p>	<p>No Impact</p>
<p><b>Showers/Laundry Facilities</b>  2.10 Scout/Youth Group (North)- Showers Only  2.15 Scout/Youth Group (South)- Showers Only  6.06 Sierra Camp  21.02 Main Group Campground</p>	<p>No impacts to sensitive biological resources are expected to occur from construction of shower facilities. The new shower facilities are proposed for areas that will not affect potential California red-legged frog, foothill yellow-legged frog, or western pond turtle habitat; therefore, no impacts are expected to occur to these species. Also, the construction of shower facilities is not anticipated to affect jurisdictional waterways or potential special-status plant species habitat.</p> <p>Tree removal is not expected to be necessary for the construction of new shower</p>	<p>No Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
	facilities.	
<p><b>Reconfigure Existing Parking</b></p> <p>1.05 Main Park Entrance  4.01 Pine Cone Camp  6.01 Sierra Camp  10.01 Chimney Camp (Day Use)</p>	<p>The reconfiguration of existing parking would most likely require some tree removal. Trees proposed for removal may be used by roosting bat species or nesting raptors.</p> <p>Due to excessive campsite disturbance, Pine Cone and Sierra camps as well as the main park entrance most likely do not represent potential habitat for special-status plant species; therefore, the reconfiguration of existing parking within these areas is not expected to affect special-status plant species.</p> <p>No other impacts are expected to occur to sensitive biological resources.</p>	Potentially Significant Impact
<p><b>Construct New Parking Areas</b></p> <p>2.02 Scout/Youth Group Camp (North)  3.01 Miwok Trailhead  4.02 Pine Cone Camp  6.07 Sierra Camp  11.02 Lake Drive Stabilization (Day Use)  12.03 Hazel Creek Camp (Day Use and Trailhead)  18.01 Dog Park  19.01 Bumpy Meadow Trailhead  20.01 Retreat and Event Center (East)  20.02 Retreat and Event Center (West)  21.03 Main Group Campground/Shower Parking</p>	<p>The construction of new parking areas at the Miwok Trailhead may result in impacts to potential habitat for special-status amphibians within Carpenter Creek. Carpenter Creek is regulated under Section 404 and Section 1600 as well as any riparian habitat that occurs in the portion of Carpenter Creek proposed for new parking. Only indirect impacts may occur to Carpenter Creek during construction of the new parking area; work is not expected to occur directly within the creek bed therefore no direct impacts to waters of the U.S. or sensitive freshwater invertebrates are expected to occur. However, removal of riparian habitat may be necessary for parking lot construction near Carpenter Creek.</p> <p>The day use parking at Lake Drive is proposed above the ordinary higher water mark and will not affect any waters of the U.S.</p> <p>The construction of new parking facilities at Hazel Creek Camp is not anticipated to affect special-status amphibian species, specifically California red-legged frog. The new parking lot construction will not occur within the riparian corridor and will occur above the ordinary high water mark and above the 50 foot restoration buffer areas. The remaining campgrounds are not expected to be potential habitat therefore impacts to CRLF and/or potential amphibian habitat from the construction of new parking areas are not anticipated to occur.</p> <p>The construction of new parking areas may require minor tree removal. Any trees proposed for removal may be used as a bat roosting site or a nesting raptor. If the existing museum structure at the Miwok Trailhead is used as a bat roost, demolition of the structure would affect roosting bat species.</p> <p>The construction of new parking areas within suitable mixed conifer habitat has the potential to affect special-status plant species. Specifically, the proposed Retreat and Event Center site has been identified as suitable Pleasant Valley mariposa lily habitat;</p>	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
	<p>however, this plant was not observed within this area of SPRA during directed floristic surveys.</p> <p><i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	
<p><b>Marina Parking Expansion</b>  24.01 Marina Parking Expansion  24.03 Marina Parking Expansion (Fish Cleaning Station)</p>	<p>The expansion of the Marina parking lot will require the removal of existing trees. Based on a preliminary site plan review for the parking lot expansion footprint, including a 15-wide buffer for construction, approximately 182 trees would be removed. The majority of trees to be removed would be among the species of pines identified in SPRA, ranging in size from 6 to 42 inches diameter at breast height (DBH). Six of the trees proposed for removal are oaks (<i>Quercus</i> spp.). The 182 trees proposed for removal fall into the following age classes: 62 trees 6 to 12 inch DBH; 77 trees 13 to 24 inch DBH; 37 trees 25 to 36 inch DBH; and 6 trees are greater than 37 inch DBH.</p> <p>Trees planned for removal under these project elements may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur upon implementation.</p> <p>The proposed Marina parking lot expansion area is mapped as Ponderosa Pine Series (<b>Figure 4.7-1</b>). Removal of approximately 180 pine trees within this area is not anticipated to result in a significant loss of forest resource within SPRA or the surrounding El Dorado National Forest. It is also not anticipated that removal of trees in this area would significantly affect local nesting or foraging raptor populations due to similar forested habitat of similar age and structure in the vicinity. Trees planned for removal as a result of the proposed Marina parking lot expansion may be used as a bat roost and therefore impacts to bat roosts or the removal of a bat roost trees could occur during construction and would require mitigation. The removal of any tree that is occupied by an active raptor nest or as a bat roost within the areas of the proposed Marina parking lot expansion would be considered a significant impact.</p> <p>No direct impacts are expected to occur to Jenkinson Lake or aquatic species within the lake from the expansion of the Marina parking lot as no work would occur below the ordinary high-water mark. Indirect impacts have the potential to occur to Jenkinson Lake from construction runoff during construction activities associated with Marina parking expansion. Indirect impacts to the water quality of Jenkinson Lake would be temporary and would be expected to last the duration of construction activities.</p>	<p>Potentially Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Realign/Improve Campground Access Roads</b></p> <p>2.01 Scout/Youth Group Camp</p> <p>2.03 Scout/Youth Group Camp (North)</p> <p>2.04 Scout/Youth Group Camp (South)</p> <p>2.06 Scout/Youth Group Camp (South)</p> <p>4.03 Pine Cone Camp</p> <p>5.01 Jenkinson Camp</p> <p>6.02 Sierra Camp (West)</p> <p>6.03 Sierra Camp (East)</p> <p>7.02 Stonebraker Camp</p> <p>8.01 Hilltop Camp</p> <p>9.01 Chimney/Hilltop Host Site</p> <p>12.02 Hazel Creek Camp</p> <p>13.03 Dogwood Camp</p> <p>21.04 Main Group Campground (Group Site #1)</p> <p>21.05 Main Group Campground (Group Site #5)</p> <p>21.08 Main Group Campground (Group Site #2)</p> <p>21.11 Main Group Campground (Group Sites #3 and #4)</p> <p>23.02 Black Oak Equestrian Center</p> <p>25.01 Lake Drive Access Improvements</p>	<p>The realignment of existing campground access roads are not anticipated to affect potential habitat for California red-legged frog, foothill yellow-legged frog, or western pond turtle as this work would not be occurring in the vicinity of any stream riparian corridors. No impacts are anticipated to occur to jurisdictional waterways from the realignment of existing campground roads.</p> <p>Generally, the realignment of existing park roads will avoid the removal of trees, but minor tree removal may be necessary for proper roadway improvements. Trees larger than 6 inch DBH will be avoided where possible. Trees planned for removal under these project elements may be used as a bat roost site or by a nesting raptor and therefore, impacts to roosting bats or nesting raptors could occur upon implementation.</p> <p>Due to fluctuating water levels and disturbance of existing campgrounds, none of the road improvement areas are assumed to be potential habitat for special-status plant species and no impacts are anticipated to occur to these species.</p> <p>Potential impacts from the stabilization of Lake Drive are discussed in a separate section.</p>	<p>Potentially Significant Impact</p>
<p><b>Reconfigure Main Entrance</b></p> <p>1.01 Main Park Entrance</p> <p>1.02 Main Park Entrance</p>	<p>Work associated with the relocation of the dump station and reconfiguration of the main entrance may require minor tree removal although tree removal will be avoided to the extent practical. Tree removal has the potential to affect active raptor nests, and/or remove potential raptor nest trees if that tree is used by a nesting raptor. Trees planned for removal under these project elements may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur upon implementation.</p> <p>No other impacts to sensitive biological resources are anticipated to occur from the</p>	<p>Potentially Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
	reconfiguration of the main park entrance.	
<b>Install Interpretive/Trail Signage/Kiosks</b> 1.06 Main Park Entrance 3.04 Miwok Trailhead 7.05 Stonebraker Camp 12.10 Hazel Creek Camp 19.05 Bumpy Meadow Trailhead	Installation of interpretive kiosks at the aforementioned campgrounds is not anticipated to affect biological resources due to minimal ground disturbance and no work occurring within the vicinity of a stream corridor. Tree removal is not anticipated to occur for the installation of any new signage.	No Impact
<b>Construct Visitor Center/New Maintenance Shop</b> 1.04 Main Park Entrance 1.07 Main Park Entrance	Construction of the new visitor center and visitor parking at the Main Park Entrance may require minor tree removal. If a tree proposed for removal is used by a nesting raptor, potential impacts may occur to active raptor nests, and/or remove potential nest trees. Any trees planned for removal under these project elements may also be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur upon implementation. Additionally, if the two existing small buildings at the Main Park Entrance are used as a bat roost, demolition of the structures would affect roosting bat species.	Potentially Significant Impact
<b>Construct New Facilities</b> 18.02 Dog Park	Construction of the Dog Park is not anticipated to affect biological resources as the proposed location is currently disturbed and minimal ground disturbance is proposed (fencing installation) for the dog park.	No Impact
<b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Center	<p>The construction of the Fine Arts Center will require the removal of existing trees. The proposed Sugarloaf Fine Arts Center is mapped as Mixed Conifer Series (<b>Figure 4.7-1</b>). Removal of this type of forest is not anticipated to be a significant loss of this forest type within SPRA or the surrounding El Dorado National Forest. Also, loss of this forest type is not expected to significantly affect local nesting or foraging raptor populations given the proximity of similar, undisturbed forest habitat along the southern portion of the lake. However, removal of a tree in this area that is occupied by an active raptor nest would be a significant impact and would require mitigation. Trees planned for removal under these project elements may be used as a bat roost site and therefore, impacts to bat roost sites or removal of bat roost trees could occur during construction of the Sugarloaf Fine Arts Center.</p> <p>No other impacts to sensitive biological resources are anticipated to occur from construction of the Fine Arts Center.</p>	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Rehabilitate Vegetation</b></p> <p>1.08 Main Park Entrance  4.07 Pine Cone Camp  6.08 Sierra Camp  6.09 Sierra Camp  7.06 Stonebraker Camp  8.04 Hilltop Camp  10.03 Chimney Camp  12.05 Hazel Creek Camp  12.06 Hazel Creek Camp  12.08 Hazel Creek Camp  12.09 Hazel Creek Camp  13.01 Dogwood Camp  14.02 Rainbow Camp  15.02 Kamloop Camp  21.07 Main Group Campground  (Group Sites #1 and #5)  21.10 Main Group Campground  (Group Site #2)  21.13 Main Group Campground  (Group Sites #3 and #4)  23.03 Black Oak Equestrian Camp  FMP Plant/maintain Seedlings for  Forest Health</p>	<p>Only vegetation rehabilitation activities occurring at Hazel Creek Camp may affect sensitive biological resources due to work occurring below the ordinary high water mark. The Hazel Creek restoration project will occur within the riparian corridor of Hazel Creek, a jurisdictional waterway under Section 1600 of the California Fish and Game Code and Section 404 of CWA. Direct and indirect impacts to Hazel Creek are anticipated to occur from rehabilitation activities. Also, work occurring in the stream corridor has the potential to affect foothill yellow-legged frog, California red-legged frog, and to a lesser extent western pond turtle (if marsh habitat occurs in this area of the creek). Work occurring within the stream bed may potentially affect federally sensitive freshwater invertebrate species.</p> <p>No other vegetation rehabilitation projects are anticipated to affect sensitive biological resources.</p>	<p>Potentially Significant Impact</p>
<p><b>Restrict Access</b></p> <p>3.02 Miwok Trailhead  3.03 Miwok Trailhead  4.06 Pine Cone Camp (Shore Access)  8.02 Hilltop Camp  14.01 Rainbow Camp (Creek Access Control)  15.01 Kamloop Camp (Creek Access Control)  19.04 Bumpy Meadow Trailhead  23.04 Black Oak Equestrian Center  23.06 Black Oak Equestrian Center</p>	<p>Creek access control measures such as the installation of barriers (boulders and cable fencing) at Pine Cone Camp, Rainbow Camp, and Kamloop Camp are not anticipated to affect any sensitive biological resources. No work is anticipated to occur below the ordinary high water mark and tree removal is not expected to be necessary.</p>	<p>No Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
<b>Dock Expansion</b> 7.07 Stonebraker Camp	No impacts are expected to occur to biological resources during the addition of 2-8-foot by 40-foot sections onto the existing floating dock at Stonebraker Camp.	No Impact
<b>Lake Drive Stabilization</b> 11.01 Lake Drive Stabilization	<p>Stabilization of Lake Drive may affect Jenkinson Lake during activities associated with moving the road away from the shoreline and the reinforcement of the bank to prevent undercutting. Work is anticipated to occur below the ordinary high-water mark. Direct and indirect impacts may occur to Jenkinson Lake during the realignment of approximately 500 feet of Lake Drive away from the existing shoreline. Jenkinson Lake is not potential habitat for freshwater invertebrates therefore impacts are not anticipated to occur to these species during stabilization of Lake Drive. Jenkinson Lake is not potential habitat for any special-status reptile or amphibian species and no tree removal is expected to occur.</p> <p>No other impacts to biological resources are expected to occur during stabilization of Lake Drive.</p> <p><i>Note: Component 11.01 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	Potentially Significant Impact
<b>SPRA Administration</b> SPRA01 Increased Staffing SPRA02 Staff Training SPRA03 Reservation Systems Software SPRA05 Website Development SPRA06 Proactive Maintenance SPRA07 Annual Maintenance Work Plan SPRA08 Volunteer Maintenance Events	No impacts would occur to biological resources.	No Impact
<b>Planning</b> SPRA04 Day-Use Carrying Capacity SPRA09 Trail Maintenance Plan SPRA11 Emergency Preparedness Plan	No impacts would occur to biological resources.	No Impact
<b>Fire Prevention</b> SPRA10 Fire Prevention	No impacts would occur to biological resources.	No Impact
<b>Law Enforcement</b> SPRA12 Law Enforcement	No impacts would occur to biological resources.	No Impact

Implementation of the SPRA Master Plan project is not anticipated to substantially affect biological resources on a local or regional-wide basis. Under the SPRA Master Plan, development of project components would generally be taking place within disturbed areas currently used for recreational purposes. Under the proposed Master Plan, environmental levels are not anticipated to exceed biological thresholds. Project design elements have been incorporated into the Master Plan to enhance biological value of SPRA including measures such as buffers from recreational areas, interpretive signage to promote environmental public awareness, enhancement of riparian areas, and access restriction to creeks and riparian areas.

#### **4.7.5 Mitigation Measures**

- Mitigation Measure BIO-1:** Under the El Dorado County General Plan policy 7.3.3.4, development of new facilities shall provide at least 100-foot setbacks from perennial streams and 50-foot setbacks from intermittent streams. Any facilities or new activities that must encroach closer shall be designed to minimize indirect impacts to wetlands to the greatest extent practicable. Additionally, design measures have been incorporated into project elements such as a 50-foot setback from the ordinary high-water mark of creeks, the minimization of cut and fill activities and the minimization of culvert installation will minimize impacts to potentially jurisdictional wetland features as well.
- Mitigation Measure BIO-2:** The Hazel Creek restoration project will require a Corps permit because the restoration activities will be occurring within below the ordinary high water mark. This work would be covered under Nationwide Permit (NWP) 27, Stream and Wetland Restoration Activities. A pre-construction notification is required for the restoration of Hazel Creek and must be submitted to the Corps before work occurring within the creek corridor. Any permit conditions required by the Corps in the issuance of the permit will be followed for the duration of the restoration work.
- Mitigation Measure BIO-3:** The stabilization of the bank along Lake Drive will require a Corps permit as it is occurring below the ordinary high water mark. This work would be covered under Nationwide Permit 13, Bank Stabilization; therefore NWP 13 shall be acquired before bank stabilization work occurring along Lake Drive. If the bank stabilization activity is less than 500 feet in length and the activity will not disturb more than one cubic yard per running foot, a post-notification to the Corps will be required to ensure compliance with this nationwide permit. If the length of bank stabilization is greater than 500 feet, a pre-construction notification

package must be submitted to the Corps to ensure compliance with the permit. If a pre-construction package is required for the bank stabilization along Lake Drive, any permit conditions required by the Corps will be followed for the duration of the work.

**Mitigation Measure BIO-4:** Based on site-specific projects, all Master Plan components that can feasibly be fitted with a crossing that will span and remain out of the ordinary high water mark and the 100-year flood hazard area of that waterway should be identified. Where determined feasible, all bridge abutments shall be located outside of the ordinary high water mark.

**Mitigation Measure BIO-5:** Construction of SPRA Master Plan elements may indirectly affect unnamed tributaries, creeks, or Jenkinson Lake from runoff during construction. If indirect impacts have the potential to occur during construction activities, additional measures may be required to maintain water quality standards of the waterways. If a 404 permit is required for the SPRA Master Plan, water quality concerns during construction shall be addressed in a required Section 401 water quality certification by the Regional Water Quality Control Board. A Storm Water Pollution Prevention Plan (SWPPP) will be required for the entire SPRA Master Plan project. SWPPPs are required in issuance of a National Pollutant Discharge Elimination System (NPDES) construction discharge permit by the U.S. Environmental Protection Agency. Implementation of Best Management Practices (BMPs) during construction is standard in most SWPPPs and water quality certifications. Examples of BMPs include stockpiling of debris away from regulated wetlands and waterways; immediate removal of debris piles from the site during the rainy season; use of silt fencing and construction fencing around regulated waterways; and use of drip pans under work vehicles and containment of fuel waste throughout the site during construction.

**Mitigation Measure BIO-6:** A Streambed Alteration Agreement shall be obtained from CDFG, pursuant to Section 1602 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank or associated riparian vegetation of any stream within SPRA, specifically work that is occurring near Carpenter and Hazel creeks. Appropriate mitigation measures shall be developed in coordination with CDFG in the issued 1602 agreement.

**Mitigation Measure BIO-7:** A pre-construction survey for California red-legged frog and foothill yellow-legged frog should be performed within any areas proposed for a bridge crossing or where work will be occurring within a riparian corridor. Generally, this includes work being performed in proximity to Hazel and Carpenter creeks. Aquatic and upland habitat will be surveyed by a qualified biologist for the presence of California red-legged frog or foothill yellow-legged frog.

Because foothill yellow-legged frogs have been identified within Sly Park Creek within the SPRA, a clearance survey should be performed prior to construction to ensure no impacts will occur to this species that is known to occur within the SPRA. If this species is identified during the pre-construction clearance survey, any individuals should be safely re-located by a qualified professional out of the construction zone to an equivalent habitat located within the SPRA. The qualified biologist performing the survey should possess a valid California Department of Fish and Game Scientific Collecting Permit.

Although California red-legged frogs have not been identified within the SPRA before, if this species is identified during a pre-construction survey, the USFWS should be contacted immediately for subsequent measures. No California red-legged frogs shall be moved or re-located as part of the pre-construction survey.

**Mitigation Measure BIO-8:** As discussed in Table 4.7.3, several Master Plan projects shall require a Corps permit and/or Section 1600 Streambed Alteration Agreement. If either the Corps or California Department of Fish and Game require specific California red-legged frog or foothill yellow-legged frog impact avoidance measures, the applicant shall adhere to the conditions of the permit. These conditions are expected to include construction impact avoidance measures such as the presence of a biological monitor during creek restoration activities, a seasonal time restriction on work occurring within the creek bed, or a pre-construction survey.

**Mitigation Measure BIO-9:** Avoidance measures for reducing impacts to potential habitat for western pond turtle have been incorporated into the SPRA Master Plan as a design guideline to the maximum extent feasible. Also, the 50- and 100-foot setbacks as required under the El Dorado County General Plan will aid in the protection of western pond turtle and

potential marsh habitat during construction activities. However, impacts may still occur during removal of existing campsites within the 50-foot buffer, construction of span bridges, and other project elements that are expected to occur within the 50- and 100-foot creek buffer.

A pre-construction clearance survey for western pond turtle is recommended before construction activities occurring within potential pond turtle habitat. Potential habitat for western pond turtle occurs along Sly Park and Hazel creeks and potentially other perennial, slow-moving drainages. The clearance survey shall be performed during April or May when western pond turtle are most active and identifiable. It is assumed construction is not going to take place during the rainy season, a period when western pond turtles would be less identifiable. Open water areas with emergent vegetation with open rocks for basking shall be adequately surveyed to determine the presence or absence of western pond turtle within the creek corridors. The areas to be subject to clearance surveys shall be based upon final grading plans for each project element, specifically the two span bridges and campground reconfigurations. If western pond turtles are not observed, construction activities shall proceed as scheduled. If western pond turtle are observed, CDFG shall be consulted on subsequent impact avoidance measures.

**Mitigation Measure BIO-10:** Signs shall be posted to discourage collecting and handling of aquatic wildlife by recreational users. Interpretive trail signage and kiosks proposed for specific campgrounds shall serve to inform the public of the sensitivity and the ecological importance for preserving of riparian habitat and creek corridors. Interpretive signs and kiosks shall also define park rules and prohibit collecting aquatic wildlife (other than fishing). Also, design measures such as creek access controls (boulders and cable fencing) at Pine Cone, Rainbow, and Kamloop camps have been incorporated into the SPRA Master Plan project where applicable. The re-configuration of campsites away from Hazel Creek at Hazel Creek, Kamloop, and Rainbow campgrounds would widen the buffer to Hazel Creek to enhance riparian habitat value; the increased distance of campsites to Hazel Creek shall further discourage foot traffic along Hazel Creek and reduce the likelihood of aquatic wildlife collection.

**Mitigation Measure BIO-11:** Based on final grading plans, any project component that would involve the removal of potential nest trees shall be

surveyed for the presence of a bald eagle nest. Federal protocol surveys shall be performed to determine the presence or absence of nesting and wintering bald eagles. As stated previously, bald eagles are known to winter at Jenkinson Lake and the first confirmed successful nesting attempt by a bald eagle pair occurred during 2004 south of Jenkinson Lake on USFS property as well as the previous two years. Additionally, nesting bald eagles have been recorded from nearby lakes in 2004. Therefore, tree removal shall not take place until confirming a bald eagle nest does not occur within the trees planned for removal.

Timing construction activities to occur outside of the active bald eagle breeding season (early-February through July) at Jenkinson Lake, would reduce the likelihood of adverse effects on nesting bald eagle. Additionally, work associated with the implementation of the SPRA Master Plan is not expected to occur during the rainy season, which will also avoid impacts to bald eagles. CDFG recommends that specific survey guidelines and scheduling of surveys be handled with consultation with CDFG at the agency district or regional office level. CDFG recommends a minimum of three surveys during the nesting season to confirm the location of eagle territories (CDFG 1999). One survey shall be performed during early March (early incubation) to determine whether territories are occupied. CDFG recommends a second survey during late-April or early-May (early nesting period) to confirm if the territory is unoccupied, or if occupied in March to determine whether the breeding pair is still present. A third survey shall be performed during mid-June (late nestling period) to determine how many nestlings are present and may fledge (CDFG 1999). Performing directed surveys to identify breeding bald eagles shall also determine the location of any wintering bald eagles. Trees harboring any roosting, wintering bald eagles shall not be removed. As discussed in BIO 12 through BIO 14, in order to avoid impacts to northern goshawk, bald eagle, California spotted owl, and other nesting raptors during their typical breeding seasons, construction activities should not occur from February through September.

If bald eagle nesting territories are found and defined, the bald eagle management and design guidelines for the SPRA Master Plan shall establish management zones based on a radius around the bald eagle nest. For example, the Habitat Management Guidelines for the Bald Eagle in the Southeast

Region (USFWS 1987) provides recommended restrictions in a “primary management zone” within approximately 750 feet of a bald eagle nest, and lesser restrictions within a “secondary management zone” between 750 feet and one mile from the nest (exact distance would be dependent upon site specific factors). The Washington Department of Fish and Wildlife’s (WDFW) Priority Habitat and Species Management Recommendations (Washington Department of Fish and Wildlife 2004) recommend a survey buffer of at least 800 feet of a bald eagle nest. WDFW recommends buffering bald eagle nests within a two-zone management system similar to the USFWS guidelines, but with a primary zone within 400 feet of the nest and a secondary zone between 330 and 880 feet of the nest. For wintering eagles, 800- to 1,000-foot buffers around perching areas have been recommended where little screening cover is present (WDFW 2004).

CDFG has not developed bald eagle protection guidelines for California, and reasonable measures may vary depending on site-specific and project-specific conditions. The bald eagle guidelines for the SPRA Master Plan shall be developed in coordination with the wildlife agencies and based on site-specific information and the best available scientific information regarding the bald eagle.

The bald eagle management and design guidelines shall be designed to avoid “take” of bald eagles as defined under the California and Federal Endangered Species Acts and Bald and Golden Eagle Protection Acts, so that a take permit will not be necessary. However, even with these guidelines in place, if any federally funded or permitted activities take place that may affect bald eagles, a formal Section 7 Consultation with the USFWS shall be necessary. The bald eagle management and design guidelines shall be a useful component in assisting any Section 7 Consultation that takes place, to provide assurance to the USFWS that species impacts will be adequately minimized.

**Mitigation Measure BIO-12:** Based on final grading plans, any project component that would involve the removal of potential nest trees shall be surveyed for the presence of a nesting northern goshawk. The USFS has implemented a survey protocol for northern goshawk on USFS lands, *Survey Methodology for Northern Goshawks in the Pacific Southwest Region* (USFS 2000). This survey protocol is typically applied to USFS logging activities on state forest and non-state forest land; however, this survey methodology is recommended for

implementation of the SPRA Master Plan project components as well. As with bald eagle, tree removal shall not take place until confirming an active northern goshawk nest does not occur within the trees planned for removal.

For activities planned adjacent to non-USFS lands, databases and resource agencies shall be consulted for the location of known northern goshawk protected activity centers (PACs) (USFS 2004). To date, no northern goshawk PACs are known to occur within SPRA. PACs are delineated to include the known and suspected nest stand and to designate the best available 200 acres of forested habitat in the largest continuous patches based on aerial photography. If PACs occur within SPRA, directed surveys to establish the location or activity of the nest or PAC shall be performed. The USFS also recommends maintaining a limited operating period (LOP) prohibiting activities occurring within approximately 0.25 mile of a goshawk nest during the breeding season (generally February 15 through September 15) on USFS lands. The LOP would only apply to new Master Plan projects occurring on USFS lands. The LOP would not apply to existing recreational trail use or maintenance or continued recreation use such as those at SPRA; however, new construction activities associated with the Master Plan projects occurring on USFS lands shall be subject to USFS protocol guidelines. The LOP may be waived for individual projects or activities of limited activity and duration or when a biological evaluation determines that such projects are unlikely to result in breeding disturbance. The LOP may be reduced if the biological evaluation concludes that a nest site would be shielded from the proposed activity by natural topographic features that would minimize disturbance. If a northern goshawk nest is identified, the CDFG and/or USFS shall be consulted on subsequent impact avoidance measures. As discussed in BIO-11 through BIO-14, in order to avoid impacts to northern goshawk, bald eagle, California spotted owl, and other nesting raptors during their typical breeding seasons, construction activities should not occur from February through September.

**Mitigation Measure BIO-13:** As with northern goshawk, a similar USFS survey protocol is recommended for California spotted owl and is based on the presence of owl PACs within the project site. This survey protocol is typically applied to USFS logging

activities on state forest and non-state forest land; however, this methodology is recommended for implementation of the SPRA Master Plan project components. A California spotted owl protected activity center is identified by the USFS in the southeastern corner of SPRA (pers. comm. July 2004, Susan Yasuda, USFWS). As with bald eagle and northern goshawk, tree removal shall not take place until confirming an active northern goshawk nest does not occur within the trees planned for removal.

For activities planned adjacent to non-USFS lands, databases and resource agencies shall be consulted for the location of known spotted owls PACs (USFS 2004). PACs are delineated using aerial photographs to include the known and suspected nest stand and to designate the best available 300 acres of contiguous forested habitat in the largest continuous patches. If PACs occur within SPRA, directed surveys to establish the location or activity of the nest or PAC shall be performed. The USFS recommends a LOP that prohibits construction activities occurring within 0.25 mile of an activity center during the breeding season on USFS lands (generally March 1 through August 31) unless directed surveys conducted before confirmed no spotted owls were nesting. The LOP would only apply to new Master Plan projects occurring on USFS lands. The LOP may be waived for individual projects or activities of limited activity and duration or when a biological evaluation determines that such projects are unlikely to result in breeding disturbance to California spotted owls on USFS lands. The LOP may be reduced if the biological evaluation concludes that a nest site would be shielded from the proposed activity by natural topographic features that would minimize disturbance. If a California spotted owl nest is identified, the CDFG and/or USFS shall be consulted on subsequent impact avoidance measures. As discussed in BIO-11 through BIO-14, in order to avoid impacts to northern goshawk, bald eagle, California spotted owl, and other nesting raptors during their typical breeding seasons, construction activities should not occur from February through September.

**Mitigation Measure BIO-14:** Construction activities are not expected to occur during the rainy season; however, nesting territories of other raptor species could be established during winter months that could be disturbed by construction activities during that time. Specifically, resident owl species are known to initiate nest building and

breeding during early winter months. For this reason, pre-construction nesting raptor surveys shall be performed within SPRA. Based on the final grading plans for specific SPRA Master Plan projects, any trees that are planned for removal shall be surveyed for the presence of active raptor nests. A pre-construction raptor survey is recommended to determine the activity status of any identified raptor nests within SPRA including a 500-foot buffer from construction activities, if construction of any new facilities is expected to occur during the typical nesting season (February-September). The survey shall be conducted by a qualified biologist no more than 30 days before the start of construction activities. If more than 30 days lapse between the survey and the start of construction, an additional survey shall be performed. If the nests are found and considered to be active, construction activities shall not occur within 500 feet of the nests until the young have fledged and the appropriate resource agencies (USFS, USFWS, or CDFG) shall be consulted. If construction activities are proposed to occur during the non-breeding season (October-January), a survey is not required and no further studies are necessary. As discussed in BIO-11 through BIO-13, in order to avoid impacts to northern goshawk, bald eagle, California spotted owl, and other nesting raptors during their typical breeding seasons, construction activities should not occur from February through September.

Avoidance measures for reducing impacts to nesting raptor species and potential nest trees have been incorporated into the SPRA Master Plan as a design guideline to the maximum extent feasible. For example, during campground re-configuration construction activities, no trees with a DBH of 6 inches or greater shall be removed; raptors are not likely to nest within trees less than 6 inches DBH. Ongoing recreational activities are not expected to have a significant affect on nesting raptors, as any raptors nesting in areas of recreational use will have become habituated to human activity.

**Mitigation Measure BIO-15:** Avoidance measures for reducing impacts to federally sensitive invertebrate species have been incorporated into the SPRA Master Plan as a design guideline to the maximum extent feasible. Additionally, the 50- and 100-foot setbacks as required under the El Dorado County General Plan policies would aid in protecting federally sensitive invertebrate species. Also, the re-configuration of

campgrounds shall not allow construction within 50 feet from the ordinary high-water mark of any creeks.

Before construction occurring within the creek corridors for the two proposed span bridges, these potential habitat areas shall be surveyed to determine the presence or absence of Button's Sierra sideband, Gold rush hanging scorpionfly, South Forks ground beetle, and spiny rhyacophilan caddisfly. A qualified entomologist or invertebrate zoologist shall be retained that is familiar with the biology, habitat requirements, and identification of these species. An adequate number of surveys shall be performed over a period when the invertebrate species are identifiable. These species are assumed to be active and identifiable year-round. If any of these federally sensitive invertebrate species are identified within SPRA area, any individuals should be safely re-located by a qualified entomologist out of the construction zone to an equivalent habitat located within the SPRA. If these species are not identified, bridge construction shall proceed as scheduled and no further mitigation should be necessary.

**Mitigation Measure BIO-16:** Before the removal of any trees or structures within SPRA, a clearance survey shall be performed to determine the presence of bat roosts. The final grading plans for each individual project shall determine the trees and structures to be removed which shall be subject to the pre-construction survey. The pre-construction survey shall be conducted by a qualified biologist familiar with the identification of bat species and roosting sign. If special-status roosting bats are found during the pre-construction survey, CDFG or the USFWS should be consulted regarding measures to minimize impacts to roosting bats during construction. No trees or park facility structures shall be removed that is used as by roosting bats. If special-status bats are not found during the pre-construction survey, no mitigation measures should be necessary for special-status bats.

**Mitigation Measure BIO-17:** Additional rare plant surveys shall be performed before implementing specific projects under the SPRA Master Plan, focusing on the specific area of proposed disturbance during the appropriate season for detecting the species. Areas subject to surveys shall be concentrated within areas proposed for new park facility developments including but not limited to the Sugarloaf Fine Arts Center and the Black Oak Equestrian Center. Special attention shall be given to

Pleasant Valley mariposa lily, which has a high likelihood of occurrence on the north side of SPRA.

CDFG recommends a sufficient number of visits spaced throughout the blooming period of all special-status plant species to accurately determine their presence or absences of special-status plant species (CDFG 2000c). Generally, the blooming period to cover all target plant species identified in Table 4.7-1 covers February through October. Field surveys performed during June and July 2004 adequately covered the mid-blooming range of target plant species; however additional surveys are recommended before and after these months to catch early- and late-blooming target plant species. A minimum of two additional surveys are recommended, one during late-winter and spring months and one to cover early fall months.

If special-status species are found, plant locations shall be described and mapped and the project shall be designed to avoid impacts to the extent practicable. A mitigation plan developed from consultation with CDFG and CNPS shall be prepared. The plan should detail the various mitigation approaches to ensure minimal impacts to special-status plants species. Examples of mitigation include avoidance of the resource, salvage of plant materials where possible, acquisition of credits at an approved mitigation bank, or acquisition and preservation of property that supports these species. Preservation management strategies shall be developed in consultation with the appropriate resource agencies. For example, populations may be avoided and fenced if found where proposed trails or camping facilities are to be placed. Vegetation rehabilitation activities currently proposed under the SPRA Master Plan may be sufficient mitigation although consultation resource agencies shall be conducted to define an appropriate mitigation plan. If no special-status plant species are observed, no further mitigation would be required.

**Mitigation Measure BIO-18:** The following measures are designed to protect existing trees and minimize impacts during construction activities.

- A) To protect the root zone, drift fencing (or similar protective barrier approved by El Dorado County) a minimum of 4 feet tall, shall be installed at least two feet outside the drip line of each protected tree. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the drip line

protection area for preserved trees and shall establish the Critical Root Zone (CRZ) of the tree. The drift fencing shall not be moved once installed.

Removal of tree branches and/or roots shall be minimized to the extent practical and shall be in compliance with the 2001 “American National Standard for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance-Standard Practices (Pruning)” (A300, Part 1) and with the 1995 International Society of Arboriculture (ISA) companion publication of “Tree Pruning Guidelines.” The removal or severing of any roots on trees to be retained shall only be done at the discretion of an onsite arborist and shall not cause permanent damage to the tree. Roots shall be cut cleanly as close to the excavation as possible. Roots with cut faces of more than 1.5 inches shall be coated with emulsified asphalt or other approved coating formulated for use on damaged plant tissues. Any tree impacted by activity within its CRZ, including cuts to branches and/or roots shall be considered impacted and subject to the same mitigation as a removed tree.

In the event that a stand of trees will be preserved, the entire stand may be fenced, as a group, per the above stated guidelines. Fencing shall be shown on construction plans and shall be installed before the onset of grading activities. Signs shall be attached to the fencing describing the trees as protected.

- B) No grading, vehicular traffic, dumping of excavated debris, materials storage, or disposal of chemicals or contaminated water shall be allowed within the CRZ of the trees to be retained as shown on final site plans. This includes but is not limited to washing concrete from tools or trucks; paint materials; sheetrock, mud, or stucco materials; or other chemicals such as solvents and herbicides. Nails, ties, screws, or other fasteners shall not be used to attach signs, braces, etc. to any tree trunks or branches.
- C) Drainage patterns on the site shall not be modified so that water accumulates in, or is diverted across, the CRZ of any preserved tree.
- D) Construction crews shall be informed of the above measures and shall be required to comply with the

guidelines of this mitigation plan. They will also be provided a copy of the map illustrating areas to be fenced and avoided. Before construction, all construction personnel shall be required to sign a document acknowledging receipt and understanding of all tree protection and preservation requirements.

- E) A certified arborist shall monitor the protected trees periodically during construction to ensure the above-mentioned measures are carried out and to monitor the health and structure of the trees.
- F) If construction activities intercept major roots outside of the CRZ, a certified arborist shall be consulted to advise construction crews on how best to minimize damage to roots.
- G) Whenever feasible, utility trenches shall be established outside of the CRZ. If utilities must be located within this area, they should be placed in a conduit that is bored through the soil. Immediately backfill and water to the point of saturation all areas where soil cuts and trenches enter the CRZ of any existing tree.

**Mitigation Measure BIO-19:** To mitigate for the loss of trees, the following tree replacement measures shall be implemented for individual trees removed as part of the SPRA Master Plan:

- A) Based on final grading plans, each SPRA Master Plan project that would require tree removal shall be subject to an arborist survey and report. All trees that occur within the construction footprint will be inventoried by an ISA Certified Arborist. The survey will include numbering each qualifying tree (per El Dorado County guidelines) and recording required data such as species, size, health, and structural condition. Following the inventory of all trees proposed for removal, an arborist report will be completed and submitted to the Manager of Environmental Review Division.

Replacement shall be required for all healthy native trees equal to or greater than 6 inch diameter at breast height (DBH) that will be removed. A healthy tree is defined as a tree with an average to be below-average amount of deadwood with respect to the tree's size and growing environment and little evidence of stress. A healthy tree shall also exhibit a low risk for failure as a public hazard in that it has minimal evidence of

wounds, cavities, decay, or indication of hollowness within the root crown, trunk, or primary limbs, as well as lack of codominant stems or included bark in major trunk or branch attachments.

- B) For all trees, at least one (1) one-gallon seedling shall be replanted for every two inches of impact for a mitigation ratio of 1:2, thus a 12 inch DBH tree would require six (6) one-gallon replacement seedlings. Replacement seedlings shall be of the same genus and species removed.
- C) For oak (*Quercus* spp.) trees removed, replacement trees may be up to but in no case larger than 15-gallon size or to be consistent with General Plan Policy 7.4.5.2, the replacement requirement shall be calculated on an inch for inch basis, whichever measure is more stringent on tree replacement. The ratio of a 5-gallon oak replacement seedling to inches removed shall be at a minimum 1:3; the ratio of a 15-gallon oak replacement seedling to inches removed shall be at a minimum of 1:6.
- D) Tree re-planting may take place anywhere in SPRA in a location that provides conditions suitable to the growth requirements of the species including areas identified for reforestation in the Forest Management Plan.
- E) Replacement stock seedlings shall be purchased from a source in the SPRA region where feasible.
- F) A complete tree monitoring plan shall be required for the replacement trees. Monitoring shall be designed to ensure compliance with the established performance standard and to discover and remediate conditions that are detrimental or potentially detrimental to the plantings to ensure the continued success of the plantings. A minimum of 80 percent of the total plantings will survive annually (exhibiting fair health characteristics or higher) for a period of 3 years from the date of planting. If the plantings fail to meet the performance standard, they shall be replaced annually on an inch-for-inch basis, under the guidelines of this management plan to meet the 80 percent survival goal. Monitoring of the plantings will occur annually for three years, from the date of installation, conducted by a certified arborist or qualified biologist. Monitoring will consist of a site assessment to evaluate the health of each planting. Annual monitoring reports shall be

submitted to the Manager of Environmental Review Division.

The project proponent, or its successor, is the responsible party for monitoring plantings within SPRA. Any maintenance or remediation required to achieve the performance standard is the responsibility of the project proponent.

**Table 4.7-4 — Proposed Mitigation Measures to Reduce or Eliminate Potential Impacts  
Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<b>Construct New Campsites</b> 13.04 Dogwood Camp 16.02 Primitive Camp Area	BIO-1, BIO-5, BIO-17	Less than Significant with Mitigation Incorporation
<b>Construct Post/Pier Structures</b> 2.09 Scout/Youth Group Camp Mess Hall 2.12 Scout/Youth Group Camp (North) 2.13 Scout/Youth Group Camp (South) 2.17 Scout/Youth Group Camp Mess Hall 5.02 Jenkinson Camp 10.04 Chimney Camp 20.03 Retreat and Event Center 20.05 Retreat and Event Center (Phase I) 20.06 Retreat and Event Center (Phase II)	BIO-1, BIO-5, BIO- 14, BIO-16, BIO-17, BIO-18, BIO-19	Less than Significant
<b>Reconfigure Campsites</b> 2.07 Scout/Youth Group Camp 2.11 Scout/Youth Group Camp 2.16 Scout/Youth Group Camp 4.04 Pine Cone Camp 4.05 Pine Cone Camp 6.04 Sierra Camp (West) 6.05 Sierra Camp (East) 7.03 Stonebraker Camp 8.03 Hilltop Camp 9.02 Chimney/Hilltop Host Site 10.02 Chimney Camp 12.01 Hazel Creek Camp 13.02 Dogwood Camp 14.03 Rainbow Camp	BIO-1, BIO-5, BIO-6, BIO-7, BIO-8, BIO-10, BIO-14, BIO-15, BIO-16, BIO-18, BIO-19	Less than Significant

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
15.03 Kamloop Camp 21.01 Main Group Campground (Relocate Host Site) 21.06 Main Group Campground (Tent Sites at Groups Sites #1 and #5) 21.09 Main Group Campground (Tent Sites at Group Site 32) 21.12 Main Group Campground (Tent Sites at Group Site #3 and #4) 21.14 Main Group Campground (Group Kitchens) 23.01 Black Oak Equestrian Camp		
<b>Trail Construction</b> 1.03 Main Park Entrance 2.05 Scout/Youth Group Camp 7.01 Stonebraker Camp 12.04 Hazel Creek Camp 16.01 Primitive Camp Area 22.01 Mountain Bike Trail 23.05 Black Oak Equestrian Camp	BIO-1, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8, BIO-9, BIO-11, BIO-12, BIO-13, BIO-14, BIO-16, BIO-17, BIO-18, BIO-19	Less than Significant
<b>Bridges at Trail Crossings</b> 2.20 Scout/Youth Group Camp 12.07 Hazel Creek Camp	BIO-5, BIO-6, BIO-7, BIO-8, BIO-9, BIO-10, BIO-14, BIO-16, BIO-17, BIO-18, BIO-19	Less than Significant
<b>Reconfigure Existing Parking</b> 1.05 Main Park Entrance 4.01 Pine Cone Camp 6.01 Sierra Camp 10.01 Chimney Camp (Day Use)	BIO-11, BIO-12, BIO-13, BIO-14, BIO-16, BIO-18, BIO-19	Less than Significant
<b>Construct New Parking Areas</b> 2.02 Scout/Youth Group Camp (North) 3.01 Miwok Trailhead 4.02 Pine Cone Camp 6.07 Sierra Camp 11.02 Lake Drive Stabilization (Day Use) 12.03 Hazel Creek Camp (Day Use and	BIO-1, BIO-5, BIO-6, BIO-7, BIO-8, BIO-11, BIO-12, BIO-13, BIO-14, BIO-16, BIO-17, BIO-18, BIO-19  <i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i>	Less than Significant

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
18.01 Trailhead) Dog Park 19.01 Bumpy Meadow Trailhead 20.01 Retreat and Event Center (East) 20.02 Retreat and Event Center (West) 21.03 Main Group Campground/Shower Parking		
<b>Marina Parking Expansion</b> 24.01 Marina Parking Expansion	BIO-5, BIO-11, BIO-12, BIO-13, BIO-14, BIO-16, BIO-18, BIO-19	Less than Significant
<b>Realign/Improve Campground Access Roads</b> 2.01 Scout/Youth Group Camp 2.03 Scout/Youth Group Camp (North) 2.04 Scout/Youth Group Camp (South) 2.06 Scout/Youth Group Camp (South) 4.03 Pine Cone Camp 5.01 Jenkinson Camp 6.02 Sierra Camp (West) 6.03 Sierra Camp (East) 7.02 Stonebraker Camp 8.01 Hilltop Camp 9.01 Chimney/Hilltop Host Site 12.02 Hazel Creek Camp 13.03 Dogwood Camp 21.04 Main Group Campground (Group Site #1) 21.05 Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group Sites #3 and #4) 23.02 Black Oak Equestrian Center 25.01 Lake Drive Access Improvements	BIO-1, BIO-14, BIO-16, BIO-18, BIO-19	Less than Significant

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<b>Reconfigure Main Entrance</b> 1.01 Main Park Entrance 1.02 Main Park Entrance	BIO-14, BIO-16, BIO-18, BIO-19	Less than Significant
<b>Construct Visitor Center/New Maintenance Shop</b> 1.04 Main Park Entrance 1.07 Main Park Entrance	BIO-14, BIO-16, BIO-18, BIO-19	Less than Significant
<b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Center	BIO-11, BIO-12, BIO-13, BIO-14, BIO-16, BIO-18, BIO-19	Less than Significant
<b>Rehabilitate Vegetation</b> 1.08 Main Park Entrance 4.07 Pine Cone Camp 6.08 Sierra Camp 6.09 Sierra Camp 7.06 Stonebraker Camp 8.04 Hilltop Camp 10.03 Chimney Camp 12.05 Hazel Creek Camp 12.06 Hazel Creek Camp 12.08 Hazel Creek Camp 12.09 Hazel Creek Camp 13.01 Dogwood Camp 14.02 Rainbow Camp 15.02 Kamloop Camp 21.07 Main Group Campground (Group Sites #1 and #5) 21.10 Main Group Campground (Group Site #2) 21.13 Main Group Campground (Group Sites #3 and #4) 23.03 Black Oak Equestrian Camp FMP Plant/maintain Seedlings for Forest Health	BIO-2, BIO-5, BIO-6, BIO-7, BIO-8, BIO-9	Less than Significant

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Lake Drive Stabilization</b> 11.01 Lake Drive Stabilization</p>	<p>BIO-3, BIO-5</p> <p><i>Note: Component 11.01 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	<p>Less than Significant</p>

## 4.8 Cultural Resources

This chapter summarizes the cultural history of SPRA, describes the regulatory framework for identifying significant cultural resources, and discusses their potential impacts as a result of implementation of the proposed SPRA Master Plan. Mitigation measures are presented to reduce significant impacts to a less-than-significant level. For the purposes of this Draft Master EIR, cultural resources are defined, evaluated, and their impacts assessed and mitigated in accordance with CEQA.

Cultural resources were identified in SPRA through review of previous studies, limited field investigation, and consultation with interested and knowledgeable individuals. A total of 24 cultural resources have been identified in SPRA. Twelve of these are considered eligible for the California Register of Historical Resources (CRHR) and the remaining twelve are not eligible. All twelve CRHR-eligible resources have the potential to be significantly impacted by components proposed in the SPRA Master Plan. Mitigation measures are provided to reduce the impacts to a less than significant level.

### 4.8.1 Existing Conditions

#### 4.8.1.1 Cultural Setting

The history of land use in SPRA represents virtually every major historic theme in El Dorado County. From the seasonal base camps of Native Americans 4,000 years ago to the development of water storage facilities, Sly Park has been the location of trail blazing, gold mining, lumber milling, cattle grazing, wagon road way stations, private homes, a public school, and recreation.

#### Prehistory

Defining cultural chronology for this region of the Sierra Nevada has been problematic due in part to environmental conditions that have discouraged preservation of organic remains appropriate for radiocarbon dating and the lack of localized, intensive, research-oriented studies. As a result, chronologies have historically been borrowed from adjacent regions and applied to findings in the central Sierra region. However, recent studies have provided enough data to begin to develop and refine the North-Central Sierran cultural historical taxonomic framework (Boyd 1998; Jackson and Ballard 1999; Maniery 1993; Rosenthal and McGuire 2004; Rosenthal and Waechter 2002; Shapiro and Jackson 1996).

#### ***Pleistocene/Holocene Transition (12,000 to 7,000 B.P.)***

Archaeological evidence for human use of central California during the late Pleistocene and early Holocene is scarce; however, archaeological remains of this period have been identified (Johnson 1967; Peak and Crew 1990; Treganza and Heizer 1953). The economy of the California residents during the late Pleistocene was likely based on hunting large Pleistocene mammals that became extinct at the Pleistocene-Holocene transition. During the Early Holocene, Californian's subsistence was focused on wetlands that provided large game, bird, fish, and vegetal resources (Moratto 1984).

#### ***Archaic Pattern and Period (7,000- 3,200 B.P.)***

The Archaic Period is marked by the appearance of handstones and millingslabs throughout California. This technological innovation is assumed to represent an expanded subsistence base

with increased use of seeds and vegetal items. At the very least, the appearance of milling equipment indicates an increase in the milling of seeds. This period, however, is not abundantly represented in the north-central Sierra (Jackson and Ballard 1999).

### ***Sierran Pattern (3,200-150 B.P.)***

This period is marked by a substantial increase in obsidian production and the widespread appearance of the bow and arrow. Acorn exploitation is associated with boulder and bedrock mortars, pitted stones, and the use of handstones and pestles on milling slabs and mortars. During the Middle Sierran period, widespread changes occurred in Central California and the Great Basin, evidenced by changes in artifact assemblages, land use, and a high incidence of violent death in archaeological sites (cf. Cleland 1987). This latter part of this period is characterized by year-round occupation of the western Sierra at sites below 3,000–3,500 feet, habitual use of mid- and high-elevation Sierra sites during summer months, and widespread land use (Jackson and Ballard 1999; Whiteman 2004).

### **Ethnographic Boundaries**

The SPRA is historically defined as predominantly Miwok territory but may also have been home to the Nisenan, and was reportedly used by the Washoe as well. The problem is that these boundaries, defined in the early 20th century ethnographic literature, may not necessarily represent boundaries before Euroamerican encroachment. Many boundaries now accepted were based on conditions after the Gold Rush, when population pressures because of the influx of Euroamericans would have forced movement of indigenous groups (Bennyhoff *et al.* 1982). Areas such as these, wherein prehistoric boundaries are not certain, are referred to as grey areas. Prehistoric sites identified within these areas may offer answers to important research questions.

The Sierra Miwok occupied the foothills and higher mountains of the Sierra Nevada between the Cosumnes and Fresno river drainages (Levy 1978). Bennyhoff *et al.* (1982) ascribes the Cosumnes drainage to the Miwok before 1847, indicating that after that time, John Sutter's labor demands pushed the Nisenan to intrude into this Miwok territory. Littlejohn (1928) concluded that the Miwok's northern boundary was marked by the streams flowing southwest into the North Fork of the Cosumnes River or the river itself, as the Nisenan defined their territory by the deep, steep-walled canyons of the large rivers. Littlejohn's Placerville informant, Sam Kesler, called the Pleasant Valley people *Kor'ni* (Miwok), and said that he could not understand their speech. Indeed, Littlejohn's Pleasant Valley informant, Mary Hunter, possessed a vocabulary entirely different from the individuals in, around, and north of Placerville. Sam Kesler stated that his people did not extend any farther south than Pleasant Valley. However, considerable intermarriage suggests the inhabitants of Pleasant Valley were probably both Miwok and Nisenan. Littlejohn (1928) indicates Sly Park was predominantly used by individuals from Pleasant Valley, but that Placerville natives also came there "when they were feeling friendly." Sly Park was known by the Miwok as *Chu' ni* and by the Nisenan as *Tgon'o* (Littlejohn 1928).

The Nisenan lived along the drainages of the Yuba, Bear, and American Rivers and the lower drainages of the Feather River (Wilson and Towne 1978). The eastern boundary of Nisenan territory was considered the line in the Sierra Nevada where the snow lay on the ground all winter (Littlejohn 1928). Supporting this statement is the lack of archaeological evidence of

permanent villages above the snow line (Beals and Hester 1974). The area above permanent habitation was used for gathering, hunting, and fishing (Littlejohn 1928). It is important to note that the Washoe language includes place names, myths, and legends pertinent to a portion of Nisenan territory (Hildebrandt and Waechter 2003). In historic times, the Nisenan and Washoe met for Big Times (Beals 1933) and the Washoe journeyed to Nisenan villages to trade and gather acorns (Downs 1966).

The Washoe inhabited the area from the crest of the Sierra Nevada eastward, including the area around Lake Tahoe. They also traveled down major rivers, including the Cosumnes (Barrett 1917). Winter villages were located in the basin valleys. As winter subsided, groups headed to Lake Tahoe to take advantage of fishing. As summer progressed, most of the Washoe headed back east from Lake Tahoe; however, some would continue west to the lower foothills of the Sierra to gather and hunt until the acorn harvest (Downs 1966).

## **History**

Portions of the following historical context are adapted from the *National Register of Historic Places Evaluation of Historic Resources in the Baltic Peak Area, Eldorado National Forest, California* (Fryman 1997).

### ***Transportation***

Sly Park is named for James Calvin Sly who, in July 1848, grazed livestock in Sly Park while his fellow veterans of the Mormon Battalion camped in a meadow within a few miles of the park. The veterans had worked for Sutter and were making their way back to Salt Lake by establishing a trail that avoided the ill-fated Donner route. Their trail along the Carson River and over Carson Pass became known as the Mormon-Carson Emigrant Trail and bore the brunt of westward Gold Rush traffic between 1849 and 1852 (Owens 1989). As more and more people entered the area, more wagon roads were constructed to connect major settlements and resource extraction areas. Examples of these roads in the immediate vicinity of Sly Park are Starkes Grade, Stonebraker Road, the Road to Cutler's Sawmill, and Louis LePetit's Grade Road (GLO 1874). Transporting and serving those who traveled along wagon roads became a thriving enterprise for stagecoach companies, muleteers, roadside inns, and trading stations. The SPRA was home to at least two such way stations -- the Hazel Valley House and the Sly Park House, the latter operated by Mr. Cutler then by Mr. Stark.

### ***Settlement***

Settlement in the SPRA began with these way stations and grew when the area was used for agricultural purposes such as cattle ranching and dairy farming. Although hay was cut by the operators of the way stations, subsequent settlers such as Stonebraker, Bryant, Fuller, Cutler, and Kyburz made use of the land for lumber milling and stock grazing. Stock-raising families such as the Cutlers used the area for their summer grazing--rotating their stock from their winter grazing land near Michigan Bar. By 1880, a substantial enough population resided in the vicinity to warrant the establishment of the Sly Park School, a one-room schoolhouse that operated at Sly Park until 1910 (Miller 1990). Residences continued to be used at Sly Park after the turn of the 20<sup>th</sup> century, particularly boarding houses for local lumber mill workers. It is uncertain, however, if other structures identified on historic maps as houses, barns and sheds were used seasonally, for recreation, or for year-round residences (Goff 1997; Harrison ca. 1990; Mitchelson 1919).

### ***Resource Extraction***

Between 1848 and 1870, mining was the single largest industry in El Dorado County. Small gold camps grew into towns while food and lumber production developed as secondary industries. During the first years of the Gold Rush, deposits were extracted primarily by individuals working alone or in small groups, using hand tools such as picks, shovels, and variations of the gold pan. In the 1860s, hydraulic mining techniques were developed, using a powerful jet of water to expose gold-bearing Tertiary gravels. After 1884, lode mining was the principal source of gold extraction in El Dorado County (Clark 1970). Because of national and world-wide declines in gold values, however, the lode mining boom was short lived. There was a brief revival of mining in the 1930s as many individuals feeling the bite of the Great Depression sought alternative sources of income. During World War II, mining was curtailed on a national level and has not since recovered (Clark 1970). Although the SPRA does not appear to have been an area of intensive mining, both placer and lode mining were conducted on a small scale within the park.

Large-scale extraction of timber resources developed as a secondary industry after the Gold Rush to support mining enterprises and the population they brought into the area. Miners needed milled lumber for flumes and sluices and the whole population needed wood for homes, commercial structures, and fuel. The Sly Park area was home to several lumber mills through the years including the Stonebraker operated by Joseph Bryant, Cutler's, the Baltic operated by Louis LePetit, Hooper's, Blair Brothers, and the Phippens-West (GLO 1874; Sioli 1883; Yohalem 1977).

### ***Water Storage and Distribution***

Early in the Gold Rush, it became apparent that a constant supply of controlled water would facilitate the processing of large quantities of placer gravels, and by 1850 the first mining ditch in El Dorado County was completed. By the 1870s, many of the high mountain lakes had been dammed to supply year-round water, and corporate water companies conveyed the natural resource through an extensive network of canals and ditches to mining, agricultural, and industrial operations (Palmer 1993; Sioli 1883; Supernowicz 1983). One such company was the Park Canal and Mining Company who in 1875 enlarged an existing canal system developed first by Bradley, Berdan & Company, and then by the Eureka Canal Company. The Park Canal and Mining Company was acquired by the owners of the California Door Company (Caldor) in 1910, and operated the canal system as the Diamond Ridge Ditch System.

In the first few decades of the 20<sup>th</sup> century, agricultural lands requiring irrigation increased at a rate that existing water supply could not meet (Norris 1926:2). The reservoir at Weber Creek was constructed in 1924, but additional reservoir and improvement were still necessary. In 1926, the newly formed El Dorado Irrigation District purchased the stock of the El Dorado Water Corporation (Norris 1926) and purchased the Diamond Ridge Ditch System in 1938 (Jenkinson 1952). Sly Park was first considered as a reservoir site in 1911, but not until 1949 was it authorized as an element of the Central Valley Project. Construction of the reservoir began in 1952, was completed in 1955, and immediately began providing water to the region for irrigation, domestic, municipal, and industrial purposes.

## **Recreation**

Sly Park Reservoir was constructed primarily to store water for distribution among the growing needs of the region. When the reservoir was completed in 1955, responsibility for operations and maintenance was transferred from the U.S. Bureau of Reclamation (USBR) to EID and management of the recreational resources was the responsibility of El Dorado County. In 1969, however, EID assumed responsibility for the recreation area as well. By 1976, it was noted that the reservoir had been a popular recreation area for 20 years because of the high water quality and the diversity of recreational opportunities such as camping, hiking, picnicking, swimming, fishing, boating, and water skiing. Recreation within the SPRA has consistently risen through the years and activities have grown to include horseback riding, bicycling, nature study, photography, and camping for large groups such as the Boy Scouts and Girl Scouts.

### **4.8.2 Regulatory Setting**

#### **4.8.2.1 California Environmental Quality Act**

CEQA requires public agencies to evaluate the implications of their project(s) on the environment and includes historical resources as part of the environment. A *historical resource* is defined by CEQA as a resource listed in, or determined eligible for listing in, the CRHR or in a local register or survey pursuant to sections 5020.1(k) and 5024.1(g) of the Public Resources Code. A resource may be eligible for inclusion in the CRHR if it:

- a) is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- b) is associated with the lives of persons important to local, California, or national history;
- c) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
- d) has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

To be considered a *historical resource* for the purpose of CEQA, the resource must also have integrity, which is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance (California Code of Regulations title 14, Section 4852(b)). Integrity is generally evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association. It must also be judged with reference to the particular criteria under which a resource is eligible for listing in the CRHR.

The steps that are normally taken in a cultural resources investigation for CEQA compliance are as follows:

- 1) Identify *historical resources* that may be impacted by the project;

- 2) Assess the impact of the project on historical resources; and
- 3) Develop and implement measures to mitigate the effects of the project on historical resources.

#### **4.8.2.2 Memorandum of Agreement for the Transfer of the Sly Park Unit**

In 2003, the USBR transferred Sly Park to EID. That same year, the USBR, EID, and the State Historic Preservation Officer (SHPO) signed a Memorandum of Agreement (MOA). This MOA states that the transfer of the Sly Park Unit may have an adverse effect on *historic properties* and may affect other, as yet unidentified, properties that could be *historic properties*. The term “historic properties” is the federal equivalent of CEQA’s “historical resources”. The MOA stipulates that an inventory will be completed to identify cultural resources that meet the federal definition of “historic property” (i.e. eligible for listing in the National Register of Historic Properties). This study was completed (Windmiller and Napoli 2003). The MOA also stipulates treatment and management of historic properties following conveyance of the Sly Park Unit. Among these stipulations is that EID will regard “historic properties” to be “historical resources” pursuant to CEQA. Two historic properties were identified as a result of the cultural resources inventory: CA-Eld-263 and CA-Eld-728. As a result, these two sites are regarded as *historical resources* under CEQA.

#### **4.8.2.3 Identification of Historical Resources**

##### **Methods to Identify Cultural Resources in SPRA**

###### ***Review of Previous Studies***

The SPRA has been the subject of four major studies regarding cultural resources (Drucker 1948; Davy 1991; Boyd 1998; Windmiller and Napoli 2003), as well as the MOA (USBR 2003a), and several smaller studies (Starns 1987-1994). As a result of these studies, a total of 24 cultural resources have been identified in SPRA. These resources are described in the section below entitled “Cultural Resources in SPRA”.

###### ***Field Investigation***

A total of ten days were spent conducting field investigations of cultural resources at SPRA between December 22, 2004 and November 4, 2005. Eight of these days were spent recording additional data at three prehistoric sites (CA-Eld-263, CA-Eld-461, and CA-Eld-728) that have the greatest potential for impacts. Two days were spent visiting eleven other sites (CA-Eld-1333-H, CA-Eld-1334-H, CA-Eld-2094-H, CA-Eld-2096-H, P-9-1792, P-9-1797-H, P-9-1803-H, P-9-1804-H, P-9-1806-H, P-9-1817, and SP-2005-1-H) to determine if enough data had been recorded to evaluate the sites for CRHR eligibility.

###### ***Consultation***

Consultation with individuals interested and knowledgeable about cultural resources at Sly Park has focused on those individuals representing descendants of local indigenous Native American groups. The majority of communication has been in the form of letters sent to Native American representatives who were referred to EID by the Native American Heritage Commission (NAHC). Transfer-related consultation was conducted from December 2002 through August 2003 (Scambler 2003; USBR 2003b; Windmiller and Napoli 2003).

To establish a renewed base of reference for the SPRA Master Plan Draft Master EIR consultation, EID sent a letter to the NAHC on September 28, 2005. This letter requested a list of Native American representatives for the Sly Park Area. The NAHC replied on October 19, 2005 with a list that included a total of five individuals.

On October 27, 2005, EID then sent a letter to the individuals on the NAHC list, and all of the individuals or groups who had been contacted previously or had contacted EID regarding cultural resources at Sly Park. A total of 12 individuals or groups were sent this letter via Certified Return Receipt. EID has engaged in continuous consultation with Native Americans from October 2005 to the present and this consultation is expected to be on-going. In addition to Native American representatives, EID has been in continual contact with Jean Starns, former EID archaeologist.

Initial correspondence regarding the Sly Park Transfer in 2003 also included letters to the El Dorado County Museum, the El Dorado Historical Society, and the Heritage Association. However, no responses to these letters were received and no subsequent communication has occurred with individuals with an interest in or knowledge of historic period resources at Sly Park. Additional correspondence was conducted between EID's consultant, Ric Windmiller, and Sue Silver of the El Dorado County Pioneer Cemeteries Commission. Ms. Silver mentions the potential for a Sly Park Cemetery and asked that EID keep its potential existence in mind. EID contacted El Dorado County Cemetery Advisory Committee member, Mary Cory (who is also the El Dorado County Museum Administrator) to follow up regarding the potential for a cemetery in SPRA. Ms Cory, however, would find no reference to a cemetery at Sly Park (Mary Cory, personal communication 2005).

### **Cultural Resources in SPRA**

This section describes each site and states whether each site is or is not a *historical resource* under CEQA. A total of 24 individual cultural resources have been identified within SPRA (Table 4.8-1). Ten of these are prehistoric sites and fourteen are from the historic period; the latter are designated with an "H" at the end of their site number. Additional information relative to each site's evaluation is presented in The Historical Resources Inventory and Evaluation Report (Windmiller and Napoli 2003).

**Table 4.8-1 — Recorded Cultural Sites Within SPRA**

Site Number	Description
CA-Eld-263	hypothesized prehistoric seasonal base camp characterized by 347 individual bedrock mortars and a variety of lithic tools and tool manufacturing debris
CA-Eld-461	three bedrock outcrops with 8 individual mortars
CA-Eld-728	hypothesized prehistoric seasonal base camp characterized by groundstone, lithics, and a few bedrock mortars
CA-Eld-1331	one bedrock outcrop with 15 individual mortars
CA-Eld-1332	one bedrock outcrop with 7 individual mortars
CA-Eld-1333-H	residence characterized by a mortared stone foundation, two mortared stone chimneys, and one possible privy
CA-Eld-1334-H	lumber mill characterized by mill pond; and remnants of structures, a boiler house, a road, and a narrow gauge railroad
CA-Eld-1335	two bedrock outcrops with 12 individual mortars
CA-Eld-2091-H	Sly Park Reservoir
CA-Eld-2094-H	refuse scatter characterized by ca. 1940s materials
CA-Eld-2095-H	segment of dirt road
CA-Eld-2096-H	mine characterized by two adits and tailings.
P-9-1792	one bedrock outcrop with 2 individual mortars
P-9-1795	one isolated unifacial handstone
P-9-1797-H	an isolated spring characterized by a capped circular pit and an outlet channel
P-9-1801-H	Isolated stack of cedar fence posts
P-9-1803-H	two blazed cedar trees typical of boy-scout trail marking
P-9-1804-H	iron plate affixed to pine tree with two railroad spikes
P-9-1805-H	two cans 20-30 ft. apart
P-9-1806-H	isolated mining prospect pit
P-9-1817	hypothesized task area characterized by one lithic tool, a scatter of lithic tool manufacturing debris, a portable mortar, and a possible metate
SP-1992-1-H	earthen ditch segment
SP-1985-1	one bedrock outcrop with one mortar; one possible metate
SP-2005-1-H	Stonebraker Road – not yet recorded

**Sites not Eligible for the CRHR**

CA-Eld-1332

This site was recorded in 1986 and 1987 and at that time comprised 10 separate bedrock outcrops with a total of 19 mortars. Three artifacts were found in proximity to the bedrock mortars: a handstone fragment, a chopper or scraper, and a shaped handstone. These three artifacts were

collected and cataloged at the time they were discovered. In 1989, a new boat launch facility was proposed for an area that encompassed CA-Eld-1332. The USBR determined that the site was adequately recorded and approved the construction of the new boat launch facility (Starns 1992b:15). As a result, all but one bedrock outcrop containing seven mortars were destroyed.

Because the majority of the site has been destroyed and a boat launch facility is immediately adjacent to the remaining portion of the site, the integrity of CA-Eld-1332 has been exceedingly compromised. The site does not have integrity of setting, materials, feeling, or association and would not therefore qualify as a historical resource even if it did meet any of the CRHR criteria or qualify as a unique archaeological resource.

#### CA-Eld-1334-H

This is the site of a lumber mill in operation from the mid 1930s to 1952, when the reservoir was constructed. The mill was built by George and Fred Phippen and was sold to the S.G. Beach Box & Lumber Company in 1943. During the mill's operation, the owners entered into agreements with Harvey West of the Placerville Lumber Company and A.J. Rupley. The site is associated with an important regional theme, logging and lumber milling. In addition, S.G. Beach, Harvey West, and A.J. Rupley are significant individuals in the history of El Dorado County.

The site is characterized by a mill pond that is still visible when the lake water is at its maximum drawdown. A number of structural remains are also extant at the site, including a boiler house, a road, and a narrow gauge railroad. Although the site is associated with important events and can be tied to significant individuals in the history of El Dorado County, there is little physically left of the site that conveys its historic function. In addition, the archaeological remains are not of the type to yield data that would be considered important in history. As a result, the site is not eligible for the CRHR and is not considered a historical resource under CEQA.

#### CA-Eld-2094-H

This resource is a refuse scatter composed of 20-30 items encompassing an area approximately 30 ft. by 20 ft. The items indicate a period of use dating to no earlier than 1948. The relative modernity of the items indicates the site may be associated with the construction of the reservoir (CA-Eld-2091-H) or with the operation of the lumber mill (CA-Eld-1334-H). However, the materials do not have the potential to yield data that could further our understanding of these two events. The site is not eligible for the CRHR and is not considered a historical resource under CEQA.

#### CA-Eld-2095-H

This resource is an approximately 200 ft. segment of dirt road that appears to have provided access to Camp Creek before the reservoir was constructed. It does not coincide with any of the historic wagon roads or routes and does not appear to be distinctive in any way. It is not eligible for the CRHR and is not a historical resource as defined by CEQA.

#### SP-1992-1-H

This resource is an approximately 7000 ft. segment of earthen ditch. It is bifurcated in many places and is extremely eroded and covered with duff. It was barely recognizable as a ditch when first recorded in 1992 and now appears as an animal trail. It is in the general location of what has been identified as Cutler's Mill Ditch, which supplied water to Cutler's sawmill and the Sly Park

sawmill (Peabody 2004). This is one of many minor ditches that served very localized purposes in El Dorado County and its integrity is very poor. As such, it does not meet any of the CRHR criteria and is not a historical resource under CEQA.

### Isolates

Isolates are cultural materials or features found in isolation of any demonstrable historic association and usually consist of one to three single items. They are by definition, not considered historical resources under CEQA primarily because of their lack of association. The following cultural resources within SPRA are isolates and are therefore not considered historical resources under CEQA: P-9-1795; P-9-1797-H; P-9-1801-H; P-9-1803-H; P-9-1804-H; P-9-1805-H; P-9-1806-H.

### ***Sites Eligible for the CRHR***

#### CA-Eld-263

This site has been hypothesized as a seasonal base camp with areas dating to 4000 years ago. The site includes 347 individual bedrock mortars and a wide variety of lithic tools and tool manufacturing debris. Through subsurface excavations and analysis of surface-collected materials, the site has exhibited the potential to yield important data. It is important to note that the full extent of the site boundaries (to the North, East and West) has not been defined. The site has been determined eligible for the National Register of Historic Places (NRHP) and must be considered eligible for the CRHR under the Transfer MOA. Although the site has suffered loss of integrity because of erosion from the lake water and from unauthorized removal of artifacts over the last 50 years, it has yielded important data and has the potential to yield further data. The implications of this data potential in regard to site management will be addressed in the impacts and mitigation sections of this Draft Master EIR.

#### CA-Eld-728

This site has been determined eligible for the NRHP and must be considered eligible for the CRHR under the Transfer MOA. However, this site is not as well understood as is CA-Eld-263. Its boundaries are not defined and the presence of subsurface materials has not been determined. Regardless, the amount of data collected from the surface of the site thus far support the idea that the site has the potential to yield data.

### Sly Park Prehistoric District

Five prehistoric sites are located along the drainages feeding into Jenkinson Lake. These consist of CA-Eld-461; CA-Eld-1331; CA-Eld-1335; P-9-1792; and SP-1985-1. The two large prehistoric sites at the park (CA-Eld-263 and CA-Eld-728) are hypothesized as seasonal base camps used during the summer from which smaller satellite groups would travel to extract or process resources. The five prehistoric sites are all bedrock milling locations, in other words, resource-processing areas. Individually, the five bedrock milling sites offer little in the way of research potential. However, the five sites, in addition to CA-Eld-263 and CA-Eld-728, all appear to be inter-related and should be considered as a whole when attempting to interpret the prehistoric past. As such, the seven sites constitute a discontinuous district eligible for the CRHR.

One prehistoric site (P-9-1817) has suffered disturbance and has not been sufficiently characterized to determine whether it has any cultural materials remaining. This site may be considered part of the Sly Park Prehistoric District if it is determined that enough of the site remains that its prehistoric use can be conveyed. Management considerations for this site under CEQA are discussed below under the section entitled “Sites Considered Eligible for the CRHR”.

#### CA-Eld-2091-H

This resource is comprised of the Sly Park Reservoir and its associated components: Jenkinson Lake, the dam, dike, Sly Park Retreat house and storage shed, the Camp Creek diversion tunnel and north portal, the Camp Creek diversion dam, the construction landscape, and road segments. This combined resource, or historic district, was recommended eligible for the NRHP by Windmiller and Napoli (2003) but that recommendation was not agreed upon by the USBR, who was responsible for making the actual determination.

Windmiller and Napoli (2003) argued that Sly Park Reservoir was the most important reservoir construction project in El Dorado County built before 1956 and that the dam itself was an unparalleled engineering achievement. The USBR substantiated their determination of non-eligibility by applying the NRHP criteria. They state that Sly Park Reservoir was not an important component of the Central Valley Project and had no effect on the broad pattern of the Nation or State’s history (NRHP criterion A). In addition, the USBR stated that the dam is not distinctive in its engineering or method of construction, nor does it represent the work of a master (NRHP criterion C). The USBR also stated that Sly Park Reservoir is not associated with importance individuals (NRHP criterion B) and is not likely to yield important data (NRHP criterion D).

This Draft Master EIR, however, must apply the historical resource criteria of CEQA. The Sly Park Reservoir does not meet criteria b, c, or d of CRHR. However, the reservoir represents an event that has made a significant contribution to the broad pattern of local history (CRHR criterion a).

The plan to build a reservoir at Sly Park figured prominently as the major solution to water storage and distribution from the inception of El Dorado Irrigation District (Mitchelson 1919; Norris 1926). It was one of the first projects proposed by EID but was abandoned early on in favor of enlarging Weber Dam. Plans for a reservoir at Sly Park were resurrected again in 1938 and were agreed upon by the USBR in 1945 (Mountain Democrat 2000). The completion of the reservoir in 1955 encouraged areas not covered by EID to be annexed. Today, Jenkinson Lake serves as a major source of water supply for EID customers (EID 2005). It has been a popular recreation area since its establishment and continues to draw outdoor enthusiasts. Sly Park Reservoir, while not associated with broad patterns of the nation or the state, is certainly associated with the development of water supply and recreation in El Dorado County. As a result, Sly Park Reservoir is eligible for the CRHR under criterion a.

The character-defining elements of the Reservoir are the reservoir itself and the surrounding recreational facilities. The other individual components - the dam, dike, Sly Park Retreat house and storage shed, the Camp Creek diversion tunnel and north portal, the Camp Creek diversion dam, the construction landscape, and road segments - are not considered historical resources nor do they contribute to the Reservoir’s overall significance. Continued use of SPRA as a water

storage facility and a recreation area, however, will maintain the reservoir's historical significance.

#### **Sites Considered Eligible for the CRHR**

Three historic period sites (CA-Eld-1333-H; CA-Eld-2096-H; and SP-2005-1-H) and one prehistoric site (P-9-1817) within the SPRA have not been subject to sufficient investigation to determine whether they qualify as historical resources under CEQA. In the absence of definitive data, CEQA supports the practice of treating sites as historical resources. Therefore, until additional data is gathered to assist in making a *historical resource* determination, these sites are *considered* eligible for the CRHR.

### **4.8.3 Environmental Impact Thresholds/Criteria for Evaluation**

According to CEQA, a project that may cause a *substantial adverse change* in the significance of a *historical resource* or a *unique archaeological resource* may have a significant effect on the environment (CEQA Guidelines 15064.5, Pub. Res. Code section 21083.2). CEQA defines a *substantial adverse change* as:

- physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired; or
- demolition or material alteration in an adverse manner of those physical characteristics of a historical resource which convey its historical significance and justify its inclusion in or eligibility for inclusion in the California Register of Historical Resources, inclusion in a local register pursuant to section 5020.1(k) of the Public Resources Code, or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code.

If a project results in significant effects on *historical resources*, alternative plans or mitigation measures must be considered.

### **4.8.4 Environmental Impacts**

This section discusses the direct impacts to historical resources that are reasonably foreseeable if the SPRA Master Plan is implemented. To assess impacts, each one of the Master Plan Projects and Elements were analyzed to determine if they had the potential to affect historical resources. Impacts are presented according to the specific project or project element. Mitigation measures provided in Section 4.8.4 reduce the impacts to a less-than-significant level.

**Components 2.01 (Improve Access Loop Road) and 2.18 (North Water Infrastructure) of the Scout/Youth Group Camp have the potential to affect CA-Eld-461 (three bedrock outcrops with 8 individual mortars) as a result of ground-disturbing activities associated with regrading the existing Access Loop Road and the construction of the new water line.**

If CA-Eld-461 contains a subsurface cultural deposit that extends into the areas that would be disturbed by these components and if that deposit has data potential, that impact would be considered significant under CEQA.

**Increased use in areas adjacent to historical resources could result in impacts related to human disturbance (i.e., CA-Eld-461), including vandalism and unauthorized collection of cultural materials.**

The completion of Project 2, the Scout/Youth Group Camp, would result in an increase in the number of individuals per year at the camp. This expected increase is estimated at approximately 5,000 people per year (Goss personal communication 2005). The increased use in an area adjacent to a historical resource puts the resource at risk of disturbance from vandalism and unauthorized collection of cultural materials. Such disturbance would be considered significant under CEQA.

**Ground disturbance could result in adverse impacts to CA-Eld-263 (hypothesized prehistoric seasonal base camp characterized by 347 individual bedrock mortars, and a variety of lithic tools and tool manufacturing debris).**

Components 4.01 through 4.05, and 4.07 (i.e., day use parking, parallel parking, improve west campsites and access road, Reconfigure camp sites (except sites 24-27) on shore road, tent platforms, and rehabilitate vegetation) of the Pine Cone Camp include the reconfiguration of existing parking areas, establishment of new parking areas, improvement and rehabilitation of existing camp sites, establishment of tent platforms, and rehabilitating vegetation. All of these components have the potential to affect CA-Eld-263 as a result of associated ground-disturbing activities. If the cultural deposit associated with CA-Eld-263 extends into any of the areas that would be disturbed by these project components and if those areas of deposit contain data potential, the impact would be considered significant under CEQA.

**Ground disturbance could result in adverse impacts to CA-Eld-263(hypothesized prehistoric seasonal base camp characterized by 347 individual bedrock mortars, and a variety of lithic tools and tool manufacturing debris).**

Component 4.06 (shore access control) of the Pine Cone Camp entails the installation of signage and barriers to limit shore access to eight designated points. This component has the potential to affect CA-Eld-263 as a result of ground-disturbing activities in areas known to contain a data-rich cultural deposit and in the shore area that contains the bedrock mortars. This impact is considered significant.

**Development of Project Components ID Numbers 7.01 through 7.04 (i.e., replace lake access trail, improve entry, reconfigure campsites, and reconfigure day use sites), and 7.06 (rehabilitate vegetation) could result in adverse impacts to SP-2005-1-H (Stonebraker Road-not yet recorded).**

Components 7.0 through 7.04, and 7.06 of the Stonebraker Camp would reroute the existing lake access trail, improve the campground entry, reconfigure camp and day use sites, and rehabilitate vegetation. These components have the potential to affect SP-2005-1-H as a result of ground-disturbing activities. A significant impact would occur if SP-2005-1-H is determined eligible for the CRHR.

**Ground disturbance could result in adverse impacts to P-9-1817 (hypothesized task area characterized by one lithic tool, a scatter of lithic tool manufacturing debris, a portable mortar, and a possible metate).**

Components 8.03 and 8.04 (reconfigure campsites and rehabilitate vegetation) of the Hilltop Camp include reconfiguring campsites and rehabilitating vegetation. These components have the potential to affect P-9-1817 as a result of ground-disturbing activities. If P-9-1817 contains a subsurface cultural deposit that extends into the area that would be disturbed by components 8.03 and 8.04 and if that deposit indicates that P-9-1817 has data potential, the impact would be considered significant under CEQA.

**Ground disturbance could result in adverse impacts to SP-1985-1 (one bedrock outcrop with one mortar; one possible metate).**

Components 10.01, 10.02 and 10.03 (i.e., reconfigure day use parking, reconfigure campsites, and rehabilitate vegetation) of Project 10 at Chimney Camp include reconfiguring parking and camp sites and rehabilitating vegetation. These components have the potential to affect SP-1985-1 as a result of ground-disturbing activities. If SP-1985-1 contains a subsurface cultural deposit that extends into the area that would be disturbed by these components and if that deposit has data potential, the impact would be considered significant under CEQA.

**Increased use in areas adjacent to CA-Eld-1333-H (residence characterized by a mortared stone foundation, two mortared stone chimneys, and one possible privy) could result in impacts related to human disturbance, including vandalism and unauthorized collection of cultural materials.**

Component 10.04 (pilot cabins) of Project 10 is the addition of two deluxe cabins at Chimney Camp. These cabins have a variety of creature comforts, including heating, which would provide the opportunity for campers to stay in the autumn when lake levels drop. CA-Eld-1333-H is exposed on a regularly basis each autumn when the lake reaches maximum draw down. The increased use of the campground during the time of the year when the site is exposed increases the potential for the site to be damaged through unauthorized artifact searching and vandalism. If CA-Eld-1333-H meets criteria a, b, or d of the CRHR, that impact would be considered significant under CEQA.

**Ground disturbance could result in adverse impacts to CA-Eld-1331 (one bedrock outcrop with 15 individual mortars) and CA-Eld-1335 (two bedrock outcrops with 12 individual mortars).**

The Primitive Camp Area, Project 16, includes the creation of signage and an access trail to the campsites, establishment of 10 camp sites, and the installation of two double-pit toilets (Components 16.01, 16.02 and 16.03). This project has the potential to affect CA-Eld-1331 and CA-1335 as a result of ground disturbance. If CA-1331 or CA-Eld-1335 contains subsurface cultural deposits that extend into the areas that would be disturbed by the construction of the new Primitive Camp Area and if those deposits have data potential, the impact would be considered significant under CEQA.

**Ground disturbance could result in adverse impacts to CA-Eld-1335 (two bedrock outcrops with 12 individual mortars) and P-9-1817 (hypothesized task area characterized by one lithic tool, a scatter of lithic tool manufacturing debris, a portable mortar, and a possible metate).**

Ground-disturbing activities associated with Project 22, construction of the new Mountain Bike Trail, have the potential to affect CA-Eld-1335 and P-9-1817. These sites are in proximity to the proposed trail route. If these resources contain subsurface cultural deposits that extend into the areas that would be disturbed by Project 22 and if either of those deposits have data potential, the impact would be considered significant under CEQA.

**Ground disturbance could result in adverse impacts to CA-Eld-263 (hypothesized prehistoric seasonal base camp characterized by 347 individual bedrock mortars, and a variety of lithic tools and tool manufacturing debris), CA-Eld-728 (hypothesized prehistoric seasonal base camp characterized by groundstone, lithics, and a few bedrock mortars), and SP-1985-1 (one bedrock outcrop with one mortar; one possible metate).**

Ground-disturbing activities associated with Project 25, Lake Drive Access Improvements, have the potential to affect CA-Eld-263, CA-Eld-728, and SP-1985-1, as these sites are situated in proximity to Lake Drive. If cultural deposits associated with these sites extend into the areas that would be disturbed by Project 25 and if any of those deposits have data potential, the impact would be considered significant under CEQA.

**Ground-disturbing activities associated with implementation of the SPRA Master Plan have the potential to disturb previously unidentified buried or otherwise obscured cultural deposits.**

Such disturbance may result in the loss of integrity of cultural deposits and the loss of information if these deposits do exist. If such a deposit is determined to be a *historical resource* as defined by CEQA, its disturbance would result in a significant impact.

**Ground-disturbing activities associated with implementation of the SPRA Master Plan have the potential to disturb previously unknown locations of human remains.**

Although no discernible impacts to human remains are anticipated, there is always the remote possibility that such remains are present below the ground surface and could be unearthed during ground-disturbing activities. This impact would be considered significant under CEQA.

#### **4.8.5 Mitigation Measures**

The following mitigation measures have been identified to reduce potentially significant impacts related to Cultural Resources to less than significant levels as identified and discussed in Section 1.1.3 above. These measures would be applicable to the entirety of the Master Plan, as well as development of individual projects.

**Mitigation Measure CR-1:** Avoid Ground-Disturbing Activities within 100 ft. of Bedrock Milling Stations at CA-Eld-461.

Ground-disturbance will be limited to outside a 100 ft. diameter around the bedrock milling stations. Before commencement of Project components 2.01 or 2.18, EID will review proposed project alignments and an attempt will be made to realign the water line or road grading to outside the 100 ft. boundary. On-site avoidance will be ensured through construction monitoring by a professional archaeologist.

If avoidance of the 100 ft. boundary is not feasible, test excavation will be conducted in areas where impacts will occur to determine if the ground disturbance will disturb buried cultural materials that have data potential. If data-rich cultural deposits are discovered as a result of the test excavation, data recovery excavation will be conducted. Proper data analysis will be conducted and a technical report will be completed. Data gathered as a result of these excavations will be included in an overall cultural resources interpretive program for SPRA.

If impacts will occur within 50 ft. of the bedrock milling stations and avoidance is not feasible, mitigation will be determined in consultation with local Native American groups. Such mitigation may include detailed recordation, data recovery, site interpretation, and/or feature relocation.

**Mitigation Measure CR-2:** Monitor Site Impacts at CA-Eld-461 and Take Appropriate Mitigation Action in Consultation with Native Americans.

Use of the Scout/Youth Group Camp site will be monitored by SPRA staff to determine when the number of campers exceeds historical use between 2000 and 2005. When and if the 2000-2005 use is exceeded, CA-Eld-461 will be monitored by a professional archaeologist once a month beginning in June and ending in September for two consecutive years. If the archaeologist identifies evidence of extensive foot or vehicle traffic, or evidence of unauthorized excavation, the site will be considered to have had an impact. Mitigation of impacts will be developed in consultation with local Native American groups and may include detailed recordation, data recovery, site interpretation, and/or feature relocation.

**Mitigation Measure CR-3:** Test Excavate to Determine Data Potential of Impact Areas at CA-Eld-263.

Before any ground-disturbance associated with Project components 4.01 through 4.05, and 4.07, the area that will be disturbed will be subject to limited test excavation. This excavation will be conducted to determine if subsurface cultural deposits with data potential exist in the area to be disturbed. If data-rich cultural deposits are discovered as a result of the test excavation, data recovery excavation will be conducted. Proper data analysis will be conducted and a technical report will be completed. Data gathered as a result of these excavations will be included in an overall cultural resources interpretive program for SPRA.

**Mitigation Measure CR-4:** Data Recovery in Areas of Impacts at CA-Eld-263.

Although areas close to the shore at CA-Eld-263 have been excavated, the site retains the ability to provide additional data that would address regional research questions. Before any ground-disturbance associated with Project component 4.06, the area that will be disturbed will be subject to data recovery excavation. Proper data analysis will be conducted and a technical report

will be completed. Data gathered as a result of these excavations will be included in an overall cultural resources interpretive program for SPRA.

**Mitigation Measure CR-5:** Documentation and Evaluation of SP-2005-1-H.

Before ground disturbance associated with Project components 7.0 through 7.04 and 7.06, resource SP-2005-1-H will be documented and evaluated. Documentation will include appropriate California Department of Parks and Recreation record forms. Evaluation will include the preparation of a historic context and the application of CRHR criteria. The methods and findings of the documentation and evaluation will be presented in a technical report that will be forwarded to the North Central Information Center to add to their database. If SP-2005-1-H is determined to be a historical resource, mitigation will be developed in consultation with the El Dorado County Museum and may include the preparation of interpretive materials appropriate for the general public.

**Mitigation Measure CR-6:** Test Excavate in Areas of Impacts to Determine Data Potential of P-9-1817.

The presence of a cultural deposit associated with P-9-1817 has not been determined. Before any ground-disturbance associated with Project components 8.03 and 8.04, the area that will be disturbed will be subject to limited test excavation. This excavation will be conducted to determine if subsurface cultural deposits with data potential exist in the area to be disturbed. If data-rich cultural deposits are discovered as a result of the test excavation, data recovery excavation will be conducted. Proper data analysis will be conducted and a technical report will be completed. Data gathered as a result of these excavations will be included in an overall cultural resources interpretive program for SPRA.

**Mitigation Measure CR-7:** Avoid Ground-Disturbing Activities within 50 ft. of Bedrock Milling Stations at SP-1985-1.

Ground-disturbance will be limited to outside a 50 ft. diameter around the bedrock milling stations. Before commencement of Project components 10.01, 10.02, or 10.03, EID will review proposed project plans and an attempt will be made to redesign the project components to outside the 50 ft. boundary. On-site avoidance will be ensured through construction monitoring by a professional archaeologist.

If avoidance of the 50 ft. boundary is not feasible, test excavation will be conducted in areas where impacts will occur to determine if the ground disturbance will disturb buried cultural materials that have data potential. If data-rich cultural deposits are discovered as a result of the test excavation, data recovery excavation will be conducted. Proper data analysis will be conducted and a technical report will be completed. Data gathered as a result of these excavations will be included in an overall cultural resources interpretive program for SPRA.

If impacts will occur within 25 ft. of the bedrock milling stations and avoidance is not feasible, mitigation will be determined in consultation with local Native American groups. Such mitigation may include detailed recordation, data recovery, site interpretation, and/or feature relocation.

**Mitigation Measure CR-8:** Evaluate CA-Eld-1333-H for CRHR Eligibility under Criteria a, b, and d.

Before ground disturbance associated with Project components 10.04, CA-Eld-1333-H will be documented and evaluated. Documentation will include appropriate California Department of Parks and Recreation record forms. Evaluation will include the preparation of a historic context and the application of CRHR criteria a, b, and d. The methods and findings of the documentation and evaluation will be presented in a technical report that will be forwarded to the North Central Information Center to add to their database. If CA-Eld-1333-H is determined to be a historical resource, mitigation will be developed in consultation with the El Dorado County Museum and may include data recovery and the preparation of interpretive materials appropriate for the general public.

**Mitigation Measure CR-9:** Avoid Ground-Disturbing Activities within 50 ft. of Bedrock Milling Stations at CA-Eld-1331 and CA-Eld-1335.

Ground-disturbance will be limited to outside a 50 ft. diameter around the bedrock milling stations at CA-Eld-1331 and CA-Eld-1335. Before commencement of components 16.02 and 16.03, EID will review proposed project components and an attempt will be made to redesign the project components to outside the 50 ft. boundary. On-site avoidance will be ensured through construction monitoring by a professional archaeologist.

If avoidance of the 50 ft. boundary is not feasible, test excavation will be conducted in areas where impacts will occur to determine if the ground disturbance will disturb buried cultural materials that have data potential. If data-rich cultural deposits are discovered as a result of the test excavation, data recovery excavation will be conducted. Proper data analysis will be conducted and a technical report will be completed. Data gathered as a result of these excavations will be included in an overall cultural resources interpretive program for SPRA.

If impacts will occur within 25 ft. of the bedrock milling stations and avoidance is not feasible, mitigation will be determined in consultation with local Native American groups. Such mitigation may include detailed recordation, data recovery, site interpretation, and/or feature relocation.

**Mitigation Measures CR-10A and CR-10B:**

**Mitigation Measure CR-10A:** Avoid Ground-Disturbing Activities within 50 ft. of Bedrock Milling Stations at CA-Eld-1335.

Ground-disturbance will be limited to outside a 50 ft. diameter around the bedrock milling station at CA-Eld-1331 and CA-Eld-1335. Before commencement of Project 22, EID will review the proposed trail alignment and an attempt will be made to redesign the project components to outside the 50 ft. boundary. On-site avoidance will be ensured through construction monitoring by a professional archaeologist.

If avoidance of the 50 ft. boundary is not feasible, test excavation will be conducted in areas where impacts will occur to determine if the ground disturbance will disturb buried cultural

materials that have data potential. If data-rich cultural deposits are discovered as a result of the test excavation, data recovery excavation will be conducted. Proper data analysis will be conducted and a technical report will be completed. Data gathered as a result of these excavations will be included in an overall cultural resources interpretive program for SPRA.

If impacts will occur within 25 ft. of the bedrock milling stations and avoidance is not feasible, mitigation will be determined in consultation with local Native American groups. Such mitigation may include detailed recordation, data recovery, site interpretation, and/or feature relocation.

**Mitigation Measure CR-10B:** Test Excavate in Areas of Impacts to Determine Data Potential of P-9-1817.

The presence of a cultural deposit associated with P-9-1817 has not been determined. Before any ground-disturbance associated with Project 22, the area that will be disturbed will be subject to limited test excavation. This excavation will be conducted to determine if subsurface cultural deposits with data potential exist in the area to be disturbed. If data-rich cultural deposits are discovered as a result of the test excavation, data recovery excavation will be conducted. Proper data analysis will be conducted and a technical report will be completed. Data gathered as a result of these excavations will be included in an overall cultural resources interpretive program for SPRA.

**Mitigation Measures CR-11A and CR-11B:**

**Mitigation Measure CR-11A:** Test Excavate to Determine Data Potential of Impact Areas at CA-Eld-263 and CA-Eld-728.

The extent of the cultural deposits associated with CA-Eld-263 and CA-Eld-728 have not been determined. Before any ground-disturbance associated with Project 25, the areas adjacent to CA-Eld-263 and CA-Eld-728 that will be disturbed will be subject to limited test excavation. This excavation will be conducted to determine if subsurface cultural deposits with data potential exist in the area to be disturbed. If data-rich cultural deposits are discovered as a result of the test excavation, data recovery excavation will be conducted. Proper data analysis will be conducted and a technical report will be completed. Data gathered as a result of these excavations will be included in an overall cultural resources interpretive program for SPRA.

**Mitigation Measure CR-11B:** Avoid Ground-Disturbing Activities within 50 ft. of Bedrock Milling Stations at SP-1985-1.

Ground-disturbance will be limited to outside a 50 ft. diameter around the bedrock milling stations. Before commencement of Project 25, EID will review proposed project plans and an attempt will be made to redesign the project components to outside the 50 ft. boundary. On-site avoidance will be ensured through construction monitoring by a professional archaeologist.

If avoidance of the 50 ft. boundary is not feasible, test excavation will be conducted in areas where impacts will occur to determine if the ground disturbance will disturb buried cultural materials that have data potential. If data-rich cultural deposits are discovered as a result of the test excavation, data recovery excavation will be conducted. Proper data analysis will be

conducted and a technical report will be completed. Data gathered as a result of these excavations will be included in an overall cultural resources interpretive program for SPRA.

If impacts occur within 25 ft. of the bedrock milling stations and avoidance is not feasible, mitigation will be determined in consultation with local Native American groups. Such mitigation may include detailed recordation, data recovery, site interpretation, and/or feature relocation.

**Mitigation Measure CR-12:** Train Staff to Recognize Cultural Deposits and Stop Work in the event of an Unanticipated Discovery.

To reduce this impact to a less-than-significant level, it is recommended that workers involved in ground-disturbing activities be trained in the recognition of buried cultural resources, procedures to report such discoveries, laws prohibiting destruction of historical resources, and other appropriate protocols. In the event that archaeological artifacts or cultural soil deposits are encountered during any future land alterations, all work shall stop in the immediate vicinity of the find until the discovery area can be evaluated by a professional archaeologist. Depending on the extent and cultural composition of the discovered materials, it may be advisable to have subsequent activity monitored by a professional archaeologist who would be ready to record, recover, and/or protect significant cultural materials from further damage.

**Mitigation Measure CR-13:** Stop Work if Human Remains are Unearthed and Contact the El Dorado County Coroner.

If human remains are discovered anywhere on the site, work shall immediately stop in the vicinity of the discovery and the El Dorado County Coroner will be contacted. If the remains are found to be prehistoric Native American (not modern), the Coroner shall call the Native American Heritage Commission in Sacramento within 24 hours. The NAHC will identify the person(s) it believes to be the "Most Likely Descendant" of the deceased Native American. The Most Likely Descendant would be responsible for recommending the disposition and treatment of the remains. The Most Likely Descendant may make recommendations to EID for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

## 4.9 Geology/Soils

### 4.9.1 Existing Conditions

A geotechnical report for the SPRA Master Plan was prepared by Youngdahl Consulting group Inc. (Appendix F). The contents of that report are summarized below.

#### 4.9.1.1 Seismicity

SPRA lies between the Foothills Fault System and the fault system associated with the western edge of the Basin and Range Province such as the Genoa or Lake Tahoe faults (Youngdahl, 2004). The geologic fault zone transecting the Master Plan area is known as the Eastern Belt. The Eastern Belt is a Paleozoic fault zone trending in a north to south direction (URS, 2003). Faults within SPRA are shown in Figure 4.9-1.

Fault mapping within the project area is largely based on generalized potential geologic indicators within the area, including offsets in Mehrten and other late Cenozoic formations, as well as gradient changes on significant geomorphic surfaces. Based on these indicators, the possibility of Cenozoic fault traces extending to the northeast along the north and south shores of Jenkinson Lake was identified by fault mapping completed by Jennings documented in 1994 (Youngdahl, 2004).

The Melones fault zone is a potentially active Quaternary-aged fault zone located approximately seventeen miles west of the Master Plan area. As shown in Table 4.9-1, the closest active faults to the project area are the east and west branches of the Melones fault zone, located 17 and 20 miles, respectively, from the Master Plan area. The closest mapped active fault is the North Tahoe Fault, which is located approximately 33 miles northeast of the Master Plan area.

**Table 4.9-1 — Deterministic Seismicity Table**

Fault Zone/Activity Level	DBE Moment Magnitude (Mw)	UBE Moment Magnitude (Mw)	Distance to Site (km)	Direction from Site (Compass)	Max. Duration of Shaking (seconds)	DBE PHGA* (g)	UBE PHGA* (g)
North Tahoe [H]	6.25	6.5	54	NE	17	0.07	0.08
Genoa [H]	6.25	7.3	62	E	28	0.06	0.11
Dog Valley, South [H]	6.25	6.5	62	NE	18	0.06	0.07
Antelope Valley [H]	6.25	6.7	90	E	24	0.05	0.06
Melones Fault Zone [Q]							
-East	6.25	6.5	17	W	10	0.16	0.19
-West	6.25	6.5	20	W	11	0.15	0.17
Bear Mountain Fault Zone [Q]							
-West Branch	6.25	6.5	32.0	W	14	0.11	0.12
-East Branch	6.25	6.5	42	W	15	0.09	0.10

<b>Fault Zone/Activity Level</b>	<b>DBE Moment Magnitude (Mw)</b>	<b>UBE Moment Magnitude (Mw)</b>	<b>Distance to Site (km)</b>	<b>Direction from Site (Compass)</b>	<b>Max. Duration of Shaking (seconds)</b>	<b>DBE PHGA* (g)</b>	<b>UBE PHGA* (g)</b>
Mormon Island Shear Zone [LQ]	6.25	6.5	45.0	W	16	0.08	0.09

Source: Youngdahl, October 2004.

DBE = 10% exceedence in 50 years.

UBE = Mmax

[Q] = Quaternary/Potentially Active

[LQ] = Late Quaternary/Potentially Active

[H] = Holocene/Active

Recency of Movement: [H]<10,000 Years B.P.; [LQ]<700,000 Years B.P.

Maximum probable accelerations from a seismic event within the area of SPRA are estimated to be on the order of 0.3g (percent of gravity) with a ten percent probability of exceedence in ten years (Youngdahl, 2004). According to the California Geologic Survey, El Dorado County is not affected by Alquist-Priolo Earthquake Fault Zones (California Geological Survey, 2005). No active faults or Earthquake fault Zones are located on the project site and no evidence of recent or active fault was observed in conjunction with preparation of the geotechnical report prepared by Youngdahl (Youngdahl, 2004).



#### **4.9.1.2 Geology**

##### **Regional Setting**

The SPRA Master Plan area is located in the Central Sierra Nevada range, which is composed of a granite batholith with a gently sloping western slope and an abrupt eastern escarpment, resulting from geologic uplift caused by fault action. The height of the range continues to be modified by uplifting through modern times (URS, 2003).

Sierra Nevada Foothills within SPRA are comprised of three major tectonic terraces, the Western Terrane, the Central Terrane, and the Eastern Terrane. These terraces are dominated by series of fault systems trending north to northwest. The upper Sierra Nevada Foothills are largely characterized by volcanic and metamorphic rock types (Youngdahl, 2004), including the Shoo Fly Formation, which manifests as exposed, light-colored slate or schist. These geologic formations formed from sea-floor deposits during the Paleozoic Era (URS, 2003). SPRA lies in the eastern terrane, which is bounded on the east by intrusive contact with granitoid rocks of the Sierra Nevada Batholith and on the west by faults of the Calaveras-Shoo Fly thrust.

##### **Site Conditions**

As shown in Figure 4.9-2, the project area is underlain by three major rock units: the Shoo Fly Complex, the Valley Springs Formation, and the Mehrten Formation. Mapping of the Shoo Fly Formation is documented by Loyd in 1987 and mapping of the Valley Springs Formation and the Mehrten Formation is documented by Schweichert in 1981.

##### ***Project Site Geologic Units***

###### **Shoo Fly Complex (Pzsf)**

The Shoo Fly Complex is comprised of highly deformed Early to Middle Paleozoic Miogeoclinal deposits predominately composed of quartzofeldspathic schist and gneiss; quartz-mica schist, and phyllite. Exposures of this geologic unit are present along the southern lake shore, in the vicinity of the dam abutments, and in the rock quarry below the dam.

###### **Valley Springs Formation (Tvs)**

The Valley Springs Formation is of Oligocene to early Miocene in age, and was deposited unconformably onto the eroded surface of the Shoo-Fly Complex. Locally, it is composed primarily of rhyolitic ashflow tuffs and alluvial deposits derived mainly from rhyolitic volcanic rocks. Welded tuffs are exposed as resistant slopes on and above portions of the north shore of the lake and are well exposed in the cuts of campground access roads along the lake.

###### **Mehrten Formation (Tm)**

The Mehrten Formation is part of a group of andesitic volcanic events that occurred following a five to 10 million year lapse in rhyolitic volcanics. The Mehrten Formation in the project area is represented mostly by volcanic mudflow rocks (agglomerates) derived from andesitic ash and volcanism to the east in the Sierra Nevada. The deposits traveled down stream channels and valleys carved within the underlying rock and form the resistant ridge top capping units (lava cap) found in areas from Pollock Pines to Placerville. Within the project area, the Mehrten Formation is most obvious along a section of the south lake shore, on Scout Hill on the north

side of the project, in road cuts along Sly Park Road north of the project, and in road cuts along Mormon Emigrant Trail a few hundred feet south of the south dam.

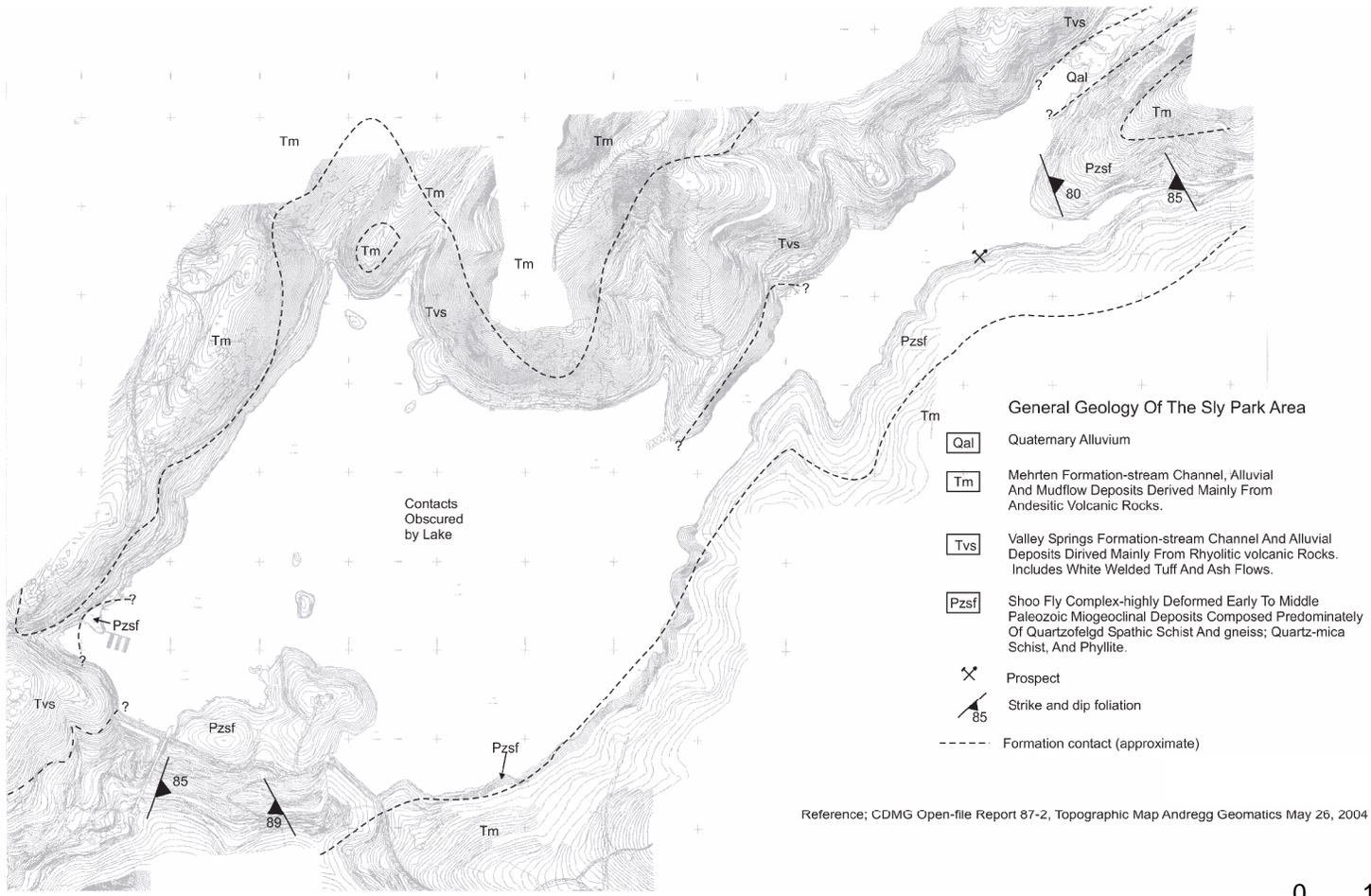
## **Seismic and Geotechnical Considerations**

### ***Fault Movement***

No unequivocal evidence of fault movement was identified within the project area in the geotechnical report prepared by Youngdahl. Any seismic activity within SPRA can be expected to be derived from fault movement outside of the project area. Seismic ground shaking has the potential to trigger localized effects from ground motion including: liquefaction, seismic settlement, landslides, and localized ground rupture.

### ***Ground Shaking***

Strong earthquakes generated from regional faults may result in ground shaking within SPRA, depending on the characteristics of the earthquake and the location of the epicenter. Effects resulting from ground shaking are generally characterized by the phenomena associated with shaking and/or ground acceleration and can be minimized through design and construction techniques.



Source: Youngdahl Consulting Group, Inc. Date: July 2004

## GEOLOGY MAP

SLY PARK RECREATION AREA MASTER PLAN  
MASTER EIR

FIGURE 4.9-2



### ***Liquefaction***

Liquefaction can generally be described as a loss of soil strength related to seismic ground shaking and is most commonly associated with soil deposits characterized by water-saturated, well sorted, fine grain sands and silts. Saturated, loose to medium-dense sands with a silt content less than 25 percent, located within the upper 40 feet are most susceptible to liquefaction.

As shown on Figure 4.9-2, significant amounts of alluvium are present where Hazel Creek enters Jenkinson Lake. No other areas of significant alluvium are present within SPRA (Youngdahl, 2004).

### ***Landslides***

Landslides refer to the downward mass movement of soils and rock related to displacement due to gravity, and may be mobilized by seismic activity. Soil creep and shallow landsliding is present on the steeper slopes within SPRA. Shoreline erosion on Jenkinson Lake has resulted in undermined banks, creating localized areas of instability.

### ***Differential Compaction/Seismic Settlement***

Fine-grained soils and clay are prone to seismic settlement and differential compaction. Areas most prone to this phenomenon would be characterized by conditions where surficial deposits are underlain by low-density silts and clays associated with fluvial depositional environments. Typically these areas consist of old lakes, sloughs, swamps, dredge tailing ponds, and stream beds. Potential for differential compaction is highest and affects the largest area during large earthquakes. Textures for soils within SPRA primarily include clayey and silty sands. However, small amount of sandy clay soils are also present. Deep, loose deposits of these soils would be prone to differential settlement or seismic settlement, although slopes and ridges within SPRA characterized by a thin soil mantle would have a very low potential. Moderately low potential for seismic settlement exists within drainage areas of the Hazel Creek floodplain.

### ***Ground Rupture***

Ground rupture would be a secondary occurrence as a result of seismic settlement or landsliding resulting from seismic ground shaking.

### ***Slope Stability***

Incipient slope instability is not often readily identifiable without detailed focused studies. Evidence of soil creep within the project area is evident by exposures of shallow overturning laminar rock fabric. Minor soil creep within the project area is evident on steeper slopes and minor landsliding may also be present.

### ***Subsidence***

No gas, oil, or geothermal wells are known to exist within SPRA and the area does not contain peat soils. Soils are generally shallow overlying bedrock and are not characteristic of those susceptible to subsidence.

#### **4.9.1.3 Soils**

Soils across the site tend to vary according to differences in parent material, drainage, and age or degree of development. According to the mapping completed by the Natural Resource

Conservation Service (NRCS) as shown in Figure 4.9-3, the soils surrounding Jenkinson Lake primarily consist of Cohasset loam, Cohasset cobbly loam, Crozier cobbly loam, Mariposa very rocky silt loam, Mariposa-Josephine very rocky loams, and mixed alluvial land with minor amounts of Iron Mountain very rocky sandy loam. Descriptions of these soil map units according to the Natural Resources Conservation Service characterizations are summarized below.

### **Cohasset Series**

This series consist of well-drained soils underlain by weathered andesitic conglomerates at a depth greater than 40 inches. These soils are generally found on gentle to strong slopes on smooth ridges and moderately steep to steep on the sides of the ridges. The top layer is brown to a yellowish-red cobbly loam, slightly hard and friable soil. Permeability is moderate, surface runoff is medium to rapid, and the erosion hazard is moderate to high. Cohasset series soils provide fair to poor topsoil and make fair to poor road fill. This soil is severely limited for use for septic system leach fields where it occurs on steeper slopes.

### **Crozier Series**

This series consist of well -drained soils underlain by andesitic conglomerate at a depth of 24 to 40 inches. These soils are generally found on strongly sloping terrain on ridges; and moderately steep to steep terrain on the sides of ridges. The surface layer is brown to reddish-brown, slightly acidic and medium acid and strongly acid cobbly heavy loam and cobbly clay loam approximately 20 inches thick. Parent material consists of weathered andesitic breccia at a depth of approximately 36 inches. Permeability is moderate, surface runoff is medium to rapid, and the erosion hazard is moderate to high. The Crozier series provides fair topsoil and is fair to poor for use as road fill. This soil is severely limited for use in septic system leach fields due to slopes and the shallowness of bedrock.

### **Iron Mountain Series**

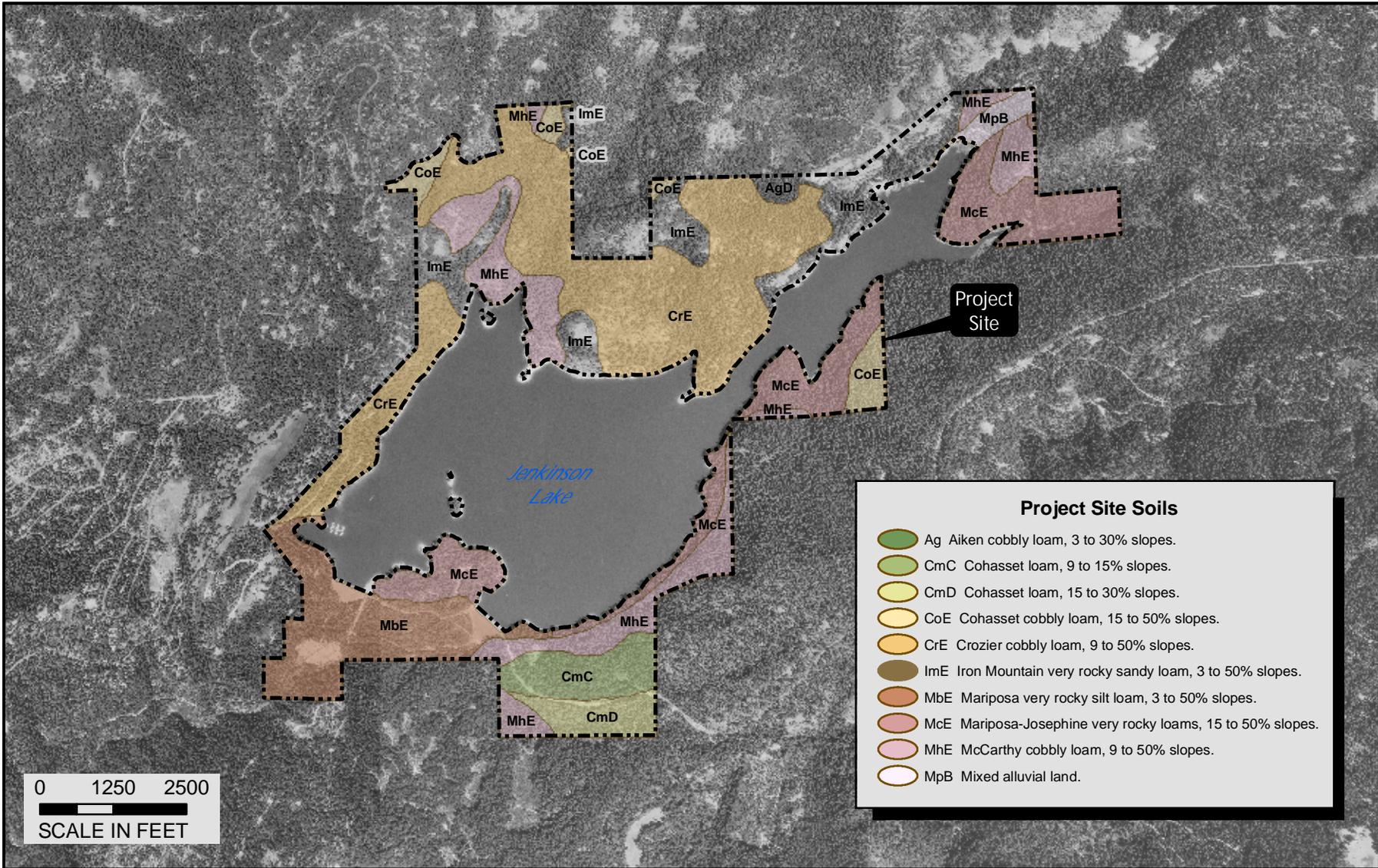
This series consists of dark brown, medium acid cobbly sandy loam approximately 12 inches thick, underlain by hard volcanic breccia. Permeability is moderately rapid, surface runoff is medium to rapid, and the erosion hazard is slight to high. The Iron Mountain Series has a poor suitability as topsoil but does make good road fill. This soil is severely limited for use for septic systems due to the shallowness of bedrock and the steepness of slopes in some places.

### **Mariposa Series**

This series consists of a pink surface layer, medium acid gravelly silt loam approximately eight inches thick. Subsoil is reddish-yellow, medium and strong acid gravelly silt loam approximately 18 inches thick. This soil series is generally underlain by schists or slate at approximately 26 inches depth. Permeability is moderate, surface runoff is medium to rapid, and the erosion hazard is slight to high. The Mariposa Series is poorly suitable for topsoil but provides fair road fill. This soil is severely limited for use for septic systems due to slopes and the shallow bedrock.

### **McCarthy Series**

This series consists of a surface layer that is a dark grayish brown to brown, slightly acid cobbly loam approximately 10 inches thick. Subsoil is strong brown, medium acid very cobbly loam approximately 28 inches thick. This is underlain by weathered andesitic conglomerate.



SOILS



Permeability is moderate, surface runoff is medium to rapid, and the erosion hazard is moderate to high. The McCarthy Series is poorly suitable for topsoil but is fairly suitable as a source for road fill. This soil is severely limited for use for septic systems due to slopes and the shallow bedrock.

### **Mixed Alluvial Land**

This series consists of small areas of recently mixed alluvium adjacent to stream channels. Soils found within this map unit are variable in color and are generally stratified from gravelly sand loam, loam, and clay loam that grade into sand and gravel with increasing depth. Depth to unrelated underlying rock is approximately 36 inches. Drainage for this soil map unit ranges from moderately well-drained to poorly drained. Permeability is rapid to slow, surface runoff is slow to medium, and the erosion hazard is moderate.

#### **4.9.1.4 Erosion**

Erosion refers to the detachment and transport of soil particles related to wind, water, or ice. NRCS identifies ranges for soils erosion hazards based on soil properties as documented for individual soil series in data collected from the Soil Survey. The erosion potential of soils within SPRA can generally be characterized as having a moderate to high potential for erosion, with some areas characterized by slight to very highly erosive soils. Erosion hazard ranges derived from the El Dorado County Soil Survey data are shown in Figure 4.9-4. Erosion is occurring within areas of SPRA where wave action reaches the shoreline, along trails and unpaved roads, and light erosion is associated with logging activities on adjacent properties.

#### **4.9.1.5 Mineral Resources**

The project site is located within a geologic region known for mineralized zones related to the Sierra Nevada foothill gold discovery. Historically, mining activities have occurred on lands adjacent to and within the vicinity of SPRA. The Hazel Creek Mine was developed in 1948 on the north bank of Hazel Creek, within one mile to the northeast of SPRA within lands currently owned by SPI. According to records maintained by the RWQCB, the mine was closed in 1989 (URS, 2003). Additionally, the Theodore Rupley Claim was a placer gold mine historically located along Sly Park Creek near the eastern project boundary (Youngdahl Consulting Group, Inc., 2004).

According to California Geological Survey mapping, the western portion of the project site is mapped MRZ-4 and the eastern portion of the project site is mapped MRZ-3a. Areas designated MRZ-4 indicates areas where available data do not preclude the presence or absence of mineral deposits. Areas designated MRZ-3a are areas underlain by geology within which undiscovered mineral resources similar in nature to known deposits within the region may be reasonably expected to exist. Based on evidence related to earlier prospecting within the area combined with a lack of evidence of production, the geotechnical report prepared by Youngdahl concludes that the potential loss of mineral resources is considered to be low to moderate (Youngdahl Consulting Group, 2004).

## **4.9.2 Regulatory Setting**

Policies and regulations that are pertinent to the proposed project are identified below. The proposed project is considered to be consistent and compatible with these policies and regulations unless stated in the impact analysis that follows.

### **4.9.2.1 Federal**

There are no applicable federal regulations pertaining to geologic or seismic hazards relevant to the proposed project.

### **4.9.2.2 State**

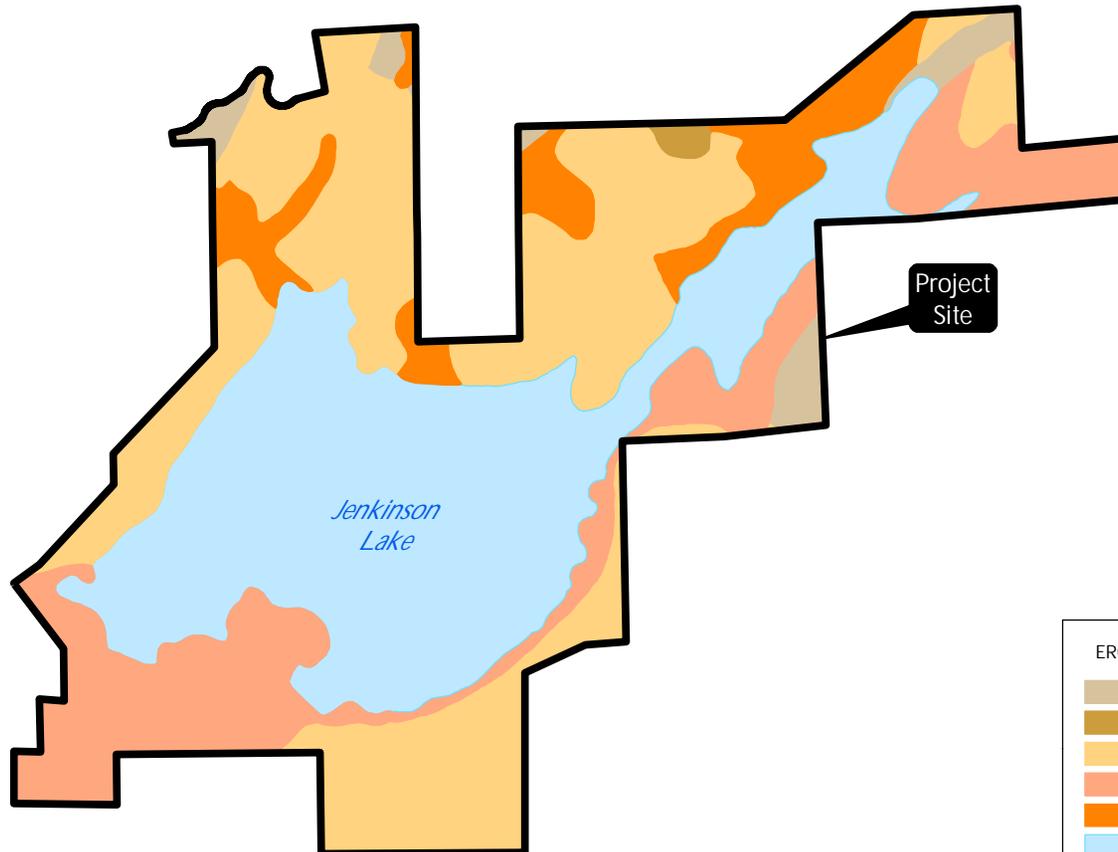
State regulations pertaining to the management of erosion and sedimentation are described in Section 4.11, Hydrology and Water Quality. Although the primary purpose of these regulations and standards is the protection of water quality from adverse effects related to land development (such as turbidity caused by sedimentation), measures included in these regulations and standards also reduce the potential for erosion. These regulations include, but are not limited to, the National Pollutant Discharge Elimination System (NPDES) program for management of construction and municipal storm water runoff, as part of the federal Clean Water Act and the State Porter-Cologne Water Quality Act. NPDES is implemented at the State and local level through issuance of permits and preparation of site-specific Storm Water Pollution Prevention Plans (SWPPP).

### **Building Standards**

The State regulations protecting the public from geo-seismic hazards, other than surface faulting, are contained in California Code of Regulations, Title 24, Part 2, the California Building Code and California Public Resources Code, Division 2, Chapter 7.8, the Seismic Hazards Mapping Act. These regulations apply to public buildings and a large percentage of private buildings intended for human occupancy. The California Building Code (CBC) is based on the Uniform Building Code (UBC). The CBC has been modified for California conditions with numerous more detailed and/or more stringent regulations.

California Health and Safety Code 19100 et seq., the State Earthquake Protection Law, requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the CBC. The CBC requires a site-specific geotechnical study to address seismic issues and identifies seismic factors that must be considered in structural design. Because the project area is not in an Alquist-Priolo Earthquake Fault Zone, as noted above, no associated provisions would be required for project development related to fault rupture.

Chapter 18 of the CBC regulates the excavation of foundations and retaining walls. Chapter 33 regulates grading activities, including drainage and erosion control and construction in areas containing expansive soils. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in Cal-OSHA regulations (Title 8 of the CCR) and in Section A33 of the CBC.



\*USDA, Soil Conservation Service, digital data derived from SSURGO data, El Dorado County CA, 2001.

### EROSION POTENTIAL



Installation of underground utility lines must comply with industry standards specific to the type of utility (e.g., American Water Works Association for water lines). These standards contain specifications for installation and design to reflect site-specific geologic and soils conditions.

#### **4.9.2.3 Local**

##### **El Dorado County**

###### ***El Dorado County Ordinance Code***

###### **Grading Ordinance of El Dorado County**

Chapter 15.14 of the El Dorado County Code establishes the Grading Ordinance of El Dorado County. The purpose of the Grading Ordinance is to regulate grading on private property within the unincorporated areas of El Dorado County to safeguard life, limb, health, property and public welfare; to avoid pollution of watercourses resulting from nutrients, sediments, or other earthen materials emanating from or transported by surface water runoff from the permit area, and to ensure that use of the site proposed for grading is consistent with the General Plan, any applicable specific plan, County ordinances and the UBC.

###### **Private Sewage Disposal Systems**

Section 15.32.000(b) requires the connection to an approved private sewage disposal system for structures when public sewer is not available.

###### **Resolution Number 259-99**

###### **Design Standards for the Site Evaluation and Design of Sewage Disposal Systems**

Section 1(A) requires a site evaluation, a site approval, and a sewage disposal permit before installation or modification of a sewage disposal system.

#### **4.9.3 Environmental Impact Thresholds/Criteria for Evaluation**

For the purposes of this Draft Master EIR impacts related to Geology and Soils are considered significant if the proposed project would:

- Expose people or structures to substantial adverse effects involving:
  - a) Strong seismic ground shaking;
  - b) Seismic-related ground failure, including liquefaction; or
  - c) Landslides.
- Result in substantial soil erosion or the loss of topsoil;
- Be located on expansive soil;
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems; or

- Be located on an unstable geologic unit or soil or result in unstable soils conditions including on- or off-site landslides.

#### **4.9.4 Environmental Impacts**

This section identifies and discusses potential impacts related to Geology and Soils associated with implementation of the SPRA Master Plan and individually proposed projects, and also identifies mitigation measures proposed to reduce impacts to less than significant levels. Potential impacts related to septic and alternative waste water disposal systems are discussed in Hydrology and Water Quality, Section 4.11 of this Draft Master EIR. A detailed discussion of mitigation measures can be found in Section 4.9.4.

**Implementation of the SPRA Master Plan and development of individually proposed projects would not expose people or structures to substantial adverse effects related to strong seismic ground shaking.**

The Tahoe North Fault is the closest mapped active fault to SPRA and is located approximately 33 miles to the northeast.

The California Building Code is based on the UBC and has been modified for State-specific conditions. The State Earthquake Protection Law, as set forth by the California Health and Safety Code Section 19100 et seq., requires structures to be designed to resist stress generated by lateral forces such as earthquakes and wind. Minimum seismic safety and structural design standards design are specified in Chapter 16 of the CBC. The proposed project is located within Seismic Zone 3 (Youngdahl, 2003) and construction of any structures intended for human occupancy would be required to conform to design criteria for this seismic zone as required by the CBC, as well as the Building Code adopted by the County; therefore, impacts are considered **less than significant**. No mitigation is warranted.

**The potential for severe ground shaking within SPRA is low. Implementation of the SPRA Master Plan and development of individually proposed projects would not expose people or structures to substantial adverse effects related to seismic-related ground failure, including ground rupture, liquefaction, and differential compaction or seismic settlement.**

The project site is located within seismic region Zone three; however the potential for severe ground shaking is low within SPRA (Youngdahl, 2004). The potential for impacts associated with liquefaction is only present within areas of alluvium located along Hazel Creek where the creek enters Jenkinson Lake. No structures are proposed within this area of SPRA. Seismic settlement is not likely to occur within SPRA due to the presence of a thin soil mantle overlying relatively strong moderately weathered bedrock. The potential for impacts resulting from ground rupture within SPRA is low. Impacts related to seismic-related ground failure, including ground rupture, liquefaction and landslides would result from seismic-induced ground shaking and the potential for severe ground shaking is low; therefore, impacts are considered **less than significant**. No mitigation is warranted.

**Implementation of the SPRA Master Plan and development of individually proposed projects would involve continued recreational activities that would have the potential to result in or further contribute to ongoing erosion.**

The long-term, conservation-oriented management activities identified in the Master Plan are proposed to conserve natural resources as well as facilitate ongoing recreational use. Erosion within SPRA currently results from natural and human-induced environmental factors. Areas throughout the park are subject to unauthorized access and use by park visitors, resulting in eroded hillsides, streambanks, and trails. Erosion within these areas is further exacerbated by natural factors, including wind and water. By nature, recreational activities also induce erosion through soil disturbance related to the movement of park visitors throughout SPRA. Most noticeably, erosion within SPRA associated with recreational use includes areas of exposed ground in campsites, as well as trails and unsurfaced roads. Wave action created by boating on Jenkinson Lake is responsible for eroded areas of shoreline.

The SPRA Master Plan proposes design standards and guidelines to guide implementation of the Master Plan concepts and development of individually proposed projects. Design standards and guidelines proposed to control erosion related to recreational use within SPRA include:

- Consider topographic constraints as a limitation to development or continued use of recreational facilities;
- Surfacing campsites with sand and/or decomposed granite over permeable landscape fabric;
- Rock-lined splash basins rock water spigots;
- Surfacing of access routes and parking areas;
- Implementation of bioengineering techniques to stabilize areas of shoreline and streambanks currently experiencing erosion;
- Native vegetation maintenance and rehabilitation, including revegetation;
- Designated access points for lake access and trails;
- Restrict access in areas not intended as access points;
- Mulching in revegetation areas;
- Retention and offsite stockpiling of topsoil; and
- Limited duration of exposure for disturbed soils.

Rehabilitation of existing and development of additional recreational facilities would be implemented in accordance with the design standards identified above, as identified by the Master Plan to address current problems related to erosion as well as to prevent exacerbation of existing or the creation of new areas of erosion within SPRA. As discussed in the project Description, the SPRA Master Plan identifies goals and objectives related to the reduction of erosion through the implementation of BMPs. The Master Plan also identifies standards and

guidelines to implement goals and policies related to erosion; therefore, impacts related to recreation-induced erosion are considered **less than significant**. No mitigation is warranted.

**Implementation of the SPRA Master Plan and development of individually proposed projects would involve topographic alterations including clearing, grading, and excavation activities that would have the potential to result in erosion.**

The SPRA Master Plan identifies goals and objectives related to the protection of natural resources associated with the development of recreational resources as well as ongoing park operation and maintenance. The Master Plan specifies that site planning and design should minimize site disturbance and retain on-site vegetation to the maximum extent practicable. Design standards and guidelines identified by the Master Plan pertaining to grading and drainage include:

- Grading plans must show locations of trees over six inches in diameter;
- Construction impacts should be limited to a 50-foot radius around actual projects where feasible;
- Cut and fill must be minimized; however slopes should not exceed a 3:1 gradient . Where slopes would need to exceed 3:1, logs, boulders, or other natural materials should be used to create retaining walls. Also, grading design should seek to provide a diversity of gradients and profiles rather than uniform slopes;
- Grade to emulate the natural drainage of the area, directing water away from buildings. Avoid concentrating flows wherever possible;
- Infiltration trenches and sediment basins should be used to catch and filter stormwater from roofs and paved or compacted surface whenever feasible. The use of culverts and other underground pipe systems should be avoided; and
- Minimize the number of temporary access routes to construction sites.

Design standards and guidelines have also been identified for the construction or reconfiguration of recreational facilities within SPRA and include the following measures:

- Placement of the long axis of building along contours to minimize grading;
- Install porous paving to minimize erosion and to “recharge” the groundwater;
- Adjustments to alignments or siting for new roads should be planned carefully to preserve major trees and clumps of vegetation, while considering safety factors such as visibility;
- Where feasible, maintenance should improve pedestrian trail accessibility as defined by ADA/Title 24 accessibility standards. Such improvements are subject to limitations of the terrain, staff, and funding and may not cause damage to significant natural resources;

- Each campground layout should be reviewed onsite to ensure that grade transitions can be accomplished smoothly and with minimal need for retaining walls or other costly remediation;
- Campsites should be sloped at a 1.5 percent minimum to drain and three percent maximum;
- Campsite parking spaces may be chipped and sealed, or surfaced with compacted road base, asphalt, or permeable pavers;
- Rest rooms should be sited to minimize compaction and erosion, as well as intrusions on other campsites;
- Amphitheatre construction should take advantage of natural topography to minimize cut and fill, and reduce visual and noise impacts on adjacent property owners and other park visitors;
- Amphitheaters should be sited to minimize removal of trees and other native vegetation;
- Camping platforms should be considered for areas where conditions are not suitable for traditional camping, especially in areas with sensitive habitat or steep grades;
- If platform installation requires a cut into the existing grade, consider using 18- to 24-inch high retaining walls or large diameter logs to retain the cut bank while providing campsite seating;
- Picnic pavilions could have compacted gravel, compacted decomposed granite, or concrete floors;
- Implement stormwater Best Management Practices to reduce erosion and protect water quality during construction disturbance per the NPDES Stormwater Construction Permit;
- Remove and stockpile topsoil for reuse when construction improvements will disturb existing native soil; and
- Vegetative material removed for construction should be chipped and used as trail surfacing.

Construction activities associated with implementation of Master Plan components and activities would be subject to compliance with the SWPPP prepared in compliance with the terms and conditions specified by the RWQCB through NPDES, under the Construction General Permit. An in depth discussion of NPDES as it relates to water quality can be found in Hydrology and Water Quality, Section 4.11 of this Draft Master EIR. In addition, construction activities would, be subject to implementation of construction BMPs in accordance with the El Dorado County SWMP. Unless exempted under Section 15.14.060 of the Grading Ordinance of El Dorado County, proposed clearing, grading, and excavation activities associated with implementation of the Master Plan and development of individual projects would be required to comply with all

standards specified by County Ordinance, including submittal of an erosion and sediment control plan.

Grading and excavation activities associated with construction would result in a moderate potential for accelerated soil erosion (Youngdahl, 2004). However, implementation of the design standards and guidelines identified by the SPRA Master Plan, in combination with compliance with the regulatory standards mandated by state and local regulations and ordinances associated with any proposed grading activity would ensure that potential impacts related to erosion would remain **less than significant**. No mitigation is warranted.

**Implementation of the SPRA Master Plan and development of individually proposed projects would not create substantial hazards related to expansive soils.**

Soils within SPRA are characterized by low to moderate shrink-swell potential (Youngdahl, 2004). Design and construction of structures within areas of expansive soils would be required to be constructed in accordance with the design and construction standards specified by the CBC as enforced through building permits issued by El Dorado County Building Services. Impacts are therefore considered **less than significant**. No mitigation is warranted.

**Although, soils throughout SPRA are generally characterized by thin soils overlying bedrock and would not be considered suitable for supporting the use of septic systems.**

Sanitary sewer service infrastructure is not currently available within SPRA. Individual projects proposed by EID that would likely involve the construction of septic systems would include: kitchens, shower and laundry facilities, and restroom facilities as shown below in Table 4.9-2. The SPRA Master Plan identifies the following design standards and guidelines relevant to the development of facilities with septic systems:

- Disposal of shower/laundry grey water will be accomplished with either onsite leach fields or by removal from the site to an appropriate disposal facility. Leach fields will be sized and sited according to the El Dorado County requirements.
- Disposal of Mess Hall grey water will be accomplished with either onsite leach fields or by removal from the site to an appropriate disposal facility. Leach fields will be sized and sited according to El Dorado County requirements.

**Table 4.9-2 — Potential Septic System Development**

<b>Project Components Potentially Proposing Septic Systems</b>		
<b>Project Component ID Number</b>	<b>Project Name</b>	<b>Facility</b>
2.09	Scout/Youth Group Camp (North Mess Hall)	Kitchen
2.10	Scout/Youth Group Camp (North)	Showers
2.15	Scout/Youth Group Camp (South)	Showers
2.17	Scout/Youth Group Camp (South Mess Hall)	Kitchen
5.02	Jenkinson Pilot Cabins	Restroom/Kitchen
6.06	Sierra Camp	Shower/Laundry Facility
10.04	Chimney Camp	Cabins
20.05	Retreat and Events Center	Cabins
20.06	Retreat and Events Center	Cabins
21.02	Main Group Campground	Shower/Laundry
21.14	Main Group Campground	Group Kitchens

Source: Foothill Associates, 2005

At this time, EID has no plans to develop sanitary sewer conveyance infrastructure within SPRA; therefore, all proposed structures would be required to develop on-site septic systems as required by Section 15.32.010(b) of the El Dorado County Code. The geotechnical report prepared by Youngdahl indicates SPRA soils are shallow and may not be capable of supporting planned improvements. Proposed new facilities and recreational improvements may be constrained by the capability of project site soils to accommodate septic or alternative waste water disposal systems. Site specific soils investigations would be required by the El Dorado County Environmental Health Division pursuant to the Design Standards for the Site Evaluation and Design of Sewage Disposal Systems adopted by resolution of the Board of Supervisors. No septic system or alternative waste water disposal system could be constructed without approval by the County Environmental Health Division and Building Permits would not be issued for structures without clearance from the Environmental Health Division; therefore, impacts are considered **less than significant**.

**Implementation of the SPRA Master Plan and development of individually proposed projects could expose people to substantial hazards related to unstable soils or landslides.**

Areas of soil creep and shallow landsliding are apparent on steeper slopes within SPRA, as evident by exposures of shallow overturning laminar rock fabric. Landsliding, not readily identifiable, may also be present in areas of soil creep. Cut slopes implemented as part of project construction would have the potential to alter slope stability, potentially resulting in moderate to high potential for unstable cut and fill slopes.

Pursuant to the requirements specified by the Grading Ordinance, Section 15.14.260 of the County Code requires that final grading plans be prepared and signed by a civil engineer. However this requirement may be waived if a determination is made by the Director of

Transportation that the grading is minor in nature and would not result in threat to public health, safety, or welfare; and would not involve any of the following conditions:

- A. Cuts and fills with a combined total of one thousand five hundred cubic yards or more;
- B. An access road serving three or more existing or potential residences;
- C. A cut or fill that is intended to support structures;
- D. A cut or fill that is located so as to cause unduly increased pressure or reduce support upon and adjacent structure or property;
- E. The construction of any extensive drainage or sediment-control structures, culverts or facilities, or alteration of any existing drainage course;
- F. The creation or aggravation of an unstable slope condition.

Analysis of individual projects proposed as components of the SPRA Master Plan is included below in Table 4.9-3. A detailed discussion of these projects can be found in the project description, Chapter 3.

**Table 4.9-3 — Impacts Related to Geology and Soils Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Construct New Campsites</b>                      13.04 Dogwood Camp                      16.02 Primitive Camp Area</p>	<p>The construction of new campsites at Dogwood Camp and within the Primitive Camp area would occur on relatively level ground, and would not involve the construction of any structures. Compliance with the Grading Ordinance of El Dorado County as administered and enforced by the County Department of Transportation would ensure project are implemented without creating risk to public health, safety and welfare, therefore impacts are considered less than significant.</p>	<p>Less than Significant Impact</p>
<p><b>Construct Post/Pier Structures</b>                      2.09 Scout/Youth Group Camp Mess Hall                      2.12 Scout/Youth Group Camp (North)                      2.13 Scout/Youth Group Camp (South)                      2.17 Scout/Youth Group Camp Mess Hall                      5.02 Jenkinson Camp                      10.04 Chimney Camp                      20.03 Retreat and Event Center                      20.05 Retreat and Event Center (Phase I)                      20.06 Retreat and Event Center (Phase II)</p>	<p>Proposed development associated with the construction of post/pier structures within the area of the Scout/Youth Group Camp, Jenkinson Camp, Chimney Camp, and the Retreat and Events center would have the potential to result in adverse effects related to unstable soils and/or landslides. Each of these proposed projects would result in the construction of structures for human occupancy and gathering.</p> <p>Areas of unstable geology and soils, and landsliding have been documented within SPRA; however, site specific investigations have not been completed for individual project areas; therefore impacts are considered potentially significant.</p>	<p>Potentially Significant Impact</p>
<p><b>Reconfigure Campsites</b>                      2.07 Scout/Youth Group Camp                      2.11 Scout/Youth Group Camp                      2.14 Scout/Youth Group Camp                      2.16 Scout/Youth Group Camp                      4.03 Pine Cone Camp                      4.04 Pine Cone Camp                      4.05 Pine Cone Camp                      6.04 Sierra Camp (West)                      6.05 Sierra Camp (East)                      7.03 Stonebraker Camp                      8.03 Hilltop Camp                      9.02 Chimney/Hilltop Host Site                      10.02 Chimney Camp</p>	<p>Project component ID Numbers 2.11 North Amphitheater, 2.14 Waterless Toilet Stations, 2.16 South Amphitheater, and 21.14 Group Kitchen would result in the construction of structures for human occupancy and group gatherings. As site specific geotechnical studies have not been prepared for these sites, potential risks related to unstable soils and/or landsliding may exist. Impacts are therefore considered potentially significant.</p> <p>Project Component ID Numbers 4.05, 7.03 and 10.02 would involve an undetermined area of excavation and fill related to proposed campsite reconfigurations. Site specific geotechnical investigations have not been prepared for these projects. Cut slopes would have the potential to result in increased or create additional hazards related to unstable geology and or landslide hazards; therefore impacts are considered potentially significant.</p> <p>Project ID Numbers 2.07, 4.03, 4.04, 6.04, 6.05, 8.03, 9.02, 12.01, 13.02, 14.03, 15.03, 21.01, 21.06, 21.09, 21.12, and 23.01 would involve minor grading for campsite reconfiguration as discussed in the project description, Chapter 3 of this Draft Master EIR.</p>	<p>Potentially Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
12.01 Hazel Creek Camp 13.02 Dogwood Camp 14.03 Rainbow Camp 15.03 Kamloop Camp 21.01 Main Group Campground (Relocate Host Site) 21.06 Main Group Campground (Tent Sites at Groups Sites #1 and #5) 21.09 Main Group Campground (Tent Sites at Group Site 32) 21.12 Main Group Campground (Tent Sites at Group Site #3 and #4) 21.14 Main Group Campground (Group Kitchens) 23.01 Black Oak Equestrian Camp	Compliance with the Grading Ordinance of El Dorado County as administered and enforced by the County Department of Transportation would ensure project are implemented without creating risk to public health, safety and welfare; therefore impacts related to these projects are considered less than significant.	
<b>Construct New Day Use Area</b> 19.03 Bumpy Meadow Trailhead	Construction of the day use area would involve development of a pad of approximate dimension of 50-foot by 50-foot, although disturbance would likely occur over a larger area during initial construction. No structures are proposed. Compliance with the Grading Ordinance of El Dorado County as administered and enforced by the County Department of Transportation would ensure project are implemented without creating risk to public health, safety and welfare; therefore impacts related to this project is considered less than significant.	Less than Significant Impact
<b>Reconfigure Day Use Area</b> 7.04 Stonebraker Camp	Site reconfiguration would involve the elimination of a day use within steeper portions of Stonebraker Camp as well as the reconfiguration/development of additional day use areas within relatively flat locations. Compliance with the Grading Ordinance of El Dorado County as administered and enforced by the County Department of Transportation would ensure project are implemented without creating risk to public health, safety and welfare; therefore impacts related to this project is considered less than significant.	Less than Significant Impact
<b>Trail Construction</b> 1.03 Main Park Entrance 2.05 Scout/Youth Group Camp 7.01 Stonebraker Camp 12.04 Hazel Creek Camp 16.01 Primitive Camp Area 18.01 Dog Park 22.01 Mountain Bike Trail 23.05 Black Oak Equestrian Camp	Trail construction would be implemented according to the design standards and guidelines specified by the SPRA Master Plan. Master Plan components also include stabilization of areas of existing trails currently experiencing undercutting from shoreline erosion and other areas of instability. EID proposes the development and implementation of a trail maintenance plan to provide for ongoing future maintenance of the trails for continued long-term recreational opportunities. Impacts are anticipated to be less than significant.	Less than Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
<b>Bridges at Trail Crossings</b> 2.20 Scout/Youth Group Camp 12.07 Hazel Creek Camp	Bridge crossing would be constructed to span creeks and drainages. Grading activities would be minimal. Impacts are considered less than significant.	Less than Significant Impact
<b>Infrastructure</b> 2.18 Scout/Youth Group Camp (North) 2.19 Scout/Youth Group Camp (South) 5.04 Jenkinson Camp SPRA13 Increased Phone Service	The proposed infrastructure improvements would not involve the construction of any structures. Worker safety during construction would be ensured through compliance with construction requirements specified by OSHA.	Less than Significant Impact
<b>Waterless Toilets/Restrooms</b> 2.08 Scout/Youth Group (North) 2.14 Scout/Youth Group (South) 5.03 Jenkinson Camp 16.03 Primitive Camp Area 19.02 Bumpy Meadow Trailhead 20.04 Retreat and Event Center (1) 20.07 Retreat and Event Center (2) 24.02 Marina Parking Expansion  <b>Showers/Laundry Facilities</b> 2.10 Scout/Youth Group (North)- Showers Only 2.15 Scout/Youth Group (South)- Showers Only 6.06 Sierra Camp 21.02 Main Group Campground	The proposed construction of waterless toilets, restroom, and laundry facilities/showers would involve the construction of structures for public use. Site specific geotechnical studies have not been prepared for the proposed locations of these structures to determine the geologic stability or landslide potential of proposed structure locations and surrounding areas. Impacts are therefore, considered potentially significant.	Potentially Significant Impact
<b>Reconfigure Existing Parking</b> 1.05 Main Park Entrance 4.01 Pine Cone Camp 6.01 Sierra Camp 10.01 Chimney Camp (Day Use) 21.04 Main Group Campground (Group Site #1) 21.05 Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group	Project component ID numbers 1.05, 4.01, 6.01, and 10.01 would largely occur in previously disturbed/graded areas of existing development on relatively level ground and would not involve substantial grading or the construction of structures. Compliance with the Grading Ordinance of El Dorado County as administered and enforced by the County Department of Transportation would ensure project are implemented without creating risk to public health, safety and welfare; therefore impacts related to these projects is considered less than significant.  Project component ID numbers 21.04, 21.05, 21.08, 21.11 could involve substantial grading, including excavation of cut and fill slopes; therefore, impacts are considered potentially significant.	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
Sites #3 and #4)		
<p><b>Construct New Parking Areas</b></p> <p>2.02 Scout/Youth Group Camp (North)</p> <p>3.01 Miwok Trailhead</p> <p>4.02 Pine Cone Camp</p> <p>6.08 Sierra Camp/Shower Parking</p> <p>11.02 Lake Drive Stabilization (Day Use)</p> <p>12.03 Hazel Creek Camp (Day Use and Trailhead)</p> <p>18.01 Dog Park</p> <p>19.01 Bumpy Meadow Trailhead</p> <p>20.01 Retreat and Event Center (East)</p> <p>20.02 Retreat and Event Center (West)</p> <p>21.03 Main Group Campground/Shower Parking</p>	<p>Construction of Project Component ID Number 3.01 would result in the development of a parking lot within an area currently occupied by a structure. Grading would be minimal due to the site's relatively level topography; therefore, impacts are considered less than significant.</p> <p>Project Component ID Numbers 2.02, 4.02, 6.08, 11.02, 12.03, 18.01, 20.01, 20.02, and 21.03 would involve substantial grading and would have the potential to require substantial cut and fill slopes associated with grading and construction, potentially resulting in areas of unstable soils and or slopes. Impacts are considered potentially significant.</p> <p>Engineered plans have been completed for the construction of Project Component ID Number 19.01. These plans would be subject to review and approval by the El Dorado County Department of Transportation in accordance with the Grading Ordinance. During construction, the El Dorado County Department of Transportation would inspect construction of the parking lot for compliance with consistency with engineered plans and additional relevant standards specified by County Code. Upon completion EID, would be subject to the requirements of submittal of "as-built" plans demonstrating design and construction had been completed in compliance with plans; therefore impacts are considered less than significant.</p> <p><i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	Potentially Significant Impact
<p><b>Marina Parking Expansion</b></p> <p>24.01 Marina Parking Expansion</p> <p>24.03 Marina Parking Expansion (Fish Cleaning Station)</p>	<p>Although no structures are proposed in conjunction with the proposed Marina parking Lot expansion, grading for construction of the proposed Marina Parking Expansion would require substantial cut and fill, with the potential to result in unstable geology and soils conditions or potentially result in or create slope instability. Engineered construction plans have been completed for the proposed Marina Parking expansion. These plans would be subject to review and approval by the El Dorado County Department of Transportation in accordance with the Grading Ordinance. During construction, the El Dorado County Department of Transportation would inspect construction of the parking lot for compliance with consistency with engineered plans and additional relevant standards specified by County Code. Upon completion EID, would be subject to the requirements of submittal of "as-built" plans demonstrating design and construction had been completed in compliance with plans; therefore impacts are considered less than significant.</p>	Less than Significant Impact
<p><b>Realign/Improve Campground Access Roads</b></p> <p>2.01 Scout/Youth Group Camp</p>	<p>Grading and excavation activities associated with the proposed realignment and improvement of campground access roads could result in substantial cut and fill slopes</p>	Potentially Significant

Component ID/Project Name	Impact Analysis	Level of Significance
2.03 Scout/Youth Group Camp (North) 2.04 Scout/Youth Group Camp (South) 2.06 Scout/Youth Group Camp (South) 4.03 Pine Cone Camp 5.01 Jenkinson Camp 6.02 Sierra Camp (West) 6.03 Sierra Camp (East) 7.02 Stonebraker Camp 8.01 Hilltop Camp 9.01 Chimney/Hilltop Host Site 12.02 Hazel Creek Camp 13.03 Dogwood Camp 19.01 Bumpy Meadow Trailhead 21.04 Main Group Campground (Group Site #1) 21.05 Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group Sites #3 and #4) 23.02 Black Oak Equestrian Center 25.01 Lake Drive Access Improvements	which would have the potential to result in adverse impacts related to unstable geology, soils and unstable slopes. In particular, areas within the vicinity of the proposed Scout/Youth Group Camp, Sierra and Pine Cone Camps, Jenkinson Camp, Hilltop Camp, Chimney Camp, Hazel Creek Camp, and Dogwood Camp are characterized by varying degrees of topographic relief, including steep slopes and drainages. Areas of geologic instability are known within SPRA, as identified in the Geologic/Geotechnical Consideration Report prepared in October 2004 by Youngdahl.	Impact
<b>Reconfigure Main Entrance</b> 1.01 Main Park Entrance 1.02 Main Park Entrance	The proposed reconfiguration of the Main Entrance would involve modification to the existing encroachment off of Sly Park Road, as well as the reconfiguration of internal access and circulation routes. In addition, EID proposes to relocate the dump station and construct a new entrance booth, as well as additional parking spaces. Areas of unstable geology, soils and slopes exist within SPRA. A site specific geotechnical analysis has not been prepared for the project site; therefore, impacts are considered potentially significant.	Potentially Significant Impact
<b>Install Interpretive/Trail Signage/Kiosks</b> 1.06 Main Park Entrance 3.04 Miwok Trailhead 7.05 Stonebraker Camp 12.10 Hazel Creek Camp 19.05 Bumpy Meadow Trailhead	The proposed installation of interpretive and trail signage and kiosks would involve minimal disturbance to topography. Impacts are considered less than significant.	Less than Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
<b>Construct Visitor Center/New Maintenance Shop</b> 1.04 Main Park Entrance 1.07 Main Park Entrance	The Geologic/Geotechnical Considerations report prepared in October 2004 by Youngdahl identifies the potential for unstable geology, soils and slopes within SPRA. No site-specific geotechnical evaluation has been conducted for the site; therefore, impacts are considered potentially significant.	Potentially Significant Impact
<b>Construct New Facilities</b> 18.02 Dog Park	<p>Construction of the proposed dog park by design would minimize site disturbance. Primary emphasis would be placed on creating a large enclosure similar in nature to surrounding areas, including topography, and minimizing tree removal. No structures are proposed and site disturbance would be minimized.</p> <p>Compliance with the Grading Ordinance of El Dorado County as administered and enforced by the County Department of Transportation would ensure project are implemented without creating risk to public health, safety and welfare; therefore impacts related to this project are considered less than significant.</p>	Less than Significant Impact
<b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Center	The Geologic/Geotechnical Considerations report prepared in October 2004 by Youngdahl identifies the potential for unstable geology, soils and slopes within SPRA. No site-specific geotechnical evaluation has been conducted for the site; therefore, impacts are considered potentially significant.	Potentially Significant Impact
<b>Rehabilitate Vegetation</b> 1.08 Main Park Entrance 4.07 Pine Cone Camp 6.08 Sierra Camp 7.06 Stonebraker Camp 8.04 Hilltop Camp 10.03 Chimney Camp 12.05 Hazel Creek Camp 12.06 Hazel Creek Camp 12.08 Hazel Creek Camp 12.09 Hazel Creek Camp 13.01 Dogwood Camp 14.02 Rainbow Camp 15.02 Kamloop Camp 21.07 Main Group Campground (Group Sites #1 and #5) 21.10 Main Group Campground (Group Site #2) 21.13 Main Group Campground (Group Sites #3 and #4)	Proposed vegetation rehabilitation and access restriction activities would involve minimal grading and no construction of structures. These activities would result in long-term stabilization and rehabilitation of natural resources within SPRA. No adverse impacts would result.	No Impact

Component ID/Project Name	Impact Analysis	Level of Significance
<p>23.03 Black Oak Equestrian Camp FMP Plant/maintain Seedlings for Forest Health</p> <p><b>Restrict Access</b></p> <p>3.02 Miwok Trailhead 3.03 Miwok Trailhead 4.06 Pine Cone Camp (Shore Access) 8.02 Hilltop Camp 14.01 Rainbow Camp (Creek Access Control) 15.01 Kamloop Camp (Creek Access Control) 19.04 Bumpy Meadow Trailhead 23.04 Black Oak Equestrian Center 23.06 Black Oak Equestrian Center</p>		
<p><b>Dock Expansion</b></p> <p>7.07 Stonebraker Camp</p>	<p>Construction of the proposed dock expansion would not result in a topographic disturbance. No impact would result.</p>	<p>No Impact</p>
<p><b>Lake Drive Stabilization</b></p> <p>11.01 Lake Drive Stabilization</p>	<p>The proposed Lake Drive Stabilization project would involve excavation within an area of known instability. Although the project would be implemented to stabilize this area, project development would have the potential to result in increased instability and potential slope failure if not properly designed and constructed; therefore, impacts are considered potentially significant.</p> <p><i>Note: Component 11.01 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	<p>Potentially Significant Impact</p>
<p><b>SPRA Administration</b></p> <p>SPRA01 Increased Staffing SPRA02 Staff Training SPRA03 Reservation Systems Software SPRA05 Website Development SPRA06 Proactive Maintenance SPRA07 Annual Maintenance Work Plan SPRA08 Volunteer Maintenance Events</p> <p><b>Public Safety</b></p> <p>SPRA10 Fire Prevention</p>	<p>The implementation of administrative, planning and public safety activities proposed by EID would not directly result in impacts related to unstable geology/soils or landslides. The physical effects associated with construction of individual projects are analyzed within this table in the discussion above. No adverse impact would result from the implementation of administrative, planning or public safety activities.</p>	<p>No Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
SPRA11 Emergency Preparedness Plan SPRA12 Law Enforcement		

It is not anticipated that implementation of the SPRA Master Plan would result in substantial adverse impacts related to Geology and Soils. EID is proposing a master plan by which SPRA would be managed for long-term recreational use as well as natural resource conservation and restoration. SPRA Master Plan goals and objectives identify the importance of protecting of natural resources, including the reduction of erosion within SPRA. Construction activities associated with implementation of the SPRA Master Plan and development of individually proposed projects would have the potential to result in significant impacts related to geology and Soils. However, mitigation measures have been identified to reduce potentially significant impacts associated with implementation of the Master Plan on a project by project basis. Implementation of the Master Plan would result in a planning strategy for the long-term management of resources and soils conservation within SPRA.

#### **4.9.5 Mitigation Measures**

As identified within Table 4.9-3, development of individual projects proposed as components of SPRA would have the potential to result in significant impacts related to unstable soils and landslides. Pursuant to the El Dorado County Grading Ordinance as specified by Chapter 15.14 of the El Dorado County Code and Policy 6.3.2.5 of the General Plan, implementation of the following mitigation measure would reduce significant impacts to less than significant levels.

**Mitigation Measure GEO-1:** The applicant shall hire a California-registered geotechnical engineer experienced and knowledgeable in the practice of soils engineering to perform site-specific geotechnical studies. The study shall identify any areas of unstable geology or soils, as well as map and characterize the extent of slope instability or potential for landsliding. The report shall provide recommendations for project design alterations, considerations or other features which could reduce the potential hazards to an acceptable level. All feasible recommendations from the study(s) shall be required as part of the project approval and may include the designation of building envelopes, where appropriate. Areas of landsliding identified within the studies shall be repaired or avoided by development to the extent that they would pose no risk to life or property.

Implementation of Mitigation Measure GEO-1 would ensure the implementation of site-specific evaluation for geologic instability and areas of unstable slopes or landsliding as recommended in the Geologic/Geotechnical Considerations Report prepared in October 2004 by Youngdahl for the project.

**Mitigation Measure GEO-2:** Final grading plans shall be submitted to a licensed professional geotechnical engineer for review and recommendation. All recommendations shall be incorporated into project design.

In accordance with the Grading Ordinance of El Dorado County, implementation of Mitigation Measure GEO-2 would ensure that any proposed grading, excavation, and construction would not create or contribute to areas of geologic instability or unstable slopes resulting in risk to public health safety or welfare, consistent with the requirements specified by Section 15.14.250 of the County Code.

Table 4.9-4 below identifies the project components that would be subject to the requirements of Mitigation Measure GEO-1 and/or GEO-2. Those project components not included in the table below have been determined to result in no impact or less than significant impacts related to unstable soils and landslides as discussed in Table 4.9-3 and no mitigation is warranted.

**Table 4.9-4 — Proposed Mitigation Measures to Reduce or Eliminate Potential Impacts  
Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Construct Post/Pier Structures</b></p> <p>2.09 Scout/Youth Group Camp Mess Hall</p> <p>2.12 Scout/Youth Group Camp (North)</p> <p>2.13 Scout/Youth Group Camp (South)</p> <p>2.17 Scout/Youth Group Camp Mess Hall</p> <p>5.02 Jenkinson Camp</p> <p>10.04 Chimney Camp</p> <p>20.03 Retreat and Event Center</p> <p>20.05 Retreat and Event Center (Phase I)</p> <p>20.06 Retreat and Event Center (Phase II)</p>	<p>Implementation of Mitigation Measure GEO-1.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Reconfigure Campsites</b></p> <p>2.07 Scout/Youth Group Camp</p> <p>2.11 Scout/Youth Group Camp</p> <p>2.14 Scout/Youth Group Camp</p> <p>2.16 Scout/Youth Group Camp</p> <p>4.03 Pine Cone Camp</p> <p>4.04 Pine Cone Camp</p> <p>4.05 Pine Cone Camp</p> <p>6.04 Sierra Camp (West)</p> <p>6.05 Sierra Camp (East)</p> <p>7.03 Stonebraker Camp</p> <p>8.03 Hilltop Camp</p> <p>9.02 Chimney/Hilltop Host Site</p> <p>10.02 Chimney Camp</p> <p>12.01 Hazel Creek Camp</p> <p>13.02 Dogwood Camp</p> <p>14.03 Rainbow Camp</p> <p>15.03 Kamloop Camp</p> <p>21.01 Main Group Campground (Relocate Host Site)</p>	<p>Implementation of Mitigation Measure GEO-1 for Project Component ID Numbers 2.11, 2.14, 2.16, 4.05, 7.03, 10.02 and 21.14.</p>	<p>Less than Significant with Mitigation Incorporation</p>

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
21.06 Main Group Campground (Tent Sites at Groups Sites #1 and #5) 21.09 Main Group Campground (Tent Sites at Group Site 32) 21.12 Main Group Campground (Tent Sites at Group Site #3 and #4) 21.14 Main Group Campground (Group Kitchens) 23.01 Black Oak Equestrian Camp		
<b>Waterless Toilets/Restrooms</b> 2.08 Scout/Youth Group (North) 2.14 Scout/Youth Group (South) 5.03 Jenkinson Camp 16.03 Primitive Camp Area 19.02 Bumpy Meadow Trailhead 20.04 Retreat and Event Center (1) 20.07 Retreat and Event Center (2) 24.02 Marina Parking Expansion  <b>Showers/Laundry Facilities</b> 2.10 Scout/Youth Group (North)- Showers Only 2.15 Scout/Youth Group (South)- Showers Only 6.06 Sierra Camp 21.02 Main Group Campground	Implementation of Mitigation Measure GEO-1 for all Waterless Toilets/Restrooms and Showers/Laundry Facilities Project Component ID Numbers.	Less than Significant with Mitigation Incorporation
<b>Reconfigure Existing Parking</b> 1.05 Main Park Entrance 4.01 Pine Cone Camp 6.01 Sierra Camp 10.01 Chimney Camp (Day Use) 21.04 Main Group Campground (Group Site #1) 21.05 Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2)	Implementation of Mitigation Measure GEO-1 for Project Component ID Numbers 21.04, 21.05, 21.08, and 21.11.  Project component ID numbers 1.05, 4.01, 6.01, and 10.01 would largely occur in previously disturbed/graded areas of existing development on relatively level ground and would not involve substantial grading or the construction of structures. Compliance with the Grading Ordinance of El Dorado County as administered and enforced by the County Department of Transportation would ensure project are implemented without creating risk to public health, safety and welfare; no mitigation is warranted.	Less than Significant with Mitigation Incorporation

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
21.11 Main Group Campground (Group Sites #3 and #4)		
<b>Construct New Parking Areas</b> 2.02 Scout/Youth Group Camp (North) 3.01 Miwok Trailhead 4.02 Pine Cone Camp 6.08 Sierra Camp/Shower Parking 11.02 Lake Drive Stabilization (Day Use) 12.03 Hazel Creek Camp (Day Use and Trailhead) 18.01 Dog Park 19.01 Bumpy Meadow Trailhead 20.01 Retreat and Event Center (East) 20.02 Retreat and Event Center (West) 21.03 Main Group Campground/Shower Parking	Implementation of Mitigation Measure GEO-1 and GEO-2 for Project Component ID Numbers 2.02, 4.02, 6.08, 11.02, 12.03, 18.01, 20.01, 20.02, and 21.03.  Construction of Project Component ID Number 3.01 would result in the development of a parking lot within an area currently occupied by a structure. Grading would be minimal due to the site's relatively level topography and engineered plans have been completed for the construction of Project Component ID Number 19.01. No mitigation is warranted is warranted for these projects.  <i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i>	Less than Significant with Mitigation Incorporation
<b>Marina Parking Expansion</b> 24.01 Marina Parking Expansion 24.03 Marina Parking Expansion (Fish Cleaning Station)	Engineered construction plans have been prepared for the project. Engineered plans would be subject to review and approval by the El Dorado County of Transportation in accordance with the standards required by Grading Ordinance of El Dorado County and the County Code. No mitigation is warranted.	Less than Significant
<b>Realign/Improve Campground Access Roads</b> 2.01 Scout/Youth Group Camp 2.03 Scout/Youth Group Camp (North) 2.04 Scout/Youth Group Camp (South) 2.06 Scout/Youth Group Camp (South) 4.03 Pine Cone Camp 5.01 Jenkinson Camp 6.02 Sierra Camp (West) 6.03 Sierra Camp (East) 7.02 Stonebraker Camp 8.01 Hilltop Camp 9.01 Chimney/Hilltop Host Site 12.02 Hazel Creek Camp 13.03 Dogwood Camp 19.01 Bumpy Meadow Trailhead 21.04 Main Group Campground (Group	Implementation of Mitigation Measures GEO-1 and GEO-2 for all project Component ID Numbers.	Less than Significant with Mitigation Incorporation

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
21.05 Site #1) Main Group Campground (Group Site #5) 21.08 Main Group Campground (Group Site #2) 21.11 Main Group Campground (Group Sites #3 and #4) 23.02 Black Oak Equestrian Center 25.01 Lake Drive Access Improvements		
<b>Reconfigure Main Entrance</b> 1.01 Main Park Entrance 1.02 Main Park Entrance	Implementation of Mitigation Measures GEO-1 and GEO-2 for all project Component ID Numbers.	Less than Significant with Mitigation Incorporation
<b>Construct Visitor Center/New Maintenance Shop</b> 1.04 Main Park Entrance 1.07 Main Park Entrance	Implementation of Mitigation Measure GEO-1.	Less than Significant with Mitigation Incorporation
<b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Center	Implementation of Mitigation Measure GEO-1.	Less than Significant with Mitigation Incorporation
<b>Lake Drive Stabilization</b> 11.01 Lake Drive Stabilization	Implementation of Mitigation Measures GEO-1 and GEO-2.  <i>Note: Component 11.01 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i>	Less than Significant with Mitigation Incorporation

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## **4.10 Hazards & Hazardous Materials**

### **4.10.1 Existing Conditions**

SPRA accommodates public recreational use, including water-based recreation in Jenkinson Lake, which is also used for drinking and irrigation water supplies. Facilities within SPRA include recreational facilities as well as facilities and structures supporting management of SPRA. Supporting structures include: an entrance station, headquarters building, a maintenance yard with shop and storage buildings in the vicinity of the entrance station, a small museum, a former residence, and an additional maintenance shop and storage building in the vicinity of the reservoir shops. Additional supporting facilities within SPRA include: an RV dump station, a bilge oil recycling station, and five aboveground storage tanks (ASTs). Two 1,000 gallon underground storage tanks (USTs) are also located on the project site.

Two schools are located within the community of Pollock Pines. Pinewood School is an existing elementary school located at 6181 Pine Street and Sierra Ridge Middle School is located at 2700 Amber Trail. However, no schools exist within the vicinity or within one-quarter mile of the project area (El Dorado County Office of Education, 2005).

SPRA is not listed on the Cortese list, although an adjacent property was listed at the time of preparation of the Phase I Environmental Site Assessment (ESA) (URS, 2003). The project site is not currently listed on the Cortese list (DTSC, 2005).

There are four airports located within El Dorado County, the Placerville Airport, the Georgetown Airport, the Cameron park Airport, and the South Lake Tahoe Airport. There are no public airports within two miles of the project site and no private airports are located within the vicinity of the project area ( El Dorado County Planning Department, 2003).

Forest fuel management within SPRA is ongoing through a partnership between EID and CDF for controlled burning, as well as additional fuel reduction management activities through clearing and removal of understory growth and dead, dying or diseased trees.

An ESA was prepared for the project site by URS in February 2003 (Appendix G). The findings and conclusions of that assessment are summarized below.

#### **4.10.1.1 Historical Review**

Past land uses within SPRA include commercial timber harvesting and grazing. To identify potential past land uses or project site activities that may have involved the manufacture, generation, use, storage, and/or disposal of hazardous materials, historical aerial photographs and topographic maps were reviewed for the project site and vicinity. Historical aerial photographs for the project site and vicinity were reviewed for the years 1952, 1962, and 1994. Historical USGS topographic maps were also reviewed. The following observations were made related to these reviews:

#### **1952**

The project site and vicinity consisted of a large meadow surrounded by forest. The area of the meadow encompassed approximately two and one-half miles from east to west and one mile

north to south. A creek flowing from northeast to southwest bordered the southern edge of the meadow. The north side of the meadow was bordered by a large dirt road and dirt logging roads encroached into the forest. No indications of agricultural operations are present in the meadow. Several small buildings are located along the northeast border of the meadow.

The 1952 Sly Park USGS 7.5 minute topographic quadrangle shows the project area as forested, with a meadow in the location of Jenkinson Lake, and several dirt roads are also present. With the exception of these dirt roads, the project site and vicinity are undeveloped.

### **1962**

The area that previously existed as a meadow is now filled by a lake which extends up the drainage located at the northeast of the meadow. The lake has two dams at the southeast end. Below the dam farthest to the west, a borrow pit and hauls roads were present. Sly Park Road is shown as a paved road and buildings are present along the east side of Sly Park Road, at the location of the Sly Park Resort, adjacent to the SPRA entrance.

### **1973**

The 1973 photorevised Sly Park USGS 7.5 minute topographic quadrangle shows Sly Park Dam and Reservoir. Sly Park and Silver Lake Roads are shown as paved roads, with Sly Park Road passing to the west of the project site and Silver Lake Road passing to the south of the project site. Low density residential development is shown to the west and to the north of the project site. Structures are shown at the SPRA headquarters, the Sly Park Resort, and in the area of the reservoir shops.

### **1994**

A Marina with launching facilities and boat docking facilities are present at the west end of the lake. The area of the former borrow pit is becoming revegetated, and the hauls roads are less distinct and becoming overgrown. There are no other significant changes from the 1962 aerial.

### **Solid Waste**

An informal dumping area was historically created within a borrow pit created during construction of the two dams. This area was historically used for informal dumping of household trash until the late 1970s. At the time of preparation of the ESA, the area contained a car body, a rusting steel drum, and a rusting water heater.

### **Historical Mining**

The Hazel Creek Mine was developed in 1948 within one mile of SPRA on land currently owned by SPI. According to RWQCB records, the mine was closed in 1989 and is currently under a Cleanup and Abatement Order related to six tailings piles formerly located along Hazel Creek. Closure for the mine was granted subsequent to a determination by the RWQCB that the tailings consist of group C mining wastes. Group C wastes are classified as wastes from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity (URS, 2003).

## **Spills**

Over the past 20 years, several incidents related to potential spills within Jenkinson Lake have occurred. Between four and five boats have sunk in the Lake, three automobiles have entered the Lake, and a raw sewage spill resulted from an accidental release from an RV holding tank.

### **4.10.1.2 Regulatory Records**

A search of databases compiled by federal, state, and local government agencies was completed in conjunction with preparation of the ESA conducted for the project site. A summary of the results of this search is provided below.

## **Cortese List**

At the time of preparation of the ESA for the project site, the Sly Park Resort was included on the Cortese list. The Sly Park Resort is located at 4782 Sly Park Road and is adjacent to and northwest of the project site.

## **Leaking Underground Storage Tank Report**

An inventory of incidents related to leaking underground storage tanks is maintained by the State Water Resources Control Board within the Leaking Underground Storage Tank Incidents Report. The Sly Park Resort is identified in the Leaking Underground Storage Tank Report. A release of gasoline to soil was identified during closure of a single-walled UST in 1987.

## **Underground Storage Tank Database**

The State Water Resources Control Board maintains a database of hazardous substance storage containers, including registered USTs. The Sly Park Resort is identified is included within this database and two 1,000 USTs are located within the project site.

## **Historical UST Registered Database**

A 500-gallon UST tank is identified as a historical UST on the project site. The tank was used for storing unleaded fuel. The El Dorado County Environmental Management Department does not have any records of this UST; however, supplemental information obtained during preparation of the ESA indicates the storage tank was removed in 1988.

## **El Dorado County Environmental Management Department**

El Dorado County Environmental Management Department records document a single 2,000 gallon UST with two 1,000 gallon chambers within SPRA used for storing regular gasoline and diesel fuel. The regular gasoline tank was installed in 1987 and consists of a double-walled fiberglass tank. The diesel tank was installed in 1996 and consists of a double-walled steel tank.

The Sly Park Resort includes a service station, RV park, and a small store. El Dorado County Environmental Management Department records also include two currently permitted USTs at this location. The Sly Park Resort was in compliance with all requirements and conditions specified by the El Dorado County Environmental Management Department at the time of preparation of the ESA.

#### **4.10.1.3 Project Setting**

All gasoline, lubricants, and waste oil are stored in a metal shed. This building is located in the vicinity of the maintenance shop, placed on concrete. Approximately eight five-gallon gasoline storage containers, three five-gallon waste oil buckets, and a 55-gallon drum for transmission fluid are stored in this shed. An additional metal storage shed is used for storing cleaning supplies, disinfectant, deodorants, insecticide, hand cleaner, paper products, and a five-gallon container of wood preservative.

Within the vicinity of the maintenance shop, a small wooden structure is used to store paints. Oil-based paints are stored in containers of up to one-gallon capacity and latex-based paints are stored in containers up to five gallons in capacity. The maintenance building is used for storing small quantities of spray paints, which are stored in metal cabinet and a welding setup composed of an acetylene and an oxygen tank chained to a dolly.

The bilge oil pad recycling station is near the existing boat ramp. The recycling station is maintained by the El Dorado County Hazardous Materials Division.

Within the area of the reservoir shops, an eight-bay garage is on the peninsula between the two dams. A small residence is also located within this area. The garage is used as a maintenance shop and a storage facility for small quantities of paint, fuel, and an acetylene/oxygen welding setup, in addition to miscellaneous maintenance materials and supplies and park rental boats. A third structure in the same area is used to store geotechnical core samples.

EID policy regarding spills into Jenkinson Lake includes notification of the Recreation Director, the water quality supervisor at the treatment plant, the State Office of Emergency Services, CDFG, and the El Dorado County Department of Environmental Management.

The findings of the ESA prepared for SPRA conclude that no historical or current recognized environmental conditions (RECs) have been identified for SPRA (URS, 2003).

#### **4.10.1.4 Wildland Fire**

Wildland fire hazard within SPRA is of concern for park resources as well as surrounding communities and residences. Wildland fires result from intentional and unintentional human activities as well as natural processes. Within SPRA, wildland fire hazard is exacerbated by climatic factors, poor access, topography, and flammable vegetation.

SPRA is located within the El Dorado County Fire Protection District. Fire suppression responsibilities are shared between the District, CDF, and the USFS. The fire station closest to SPRA is station Number 17 of the El Dorado County Fire Protection District, at 6430 Pony Express Trail in Pollock Pines and houses an engine and an ambulance. Additionally, the USFS operates the Sierra Springs fire station located on Sly Park Road, west of SPRA, and CDF operates a station at Mount Danaher northwest of SPRA, in Camino.

Current ongoing forest resource management activities implemented by EID include fuel load reduction through controlled burning and the removal of dead, dying, or diseased trees. Both activities are implemented consistent with the standards and guidelines specified by CDF. Additional management activities designed to prevent fire include removal of vegetation

adjacent to structures, eliminating ladder fuels, removing dead vegetation and debris, providing adequate clearance around fire rings, and keeping fire rings and barbeques in good working order.

### **Forest Management Plan**

The FMP was prepared concurrently with the SPRA Master Plan and identifies a combination of forest resource management activities including fuel management and forest health management. Proposed fuel management activities include: shaded fuel breaks, understory burning, grazing by goats, pruning ladder fuels, and slash management through piling in staging areas and burning or chipping. Forest management activities proposed by the FMP focusing on achieving a more fire-resistant landscape emphasize maintaining upper canopy separation; silvicultural treatments encouraging the retention of large trees and thinning of younger trees; and regular monitoring of vegetation along power transmission lines.

Fuel load reduction and fire prevention on properties surrounding SPRA is also of concern. The El Dorado County Fire Safe Council is currently developing a Sly Park Corridor Community Action Plan. This plan will identify private land owners adjacent to public lands and will provide wildfire safety education to residents at community meetings. The plan will also propose an emergency evacuation plan for the corridor and will develop a biomass utilization plan (El Dorado County Fire Safe Council, 2005). EID is participating in the development of the Sly Park Corridor Community Action Plan and is currently developing an evacuation plan for SPRA.

## **4.10.2 Regulatory Setting**

### **4.10.2.1 Federal**

The U.S. Environmental protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT) regulate hazardous materials at the federal level. Applicable federal regulations are documented in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR).

### **Federal Register**

#### ***66 FR 751-777***

In response to Congressional direction, this Federal Register notice provided an initial list of urban wildland interface communities within the vicinity of federal lands that are at high risk of wildland fire. The list was compiled from information provided by the States and Tribes, and was annotated by the Secretaries of Agriculture and the Interior based on hazardous fuel reduction treatments on Federal lands that are ongoing or proposed. Pollock Pines is identified as an Urban Wildland Community by this list.

#### ***66 FR 43383-43435***

Pursuant to Congressional direction, this notice provides an updated list of urban wildland interface communities superseding the list established by 66 FR 751-777 and is intended to represent the final list. The updated list is not limited to communities within the vicinity of lands under federal management, but also includes additional lands specified by States or Tribes to comprehensively address the issues surrounding the urban wildland interface. Planning requirements for federal agencies include collaboration with state, tribal, and local agencies to

assess fire risk and types and extents of treatment proposed to reduce these risks. Based on these assessments, the federal government will prioritize communities where wildland fire risk is directly associated with federal lands and will work with state and local agencies to establish mechanisms for community awareness and support, implementation capabilities, and funding. Based on these assessments, funding for the preparation of Community Wildfire Protection Plans and fuel load reduction within El Dorado County communities originated from the National Fire Plan and the Healthy Forest Restoration Act in 2003

### ***Resource Conservation and Recovery Act***

The Resource Conservation and Recovery Act (RCRA) provides authority for the U.S. Environmental Protection Agency (EPA) to control the generation, transportation, treatment, storage, and disposal of hazardous waste from “cradle to grave” for active and future facilities. Amendments to RCRA in adopted in 1986 provided additional authority for the EPA to address environmental problems related to USTs.

### ***Comprehensive Environmental Response Compensation and Liability Act***

The Comprehensive Environmental Response Compensation and Liability Act (CERCLA) was enacted by Congress in 1981 and created what is now known as the Superfund. The Superfund is generated by taxes on the petroleum and chemical industries to create a trust fund for remediating abandoned or uncontrolled waste sites. The law also provides federal authority for responding to releases or threatened releases of hazardous materials that endanger public health or the environment.

### ***Sierra Nevada Forest Plan***

The Eldorado National Forest is one of 11 national forests under federal direction as presented in the Sierra Nevada Forest Plan (SNFP). The goal of the forest plan is to manage wildlife habitat and provide species protection, while reducing the risk of wildland fire. The SNFP was amended in January 2004, adopting an integrated vegetation management strategy emphasizing wildfire risk reduction. The overall goal of this management strategy is to reduce fire risk at the urban-wildland interface, while modifying regional fire behavior, thereby reducing the potential for catastrophic fires which threaten rural residents as well as wildlife habitat. The 2004 amendment adopts a broadened management strategy incorporating additional objectives including: stand density reduction for forest health, restoring and maintaining ecosystem structure and composition, and restoration of ecosystems following catastrophic disturbance events. The SNFP also contains provisions for timber salvage operations and incorporates new fuels and vegetation management standards and guidelines.

#### **4.10.2.2 State**

The California Environmental Protection Agency (Cal/EPA) and the Office of Emergency Services (OES) establish regulations governing the use of hazardous materials in the State. The California Highway Patrol (CHP) and Caltrans are the enforcement agencies for hazardous materials transportation regulations. Transporters of hazardous materials and waste are responsible for complying with all applicable packaging, labeling, and shipping regulations.

Within Cal/EPA, the Department of Toxic Substance Control (DTSC) has primary regulatory responsibility for hazardous waste management and cleanup. Requirements place “cradle-to-

grave” responsibility for hazardous waste disposal on the shoulders of hazardous waste generators. Generators must ensure that their wastes are disposed of properly, and legal requirements dictate the disposal requirements for many waste streams (e.g., banning many types of hazardous wastes from landfills). Enforcement of regulations has been delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law. State regulations applicable to hazardous materials are contained in Title 22 of the California Code of Regulations (CCR). Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials management.

DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. These standards are described in the Preliminary Endangerment Assessment (PEA) Guidance Manual. A PEA is defined under the California Health and Safety Code, Division 20, Chapter 6.8, Section 25319.5 as “...an activity which is performed to determine whether current or past waste management practices have resulted in the release or threatened release of hazardous substances which pose a threat to public health or the environment.” Specific objectives of the PEA include:

- Determining if a release of hazardous wastes/substances exists at the site and delineating the general extent of the contamination.
- Estimating the potential threat to public health and/or the environment posed by the site and providing an indicator of relative risk among sites.
- Determining if an expedited response action is required to reduce an existing or potential threat to public health or the environment.
- Completing preliminary project scoping activities to determine data gaps and identify possible remedial action strategies to form the basis for development of a site strategy.
- Providing the data and information necessary to list the site, if necessary for inclusion in the Department’s Annual Workplan.
- Assessing and providing for the informational needs of the community.

### **Hazardous Materials in Building Components**

Asbestos is regulated both as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of federal OSHA. These regulations prohibit emissions of asbestos from asbestos-related manufacturing, demolition, or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to federal and local governmental agencies before beginning renovation or demolition that could disturb asbestos. California has adopted asbestos regulations that are more stringent than federal regulations and requires licensing of contractors who conduct abatement activities.

## **Hazardous Materials Management Plans**

In January 1996, Cal/EPA adopted regulations implementing a “Unified Hazardous Waste and Hazardous Materials Management Regulatory Program” (Unified Program). The six program elements of the Unified Program are: (1) hazardous waste generators and hazardous waste on-site treatment; (2) underground storage tanks; (3) above-ground storage tanks; (4) hazardous material release response plans and inventories; (5) risk management and prevention program; and (6) Uniform Fire Code hazardous materials management plans and inventories. The program is implemented at the local level by a local agency – a Certified Unified Program Agency (CUPA) - which is responsible for consolidating the administration of the six program elements within its jurisdiction. The Hazardous Materials Division of the El Dorado County Department of Environmental Management is the CUPA for SPRA.

State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. California’s Hazardous Materials Release Response Plans and Inventory Law, program number four referenced above, sometimes called the “Business Plan Act,” aims to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies. The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, to illustrate where the materials are stored on site, to prepare an emergency response plan, and to train employees to use the materials safely.

## **Worker Safety**

Occupational safety standards exist in federal and State laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and ensuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA obligates many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle. For example, manufacturers are to appropriately label containers, Material Safety Data Sheets are to be available in the workplace, and employers are to properly train workers.

## **California Department of Forestry and Fire Protection**

Non-federal, non-incorporated lands within the state covered by timber, brush, undergrowth or grass, which protect soils from erosion, retard run-off of water or accelerated percolation, and are used principally for range or forage are classified by the State Board of Forestry and Fire Protection as under state responsibility for preventing and suppressing fires. These lands are formally referred to as State Responsibility Areas (SRAs) and are generally also characterized by housing densities under three units per acre across 250 acres. CDF is the agency with responsibility for fire prevention and suppression in SRAs.

## **Public Resources Code Section 4290**

Section 4290 of the California Public Resources Code establishes authority for the Board of Forestry to adopt fire safety standards for structures constructed within state responsibility areas.

These regulations specify standards applicable to defensible space; road standards for fire equipment access; standards for signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fuel breaks and greenbelts. These regulations do not, however, supersede local regulations which equal or exceed minimum regulations adopted by the state.

### **Public Resources Code Section 4291**

Section 4291 of the California Public Resources Code defines defensible space requirements for any building or structure in, upon, or adjoining mountainous areas or forested lands or otherwise covered by flammable vegetation. Section 4291 was amended January 1, 2005 to require a minimum 100-foot defensible space surrounding structures. Section 4291 requires implementation of the following practices:

- a. The removal of all flammable vegetation and materials within not less than 100 feet on each side of any structure or to the property line, whichever is closest;
- b. The removal of an additional 30 to 100 feet of brush, flammable vegetation, or combustible growth, when determined by the director on a case by case evaluation that extra hazardous conditions exist and a fire break of 100 feet would not be sufficient;
- c. The removal of any portion of any tree extending within 10 feet of the outlet of a chimney or stovepipe;
- d. Maintenance of any tree adjacent to or overhanging any building free of dead or dying wood;
- e. Maintain the roof of any structure free of leaves, needles, or other dead vegetative growth; and
- f. Provide and maintain at all times a screen over the chimney or stovepipe outlet;

Pursuant to subsection (g) of Section 4291, the director may adopt regulations exempting structures constructed entirely of non-flammable materials or the director may vary the requirements of removing or clearing away of flammable vegetation or other combustible growth.

#### **4.10.2.3 Local**

##### **El Dorado County**

###### ***El Dorado County Operational Area Multi-Hazard Emergency Operations Functional Plan***

The El Dorado County Operational Area Multi-Hazard Emergency Operations Functional Plan serves as the implementation program for hazard planning and disaster response effort planning within the County.

### ***El Dorado County Fire Safe Council***

The El Dorado County Fire Safe Council is a non-profit Public Benefit Corporation composed of more than 150 individuals from public and private sectors. The Council was established in 2001 for the purposes of public education and community outreach related to informing El Dorado County residents about the risks associated with living in an urban wildland interface as well as the measures that can be taken to protect life and property. The mission of the Councils is “to protect the people of El Dorado County and their property from the effects of catastrophic wildfire through education, cooperation, innovation, and action.”

### ***El Dorado County Wildfire Protection Plan***

The El Dorado County Wildfire Protection Plan provides historical information of fires, fire hazards, risks and management strategies as well as identifies current problems and issues with fire protection within the County. The Plan provides for the establishment of the El Dorado Fire Safe Council and identifies the Council as the entity to facilitate collaboration between citizens and fire protection agencies to establish fire safe measures and provide a forum for public education.

### **4.10.3 Environmental Impact Thresholds/Criteria for Evaluation**

For the purposes of this Draft Master EIR impacts related to Hazards and Hazardous Materials are considered significant if development of the proposed project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Impair implementation of or physically interfere with an adopted emergency response or evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires.

### **4.10.4 Environmental Impacts**

**Implementation of the SPRA Master Plan and development of individually proposed project would not result in impaired implementation or physically interfere with an adopted emergency response or evacuation plan.**

Emergency access within SPRA is currently constrained by the limited number and lack of adequate design of internal roads to accommodate emergency vehicles. In addition, there is only one main entrance to SPRA.

As a component of the proposed planning activities associated with the SPRA Master Plan, EID proposes the preparation of an emergency preparedness plan to provide for safe and efficient ingress and egress to and from the park in the event of catastrophe or emergency. Proposed

components of the emergency response plan include: evacuation route definition; response strategies; public education, notification, and coordination; procedures for internal protocol by EID staff; designation of responsibility at local, state, and federal agency levels; identification of staging areas; communication protocols; designated emergency medical facilities; media notification; park closing procedures; and alternative park operations locations. The plan would be developed in cooperation with the County, the El Dorado County Fire Safe Council, the City of Placerville, CDF, Eldorado National Forest, SPI, and members of the public. The Plan would be updated regularly. Additionally EID proposes improvements to internal roadways and campground access routes to improve ingress and egress within SPRA for park visitors as well as emergency access. Impacts are therefore, considered **less than significant**. No mitigation is warranted.

**Implementation of the SPRA Master Plan and development of individually proposed projects would not result in the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires.**

SPRA is located within the area of a community federally identified as an “urban wildland interface community within the vicinity of federal lands that are at high risk from wildfire.” The area is considered to be wildland that may contain substantial forest fire risks and hazards (CDF, 2000). As previously discussed, access to and circulation within SPRA are constrained by internal road design and distribution. EID currently works proactively in coordination with CDF to implement forest management activities implemented to reduce fuel loading. However, because the regional area is federally designated as an urban wildland interface community within the vicinity of federal lands at high risk from wildfire and because CDF has designated the area as very high wildland fire risk, implementation of the SPRA Master Plan and development of individually proposed project could result in **potentially significant impacts** related to wildland fire risk.

However, it should also be noted that forest management by EID in accordance with the FMP and past and future fuel load management help Sly Park to act as a buffer between residential and private/public forests. The SPRA Master Plan is not “development” in the sense of an “urban wildland interface community.” In this particular case, the changes resulting from the Master Plan would reduce the risk of fire.

As components of the SPRA Master Plan, EID has identified a palette of activities including public outreach and education in coordination with the El Dorado County Fire Safe Council, participation in the Sly Park Corridor Community Action Plan, the development of an emergency preparedness plan, including an evacuation plan, and implementation of a FMP identifying specific management practice for fuel load reduction and forest health management.

As discussed in Section 4.1, Land Use, approval of a special use permit by the County of El Dorado would be required to implement the SPRA Master Plan and develop individually proposed projects. As part of the discretionary review process CDF would review the application for a use permit for consistency with sections 4290 and 4291 of the Public Resources Code. All construction would be required to be consistent with CDF Fire Safe Regulations, including standards for emergency access, signing and building numbering, emergency water standards, and fuel modification standards. The County of El Dorado has adopted provisions for fire

protection within the Design and Improvements Standards Manual in conjunction with the County Ordinance Code, in addition to those specified by the Fire Safe Regulations. Project design and construction would be required to be consistent with the Fire Safe Regulations as well as County adopted standards. Additionally, discretionary approval for projects located in high and very high fire hazard zones would be conditioned to designate fire break zones in compliance with fire safe requirements.

EID approved the Sly Park Campground Waterline Project in August 2003 (El Dorado Irrigation District, 2003). The project will consist of the construction of an underground waterline to provide fire flow pressure to five fire hydrants within SPRA and will provide service lines to campgrounds as well. As of the date of preparation of this Draft Master EIR, construction of this project has not commenced. However, before approval of the special use permit or issuance of a building permit for any structure, EID would be required to demonstrate adequate fire flow for fire protection, pursuant to Section 4290 of the Public Resources Code and County Standards.

As identified by the County General Plan Policy 6.2.2.2, development shall be precluded within areas identified as “urban wildland interface communities within the vicinity of federal lands that are a high risk for wildfire,” according to the Federal Register of August 17, 2001, unless it can be demonstrated that development can adequately be protected from wildfire as demonstrated by a Fire Safe Plan prepared by an RPF and approved by the local fire district and/or CDF.

Although implementation of the SPRA Master Plan would require project design and construction in compliance with the Fire Safe Regulations specified by CDF as well as the County of El Dorado Ordinance Code and the Design and Improvements Standards Manual, a Fire Safe Plan for SPRA prepared in accordance with the requirements specified by General Plan Policy 6.2.2.2 has not been approved by the El Dorado County Fire Protection District or CDF; therefore impacts are considered **potentially significant**.

Analysis of potential impacts related to exposure to Hazards and Hazardous Materials related to development of individual projects proposed as components of the SPRA Master Plan is included below in Table 4.10-1. A detailed discussion of these projects can be found in the project description, Chapter 3.

**Table 4.10-1 — Impacts Related to Hazards and Hazardous Materials Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Construct New Campsites</b>            13.04 Dogwood Camp            16.02 Primitive Camp Area</p>	<p>According to the ESA prepared for SPRA, Class C mine tailings are present on adjacent land owned by SPI. These tailings are remnant from historical mining operations and fall under the regulatory jurisdiction of the RWQCB, who continues to require semi-annual monitoring under a Waste Discharge Order, as of the time of preparation of the ESA, all monitoring results were in compliance with water quality standards (URS, 2003).</p> <p>Proposed recreational uses would not result in the exposure of people to hazards or hazardous materials; therefore impacts related to hazards and hazardous materials are considered less than significant.</p>	<p>Less than Significant Impact</p>
<p><b>Construct Post/Pier Structures</b>            2.09 Scout/Youth Group Camp Mess Hall            2.12 Scout/Youth Group Camp (North)            2.13 Scout/Youth Group Camp (South)            2.17 Scout/Youth Group Camp Mess Hall            5.02 Jenkinson Camp            10.04 Chimney Camp            20.03 Retreat and Event Center            20.05 Retreat and Event Center (Phase I)            20.06 Retreat and Event Center (Phase II)</p>	<p>No RECs were identified within the areas proposed for development of Post/Pier structures proposed within the Scout/Youth Group Camp, Jenkinson Camp and Chimney Camp.</p> <p>The proposed Retreat and Events Center would be developed within what is currently known as the Retreat House Complex. Historically an area within the vicinity of the Retreat House Complex was used as an informal dump. Due to the “casual nature” of dumping and the limited time during which dumping occurred in this area, the information obtained regarding the nature of the dumped debris, and the lack of a source substantial amounts of hazardous materials, the ESA concluded that this area was not likely to pose a REC for this site (URS, 2003). The site currently supports a maintenance garage and ancillary structures used for storage of maintenance equipment, materials, and geotechnical borings. No staining or other evidence of hazardous spills was observed and no evidence of RECs was identified as a result of the ESA conducted for SPRA. However, due to the fact that the project site has historically and continues to support maintenance activities and the storage of hazardous materials, impacts related to the potential exposure of people to hazardous materials related to development of the Retreat/Event Center is considered potentially significant.</p>	<p>Potentially Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Reconfigure Campsites</b></p> <p>2.07 Scout/Youth Group Camp  2.11 Scout/Youth Group Camp  2.16 Scout/Youth Group Camp  4.04 Pine Cone Camp  4.05 Pine Cone Camp  6.04 Sierra Camp (West)  6.05 Sierra Camp (East)  7.03 Stonebraker Camp  8.03 Hilltop Camp  9.02 Chimney/Hilltop Host Site  10.02 Chimney Camp  12.01 Hazel Creek Camp  13.02 Dogwood Camp  14.03 Rainbow Camp  15.03 Kamloop Camp  21.01 Main Group Campground (Relocate Host Site)  21.06 Main Group Campground (Tent Sites at Groups Sites #1 and #5)  21.09 Main Group Campground (Tent Sites at Group Site 32)  21.12 Main Group Campground (Tent Sites at Group Site #3 and #4)  21.14 Main Group Campground (Group Kitchens)  23.01 Black Oak Equestrian Camp</p>	<p>The proposed reconfiguration of camp sites within SPRA would occur within areas currently supporting recreational activities and camping. No RECs were identified by the ESA conducted for SPRA. Mine tailings located on land adjacent to Hazel Creek Camp, Dogwood Camp, Rainbow Camp, and Kamloop Camp are subject to the waste discharge requirements mandated by the Waste Discharge Order issued by the RWQCB. The site is monitored semi-annually and was in compliance as of time of preparation of the ESA (URS, 2003).</p>	<p>Less than Significant Impact</p>
<p><b>Construct New Day Use Area</b></p> <p>19.03 Bumpy Meadow Trailhead</p>	<p>The construction of new day use areas would result in new opportunities for recreational activities within the vicinity of the Bumpy Meadow Trailhead. The new day use area would accommodate picnic and restroom facilities. Construction activities would be minimal and no uses associated with the generation, use, handling, storage or disposal of hazardous materials are proposed. No impact would result from development of the new day use area.</p>	<p>No Impact</p>
<p><b>Reconfigure Day Use Area</b></p> <p>7.04 Stonebraker Camp</p>	<p>The reconfiguration of the existing day use area would involve formal designation of three of four existing day use areas and decommissioning of the fourth area. Grading activities would be minimal. No adverse impact would result from reconfiguration of the day use area at Stonebraker Camp.</p>	<p>No Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Trail Construction</b></p> <p>1.03 Main Park Entrance  2.05 Scout/Youth Group Camp  7.01 Stonebraker Camp  12.04 Hazel Creek Camp  16.01 Primitive Camp Area  22.01 Mountain Bike Trail  23.05 Black Oak Equestrian Camp</p>	<p>No RECs were identified by the ESA prepared for SPRA. As proposed, trail construction would not result in adverse impacts related to hazardous materials exposure.</p>	<p>No Impact</p>
<p><b>Bridges at Trail Crossings</b></p> <p>2.20 Scout/Youth Group Camp  12.07 Hazel Creek Camp</p>	<p>The proposed construction of bridges at trail crossings within the Scout/Youth Group Camp and Hazel Creek Camp would involve minimal construction activities related to the installation of span bridges. No new land uses are proposed. No adverse impact would result from construction.</p>	<p>No Impact</p>
<p><b>Infrastructure</b></p> <p>2.18 Scout/Youth Group Camp (North)  2.19 Scout/Youth Group Camp (South)  5.04 Jenkinson Camp  SPRA13 Increased Phone Service</p>	<p>No RECs were identified by the ESA conducted for SPRA. The proposed construction of additional infrastructure would not result in adverse impacts related to hazardous materials exposure. No impact would result from infrastructure construction.</p>	<p>No Impact</p>
<p><b>Waterless Toilets/Restrooms</b></p> <p>2.08 Scout/Youth Group (North)  2.14 Scout/Youth Group (South)  5.03 Jenkinson Camp  16.03 Primitive Camp Area  19.02 Bumpy Meadow Trailhead  20.04 Retreat and Event Center (1)  20.07 Retreat and Event Center (2)  24.02 Marina Parking Expansion</p>	<p>No RECs were identified by the ESA conducted for SPRA. The proposed construction of waterless toilets and restrooms within the Scout/Youth Group Camp, Jenkinson Camp, the Primitive Camp Area, Bumpy Meadow Trailhead, and the Marina Parking Expansion would not result in adverse impacts related to hazardous materials.</p> <p>Construction and grading activities within the area of the proposed Retreat/Events Center would however, have the potential to expose previously unidentified hazardous materials due to historical and current land uses within this area; therefore impacts are considered potentially significant.</p>	<p>Potentially Significant Impact</p>
<p><b>Showers/Laundry Facilities</b></p> <p>2.10 Scout/Youth Group (North)-  Showers Only  2.15 Scout/Youth Group (South)-  Showers Only  6.06 Sierra Camp  21.02 Main Group Campground</p>	<p>No RECs were identified by the ESA conducted for SPRA. The proposed construction of showers/laundry facilities within the Scout/Youth Group Camp, Sierra Camp and the Main Group Campground would not result in adverse impacts related to hazardous materials.</p>	<p>No Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Reconfigure Existing Parking</b></p> <p>1.05 Main Park Entrance  4.01 Pine Cone Camp  6.01 Sierra Camp  10.01 Chimney Camp (Day Use)</p>	<p>No RECs were identified by the ESA conducted for SPRA. The proposed reconfiguration of parking areas in the location of Pine Cone Camp, Sierra Camp, and Chimney Camp would not result in adverse impacts related to hazardous materials.</p> <p>However, grading and construction activities associated with the reconfiguration of parking for the Main Park Entrance would have the potential to result in the exposure of previously unidentified hazardous materials related to historical and current land uses within this area of SPRA; therefore impacts are considered potentially significant.</p>	<p>Potentially Significant Impact</p>
<p><b>Construct New Parking Areas</b></p> <p>2.02 Scout/Youth Group Camp (North)  3.01 Miwok Trailhead  4.02 Pine Cone Camp  6.07 Sierra Camp  11.02 Lake Drive Stabilization (Day Use)  12.03 Hazel Creek Camp (Day Use and Trailhead)  18.01 Dog Park  19.01 Bumpy Meadow Trailhead  20.01 Retreat and Event Center (East)  20.02 Retreat and Event Center (West)  21.03 Main Group Campground/Shower Parking</p>	<p>No RECs were identified by the ESA conducted for SPRA. The proposed construction of new parking areas in the location of the Scout/Youth Group Camp, Pine Cone Camp, Sierra Camp, the Lake Drive Stabilization area, the Dog Park, and Bumpy Meadow Trailhead would not result in adverse impacts related to hazardous materials.</p> <p>Although the construction of additional parking within the area Hazel Creek Camp would be within the vicinity of former mining operations on adjacent lands, monitoring of the tailings associated with this mine is ongoing as required by the waste Discharge order issued by the RWQCB and as of time of preparation of the ESA, the site was in compliance with the Waste Discharge Order.</p> <p>Construction of the Miwok Trailhead parking lot would be associated with the demolition of the existing museum to expand parking within this area. The age of this structure remains in question. Asbestos-containing building materials or lead based-paint have the potential to exist within the structure; therefore impacts are considered potentially significant.</p> <p>Additionally, the construction of additional parking at the proposed Retreat and Event Center would involve excavation within the vicinity of areas currently used for the storage and use of hazardous materials. Although the ESA conducted for SPRA did not identify any RECs, the potential for previously unidentified hazardous materials contamination exists within this area related to historical and current land uses.</p> <p><i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	<p>Potentially Significant Impact</p>
<p><b>Marina Parking Expansion</b></p> <p>24.01 Marina Parking Expansion  24.03 Marina Parking Expansion (Fish Cleaning Station)</p>	<p>No RECs were identified by the ESA conducted for SPRA. The proposed construction of the Marina Parking Expansion would not result in adverse impacts related to hazardous materials exposure. No impact would result from project development.</p>	<p>No Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b><i>Realign/Improve Campground Access Roads</i></b></p> <p>2.01 Scout/Youth Group Camp  2.03 Scout/Youth Group Camp (North)  2.04 Scout/Youth Group Camp (South)  2.06 Scout/Youth Group Camp (South)  4.03 Pine Cone Camp  5.01 Jenkinson Camp  6.02 Sierra Camp (West)  6.03 Sierra Camp (East)  7.02 Stonebraker Camp  8.01 Hilltop Camp  9.01 Chimney/Hilltop Host Site  12.02 Hazel Creek Camp  13.03 Dogwood Camp  21.04 Main Group Campground (Group Site #1)  21.05 Main Group Campground (Group Site #5)  21.08 Main Group Campground (Group Site #2)  21.11 Main Group Campground (Group Sites #3 and #4)  23.02 Black Oak Equestrian Center  25.01 Lake Drive Access Improvements</p>	<p>No RECs were identified by the ESA conducted for SPRA and no historical or present land uses within the areas proposed for the realignment and improvement of campground access routes have been identified that involve the use, storage or disposal of hazardous materials; therefore, no adverse impacts related to hazardous materials exposure would result from the proposed projects.</p>	<p>No Impact</p>
<p><b><i>Reconfigure Main Entrance</i></b></p> <p>1.01 Main Park Entrance  1.02 Main Park Entrance</p>	<p>Grading and construction activities associated with the reconfiguration of the Main Park Entrance would have the potential to result in the exposure of previously unidentified hazardous materials related to historical and current land uses; therefore, impacts are considered potentially significant.</p> <p>Additionally, two structures within the vicinity of the Main Park Entrance are proposed for demolition. The age of these structures remains unknown. However, asbestos-containing building materials or lead based-paint may exist within these structures; therefore, impacts are considered potentially significant.</p>	<p>Potentially Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
<b><i>Install Interpretive/Trail Signage/Kiosks</i></b> 1.06 Main Park Entrance 3.04 Miwok Trailhead 7.05 Stonebraker Camp 12.10 Hazel Creek Camp 19.05 Bumpy Meadow Trailhead	The installation of signage and kiosks would involve minimal construction and/or excavation. The use, storage, and disposal of materials applied for long-term preservation of construction materials would be subject to the labeling requirements specified by strict federal and state regulations; therefore, impacts are considered less than significant.	Less than Significant Impact
<b><i>Construct Visitor Center/New Maintenance Shop</i></b> 1.04 Main Park Entrance 1.07 Main Park Entrance	No potential for REC was observed within the area of the Main Park Entrance at the time of preparation of the ESA. However, historical and current land uses at the Main Park Entrance involve the use, handling and storage of hazardous materials used in conjunction with maintenance activities. Grading and construction activities associated with the construction of a visitor center and new maintenance shop would have the potential to result in the exposure of previously unidentified hazardous materials related to historical and current land uses; therefore, impacts are considered potentially significant.	Potentially Significant Impact
<b><i>Construct New Facilities</i></b> 18.02 Dog Park	Development of the Sugarloaf Fine Arts Center and Dog Park would result in the development of some of the more formal recreational facilities within the SPRA Master Plan and would result in an area of concentrated public use within new structures. The routine use of hazardous and/or toxic compounds would be associated with building maintenance and groundskeeping and may include paints, solvents, herbicides, insecticides, cleansers, and other readily available materials. The use, storage, and disposal of these compounds is regulated by strict state and federal regulations as prescribed by product labeling. Development of these facilities would not likely result in a use that would result in significant hazard to the public or the environment related to exposure to hazards or hazardous materials. Impacts are therefore, considered less than significant.	Less than Significant Impact
<b><i>Fine Arts Center</i></b> 17.01 Sugarloaf Fine Arts Center		
<b><i>Rehabilitate Vegetation</i></b> 1.08 Main Park Entrance 4.07 Pine Cone Camp 6.08 Sierra Camp 6.09 Sierra Camp 7.06 Stonebraker Camp 8.04 Hilltop Camp 10.03 Chimney Camp 12.05 Hazel Creek Camp 12.06 Hazel Creek Camp 12.08 Hazel Creek Camp 12.09 Hazel Creek Camp 13.01 Dogwood Camp 14.02 Rainbow Camp	Vegetation Rehabilitation activities proposed within the SPRA Master Plan would involve native plantings and minimal grading. Long-term maintenance of revegetated areas may require application of insecticide and herbicides to support growth by new plantings; however, the application, storage, and disposal of these chemicals is strictly regulated by federal and state law as prescribed by product labeling; therefore, impacts are considered less than significant.	Less than Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
15.02 Kamloop Camp 21.07 Main Group Campground (Group Sites #1 and #5) 21.10 Main Group Campground (Group Site #2) 21.13 Main Group Campground (Group Sites #3 and #4) 23.03 Black Oak Equestrian Camp		
<b>Restrict Access</b> 3.02 Miwok Trailhead 3.03 Miwok Trailhead 4.06 Pine Cone Camp (Shore Access) 8.02 Hilltop Camp 14.01 Rainbow Camp (Creek Access Control) 15.01 Kamloop Camp (Creek Access Control) 19.04 Bumpy Meadow Trailhead 23.04 Black Oak Equestrian Center 23.06 Black Oak Equestrian Center	Restricted access within SPRA would represent conservation practices implemented by the SPRA Master Plan to protect sensitive natural areas. Construction activities would be minimal and no new land uses would be developed. No adverse impact related to exposure to hazards or hazardous materials would result from proposed projects	No Impact
<b>Dock Expansion</b> 7.07 Stonebraker Camp	The proposed dock expansion at Stonebraker Camp would represent an expansion of the existing docking facilities, potentially resulting in additional boats on the Lake. Past incidences of spills related to boat sue on Jenkinson Lake have been minimal according to the ESA prepared for SPRA. EID has protocol in place to address potential spills if they should occur, including contacting the appropriate regulatory agencies, including the El Dorado County Environmental Management Department. Impacts are therefore, considered less than significant.	Less than Significant Impact
<b>Lake Drive Stabilization</b> 11.01 Lake Drive Stabilization	The proposed bank stabilization along Lake Drive would likely require substantial excavation and disposal of fill, which would likely be used in conjunction with construction of the proposed parking lot within the vicinity of this project. The area of excavation is not identified by the ESA as having supported any historical land uses associated with the use, storage, handling or disposal of hazardous materials; therefore impacts are considered less than significant.  <i>Note: Component 11.01 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i>	Less than Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>SPRA Administration</b>            SPRA01 Increased Staffing            SPRA02 Staff Training            SPRA03 Reservation Systems Software            SPRA05 Website Development            SPRA06 Proactive Maintenance            SPRA07 Annual Maintenance Work Plan            SPRA08 Volunteer Maintenance Events</p>	<p>No RECs were identified by the ESA prepared for SPRA. Future planning and administrative activities proposed by EID would not interfere with any adopted emergency response or evacuation plans. No adverse impacts would result from planning and administrative activities proposed by the SPRA Master Plan.</p>	<p>No Impact</p>
<p><b>Planning</b>            SPRA04 Day-Use Carrying Capacity            SPRA09 Trail Maintenance Plan</p>		
<p><b>Public Safety</b>            SPRA10 Fire Prevention            SPRA11 Emergency Preparedness Plan            SPRA12 Law Enforcement</p>	<p>Fire prevention activities associated with implementation of the SPRA Master Plan would result in a net benefit to SPRA, and surrounding residents and communities by development and implementation of fuel reduction management activities, coordination with the El Dorado County Fire Safe Council for public education and outreach, development of an evacuation plan for SPRA, and continued coordination with CDF for controlled burning and the removal of dead, dying and diseased trees. No adverse impact would result.</p> <p>EID proposes additional staffing including compensation for one-quarter of a full time deputy of the El Dorado Count Sheriff's Office, as well as additional park rangers for internal SPRA patrol. No adverse impacts would result from law enforcement proposed by the SPRA Master Plan, the proposed additional staffing would likely benefit emergency services within SPRA.</p>	<p>No Impact</p>

#### 4.10.5 Mitigation Measures

Table 4.10 -2 below identifies the project components that would be subject to the requirements of Mitigation Measure HAZ-1 and/or HAZ-2. Mitigation Measure HAZ-3 is applicable to the entirety of the Master Plan and would require implementation before any development, in accordance with approval of the special use permit for the Master Plan. Those project components not included in the table below have been determined to result in no impact or less than significant impacts related to Hazards and Hazardous Materials as discussed in Table 4.10-1 and no mitigation is warranted.

- Mitigation Measure HAZ-1** Before demolition of existing on-site structures, the project applicant shall:
- Remove and properly dispose of or recycle all petroleum, chemicals, and hazardous materials from the property;
  - Follow standard remedial procedures as required by the County Department of Environmental Management;
  - Conduct an asbestos survey for all existing on-site structures proposed for demolition. The survey shall be conducted under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines before commencement of any demolition activities. Pursuant to NESHAP guidelines, all friable asbestos shall be removed by qualified professionals before building demolition; and
  - Conduct a lead paint survey of existing on-site structures proposed for demolition. As a component of this survey, all soils surrounding the existing structures shall be sampled for residual fragments of lead-based paint.

Implementation of Mitigation Measure HAZ-1 would ensure that potential exposure to asbestos containing building materials or lead-based exterior coatings and paint was recognized before commencement of demolition activities. By evaluating the potential for friable asbestos or lead-based coatings, the proper procedures for demolition can be implemented in compliance with regulatory requirements relevant to such materials to minimize potential risks related to exposure of workers, residents, or SPRA visitors to hazardous materials.

- Mitigation Measure HAZ-2** During site preparation and construction activities, if evidence of previously unidentified hazardous materials contamination is observed or suspected (i.e., stained or odorous soil, or oily or discolored water) construction activities shall cease and a Registered Environmental

Assessor II shall assess the situation. If necessary, the environmental professional shall prepare a sampling plan to collect soil and/or groundwater samples to determine whether or not the suspected location has been adversely affected by past activities. The samples shall be analyzed for the contaminants determined to be a potential health concern by the environmental professional. Depending on the nature of the contamination (if any), the Hazardous Materials Division of the El Dorado County Department of Environmental Management shall be contacted for further direction, which could include further investigation or remediation to all applicable federal, State, and local standards.

Implementation of Mitigation Measure HAZ-2 would ensure that if previously unidentified hazardous materials contamination were encountered, the proper procedures would be implemented for the handling and disposal of all hazardous materials in compliance with regulatory requirements to minimize the potential for the release of hazardous materials into the environment or exposure to workers, residents, or SPRA visitors.

**Mitigation Measure HAZ-3** Before adoption of the SPRA Master Plan by the EID Board of Directors, a Fire Safe Plan prepared by an RPF shall be reviewed and approved by the El Dorado County Fire Protection District and/or CDF.

Implementation of Mitigation Measure HAZ-3 would ensure that implementation of the SPRA Master Plan and development of individually proposed projects would occur consistent with the established development standards and guidelines for wildland fire protection, including emergency access as determined by the El Dorado Fire Protection District and/or CDF.

Table 4.10 -2 below identifies the project components that would be subject to the requirements of Mitigation Measure HAZ-1 and/or HAZ-2. Those project components not included in the table below have been determined to result in no impact or less than significant impacts related to Hazards and Hazardous Materials as discussed in Table 4.10-1 and no mitigation is warranted.

**Table 4.10 -2 — Proposed Mitigation Measures to Reduce or Eliminate Potential Impacts Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Construct Post/Pier Structures</b></p> <p>2.09 Scout/Youth Group Camp Mess Hall</p> <p>2.12 Scout/Youth Group Camp (North)</p> <p>2.13 Scout/Youth Group Camp (South)</p> <p>2.17 Scout/Youth Group Camp Mess Hall</p> <p>5.02 Jenkinson Camp</p> <p>10.04 Chimney Camp</p> <p>20.03 Retreat and Event Center</p> <p>20.05 Retreat and Event Center (Phase I)</p> <p>20.06 Retreat and Event Center (Phase II)</p>	<p>Implementation of Mitigation Measure HAZ-1 for project component identification numbers 20.03, 20.05, and 20.06.</p> <p>No RECs were identified within the areas propose for development of Post/Pier structures proposed within the Scout/Youth Group Camp, Jenkinson Camp and Chimney Camp; therefore no mitigation is warranted for these projects.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Waterless Toilets/Restrooms</b></p> <p>2.08 Scout/Youth Group (North)</p> <p>2.14 Scout/Youth Group (South)</p> <p>5.03 Jenkinson Camp</p> <p>16.03 Primitive Camp Area</p> <p>19.02 Bumpy Meadow Trailhead</p> <p>20.04 Retreat and Event Center (1)</p> <p>20.07 Retreat and Event Center (2)</p> <p>24.02 Marina Parking Expansion</p>	<p>Implementation of Mitigation Measure HAZ-1 for project component identification numbers 20.04 and 20.07.</p> <p>No RECs were identified by the ESA conducted for SPRA. The proposed construction of waterless toilets and restrooms within the Scout/Youth Group Camp, Jenkinson Camp, the Primitive Camp Area, Bumpy Meadow Trailhead, and the Marina Parking Expansion would not result in adverse impacts related to hazardous materials; therefore no mitigation is warranted for these projects.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Reconfigure Existing Parking</b></p> <p>1.05 Main Park Entrance</p> <p>4.01 Pine Cone Camp</p> <p>6.01 Sierra Camp</p> <p>10.01 Chimney Camp (Day Use)</p>	<p>Implementation of Mitigation Measure HAZ-1 for project component identification number 1.05.</p> <p>No RECs were identified by the ESA conducted for SPRA. The proposed reconfiguration of parking areas in the location of Pine Cone Camp, Sierra Camp, and Chimney Camp would not result in adverse impacts related to hazardous materials; therefore, no mitigation is warranted for these projects.</p>	<p>Less than Significant with Mitigation Incorporation</p>

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Construct New Parking Areas</b></p> <p>2.02 Scout/Youth Group Camp (North)  3.01 Miwok Trailhead  4.02 Pine Cone Camp  6.07 Sierra Camp/Shower Parking  11.02 Lake Drive Stabilization (Day Use)  12.03 Hazel Creek Camp (Day Use and Trailhead)  18.01 Dog Park  19.01 Bumpy Meadow Trailhead  20.01 Retreat and Event Center (East)  20.02 Retreat and Event Center (West)  21.03 Main Group Campground/Shower Parking</p>	<p>Implementation of Mitigation Measure HAZ-1 for project component identification numbers 20.01 and 20.02.</p> <p>Implementation of Mitigation Measure HAZ-2 for project component identification number 3.01.</p> <p>No RECs were identified by the ESA conducted for SPRA and currently land uses do not involve the generation, use, handling, or storage of hazardous materials likely to result in exposure to hazardous materials. The proposed construction of new parking areas in the location of the Scout/Youth Group Camp, Pine Cone Camp, Sierra Camp, the Lake Drive Stabilization area, the Dog park, and Bumpy Meadow Trailhead would not result in adverse impacts related to hazardous materials; therefore no mitigation is warranted for these projects.</p> <p><i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Reconfigure Main Entrance</b></p> <p>1.01 Main Park Entrance  1.02 Main Park Entrance</p>	<p>Implementation of Mitigation Measures HAZ-1 and HAZ-2.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Construct Visitor Center/New Maintenance Shop</b></p> <p>1.04 Main Park Entrance  1.07 Main Park Entrance</p>	<p>Implementation of Mitigation Measures HAZ-1.</p>	<p>Less than Significant with Mitigation Incorporation</p>

Implementation of the SPRA Master Plan would provide the framework for long-term management of SPRA for continued recreational use as well as resource conservation. Implementation would not involve land uses that would be likely to result in exposure of the environment or the public to hazardous materials. The risk of wildfire is very high within SPRA. However, EID proposes proactive planning for fuel load reduction, emergency preparedness and evacuation, as well as continued coordination with CDF and the El Dorado County Fire Safe Council. Continued interagency coordination, in combination with broad planning for emergency response within the SPRA, as well as risk reduction is anticipated not to result in significant risk related to wildfire hazard.

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## **4.11 Hydrology/Water Quality**

The Hydrology and Water Quality section of this Draft Master EIR discusses existing conditions related to hydrology and water quality in the project area, as well as the potential for implementation of the Master Plan to result in related impacts to the environment. Where appropriate, mitigation measures are identified to reduce the level of significance of potential impacts.

### **4.11.1 Existing Conditions**

#### **4.11.1.1 Project Setting**

##### **Surface Water Hydrology**

###### ***Streams/Creeks/Rivers***

SPRA is located within the Hazel Creek/Sly Park Creek Valley and encompasses Jenkinson Lake into which are Hazel, Sly Park, and Carpenter creeks, in addition to several other minor drainages and springs flow. Hazel and Sly Park creeks are the main sources of water to Jenkinson Lake, entering SPRA from the southeast. During years with normal rainfall, the confluence is submerged by the lake, but can be seen in the summer and during drought years when the lake surface level is low.

Two diversion tunnels convey water to Jenkinson Lake by means of Sly Park Creek and Hazel Creek. The seven-foot diameter, 2,855-foot long Camp Creek Diversion Tunnel diverts water from Camp Creek to Sly Park Creek. The Hazel Creek tunnel connects the El Dorado Canal to Hazel Creek. This diversion tunnel is used primarily during drought conditions as a reliable source of water to maintain lake levels and supplement drinking water supplies. In January 1997, heavy rains caused severe damage to the tunnel outlet and sections of the downstream channel that convey water into Jenkinson Lake. Repairs to the tunnel were completed in 2005, with a current project underway to rehabilitate the channel and enhance wetlands downstream of the tunnel.

Downstream of the dam, Sly Park Creek continues flowing westward until it converges with Camp Creek, which eventually flows into the North Fork of the Cosumnes River.

###### ***Lakes/Ponds/Reservoirs***

SPRA was created in 1955 with the construction of an earthen dam on Hazel Creek. The dam was designed and built around an existing rocky outcrop, resulting in two separate dams that function as one. Jenkinson Lake, the resulting reservoir, currently has a storage capacity of 41,000 acre-feet of water, with a maximum depth of about 150 feet and a surface area of approximately 645 acres. The majority of SPRA drains to the lake, except for a relatively small area below the dams.

An average of about 45,920 acre-feet of runoff from these sources flows through Jenkinson Lake annually, ranging from less than 4,000 acre-feet (in 1977) to more than 125,000 acre-feet (in 1983). On average, EID withdraws 23,000 acre-feet of water from Jenkinson Lake annually. Additional water may be withdrawn when necessary and available. This is typically done when problems occur with other EID water supply sources (U.S. Bureau of Reclamation, September

2003). Diversions in excess of 23,000 acre-feet have occurred four times in the last ten years, the largest quantity being 29,247 acre-feet in 1997 when there was damage to a forebay in another part of EID's water supply system. However, in the past ten years, diversions have averaged 21,172 acre-feet annually, a decrease from the historic average.

### ***Flooding***

Jenkinson Lake and the immediate shoreline are within the 100-year floodplain (Zone A) as shown on the Federal Emergency Management Administration's (FEMA) Q3 Flood Maps (Figure 4.11-1). Because of relatively steep valley topography and the existing dam elevation, the remainder of the Park's upland area is classified as either outside the 500-year floodplain (Zone X) or in areas of undetermined but possible flood hazards (Zone D). Both of these classifications have a considerably low flooding potential.

### **Groundwater Hydrology**

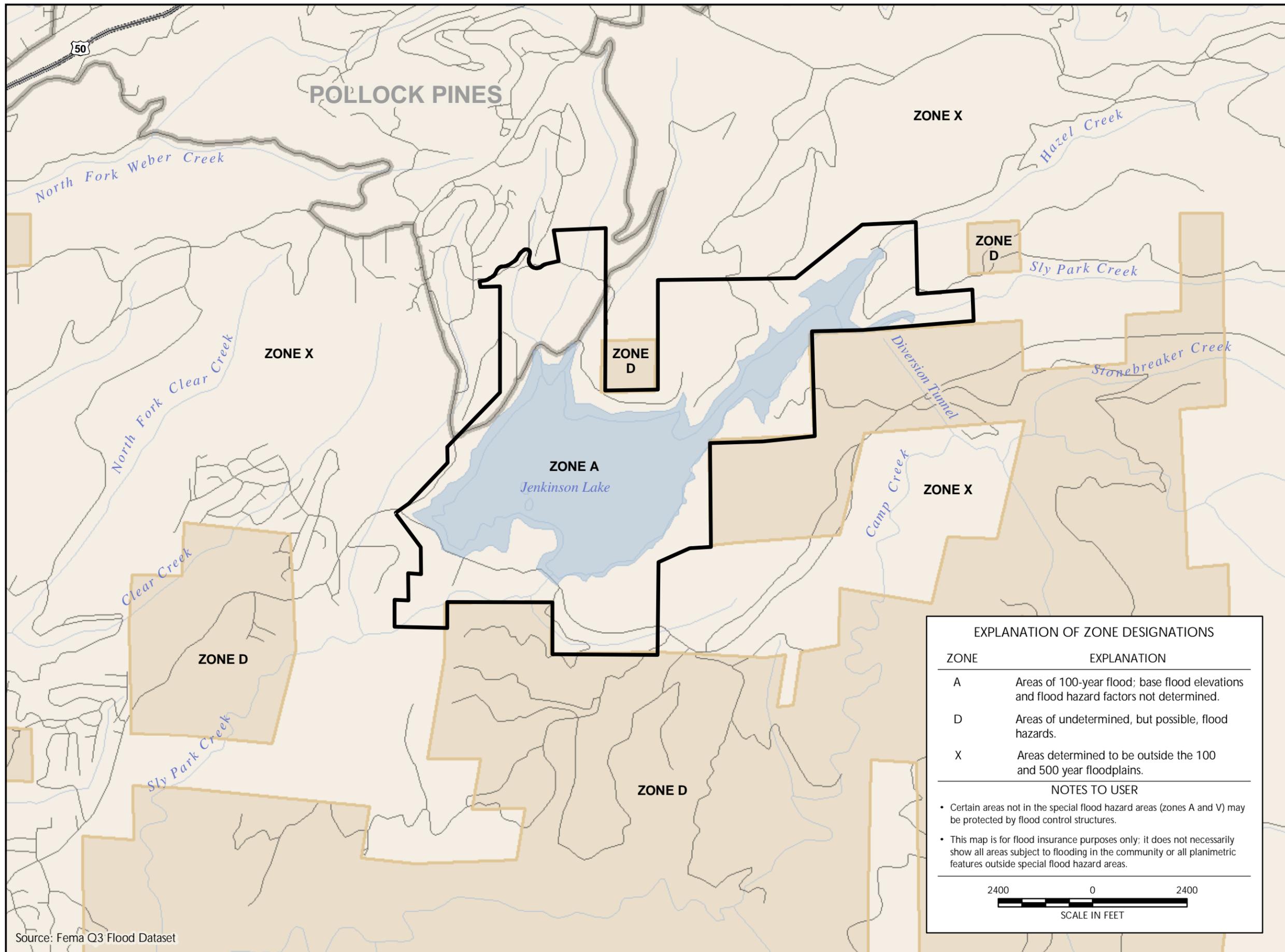
Jenkinson Lake acts as the primary control for groundwater elevation in SPRA. Depth to groundwater varies throughout the park; some areas containing active springs, with depth to groundwater estimated at approximately 115 feet below ground surface.

### **Water Quality**

#### ***Surface Water***

As the recreational focal point of the park, Jenkinson Lake is used by visitors for swimming, boating, water skiing, and fishing. However, the primary purpose of the reservoir is water storage and conveyance for irrigation, industrial, and municipal purposes.

Water quality data has been collected at Jenkinson Lake and from its tributaries for various reasons since 1999. Overall, the lake water is of good quality as noted by EID in their 2002, 2003, and 2004 water quality reports. EID tests for over 200 contaminants in their raw water supply (water sampled before entry to the water treatment facility), and while not all of the results are presented in the annual water quality reports, reports for these years for all samples collected "meet state and federal standards."



Source: Fema Q3 Flood Dataset

## FEMA FLOOD ZONE DESIGNATIONS

### SLY PARK RECREATION AREA MASTER PLAN MASTER EIR

EXPLANATION OF ZONE DESIGNATIONS	
ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
D	Areas of undetermined, but possible, flood hazards.
X	Areas determined to be outside the 100 and 500 year floodplains.

**NOTES TO USER**

- Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.
- This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

2400      0      2400  
SCALE IN FEET



FIGURE 4.11-1

Since January 1999, EID has monitored the quality of the water collected from Jenkinson Lake before it enters the water treatment plant. The raw water is tested for turbidity, pH, temperature, iron, and manganese. Graphs of the monthly averages for each of these parameters are shown on Figure 4.11-2 and Figure 4.11-3. Trend lines were added to each data set to help identify any possible long term or inter-seasonal changes within the lake. Turbidity has remained fairly constant, typically ranging between 1 and 2 NTUs, which is indicative of a pristine system. The lake's pH has also remained fairly constant, fluctuating between 6.5 and 7.0. This meets the pH requirements set forth in the Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region (1998) which states "(t)he pH shall not be depressed below 6.5 nor raised above 8.5." Both iron and manganese tended to range below 0.1 milligram per liter (mg/L), with occasional spikes that have remained below 1.0 mg/L.

In 2004, a risk assessment study of Jenkinson Lake collected lake profile water quality data at three locations. The data collected through August 2004 were provided by Hydroikos Associates, and included four sampling events (Table 4.11-1). This data also attest to the high water quality of Jenkinson Lake. Conductivity is well within criteria set forth for drinking water or habitat needs, with averages for each of the profiles at 35 micro siemens per centimeter ( $\mu\text{s/cm}$ ), with a minimum of 31  $\mu\text{s/cm}$  and a maximum of 41  $\mu\text{s/cm}$ . The average pH for the profiles is 7.1, with a minimum of 6.07 and a maximum of 7.96. Dissolved oxygen for the profiles also meet aquatic habitat standards with an average of almost 11 mg/L, with the upper 30 feet having at least 80 percent saturation.

Regular testing for Giardia and cryptosporidium occurs at the Sierra Swim Area and at the water treatment plant. These microscopic parasites can result in illness, with life threatening potential affects to individuals with compromised immune systems. Giardia has been detected once at a maximum of 0.2 individuals per liter, which is well below the typical surface water level of 100/L. The risk assessment monitoring detected fecal coliform at 13 and 4 most probable number (MPN) per 100 milliliters (ml), which is a full order of magnitude less than the 400 MPN per 100 ml set forth by the CVRWQCB's Basin Plan. Cryptosporidium was not detected in any sample.

**Table 4.11-1 — Profile Data Collected for the Jenkinson Lake Risk Assessment**

		Degree	Cond.	DO	DO	pH	Turb.
		°c	$\mu\text{s/cm}$	%	mg/l	Units	NTU
<b>String A</b>	<b>Average</b>	12.97	35	99.4	10.67	7.24	3.1
	<b>Max</b>	23.73	41	118.1	14.07	7.96	23.3
	<b>Min</b>	6.27	33	73.2	7.57	6.49	0.0
<b>String B</b>	<b>Average</b>	9.14	35	89.7	10.31	7.00	1.3
	<b>Max</b>	23.62	41	128.2	14.87	7.62	22.0
	<b>Min</b>	5.45	33	45.3	5.57	6.37	-0.2
<b>String C</b>	<b>Average</b>	11.89	35	100.4	10.97	6.99	0.5
	<b>Max</b>	23.95	42	122.1	14.59	7.74	1.5
	<b>Min</b>	6.16	31	77.9	8.10	6.07	0.1

## **Groundwater**

There are no wells currently located in SPRA and, as such, the ground water quality data has not been monitored by EID. In addition, according to Fred Sanford of El Dorado County Environmental Health, there are no public groundwater data available for the local surrounding area. Given the absence of data, the local surrounding environmental setting can be used to infer possible conditions. Within the local basin, there are no evident sources of potential ground water contamination such as industrial facilities. Jenkinson Lake also provides a control for ground water levels and creates a hydrostatic gradient of water flowing away from the lake which would likely push any contaminants away from the lake. Therefore, it can be assumed that the local groundwater is of good quality.

### **4.11.2 Regulatory Setting**

Several agencies have jurisdiction over hydrology and water quality activities within SPRA. Following is a list of the relevant agencies and their associated programs, followed by a more detailed discussion on each of the programs and how they are linked between agencies.

#### **4.11.2.1 Federal Agencies**

##### ***U.S. Environmental Protection Agency (EPA)***

**Program:** National Pollutant Discharge Elimination System (NPDES)

**Regulatory Authority:** Federal Water Pollution Control Act (Clean Water Act) § 402

**Enforcement Mechanism:** NPDES Discharge Permits through SWRCB/RWQCB

**Program:** Source Water Protection

**Regulatory Authority:** Safe Drinking Water Act (SDWA)

**Enforcement Mechanism:** Permits through State DHS

#### **4.11.2.2 State Agencies**

##### ***Central Valley Regional Water Quality Control Board (CVRWQCB)***

**Program:** NPDES/Storm Water

**Regulatory Authority:** Porter-Cologne Act and Federal Water Pollution Control Act (Clean Water Act)

**Enforcement Mechanism:** NPDES Permits

**Program:** Waste Discharges to Land (Septic/Sewage Storage)

**Regulatory Authority:** Porter-Cologne Act and Federal Water Pollution Control Act (Clean Water Act)

**Enforcement Mechanism:** Waste Discharge Requirements (WDR)

**Program:** Underground Storage Tanks

**Regulatory Authority:** Porter-Cologne Act

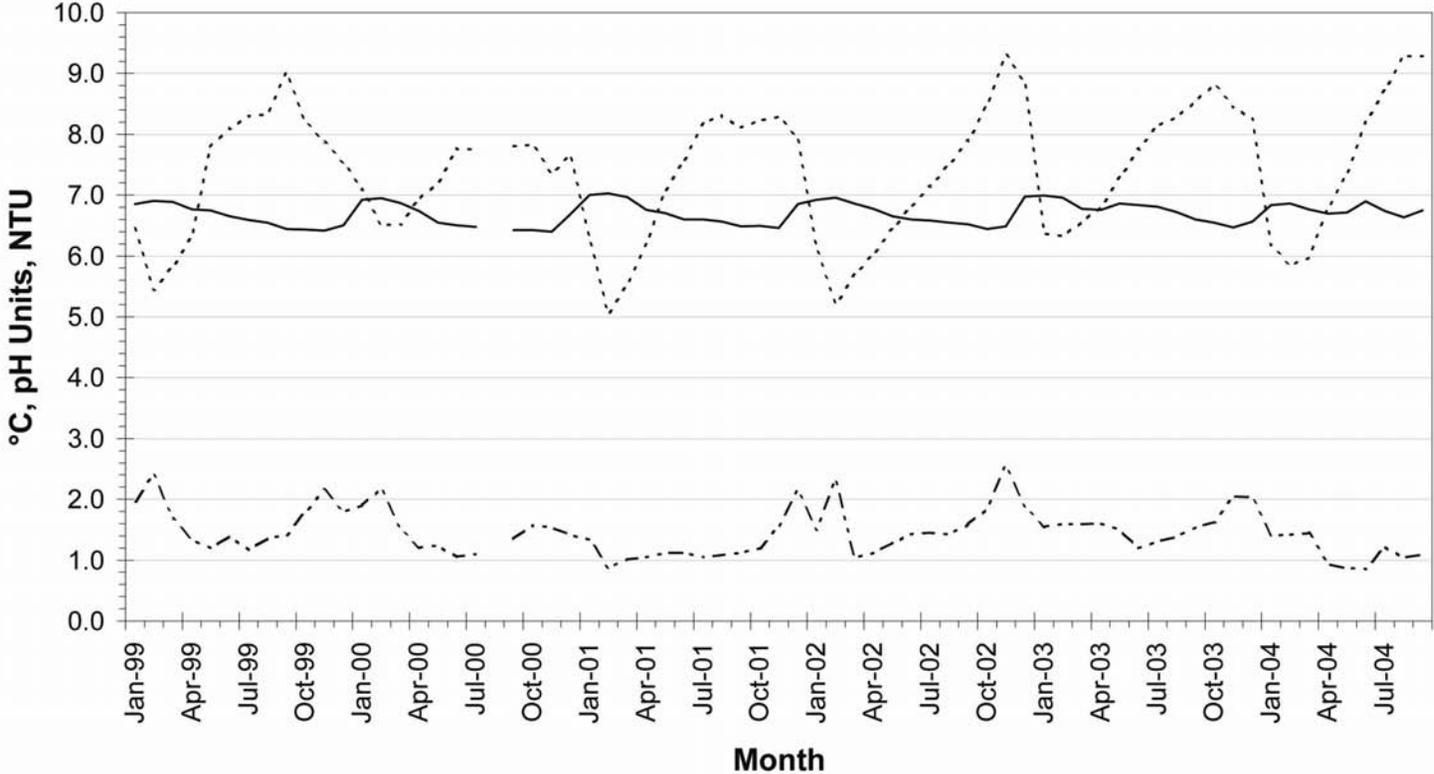
**Enforcement Mechanism:** Waste Discharge Requirements (WDR)

**Program:** Basin Plan

**Regulatory Authority:** Porter-Cologne Act and Federal Water Pollution Control Act (Clean Water Act)

**Enforcement Mechanism:** Waste Discharge Requirements (WDR)

### Monthly Average Temperature, pH, and Turbidity at the Water Treatment Plant Pipe Intake



Data Source:  
El Dorado Irrigation District, 2004

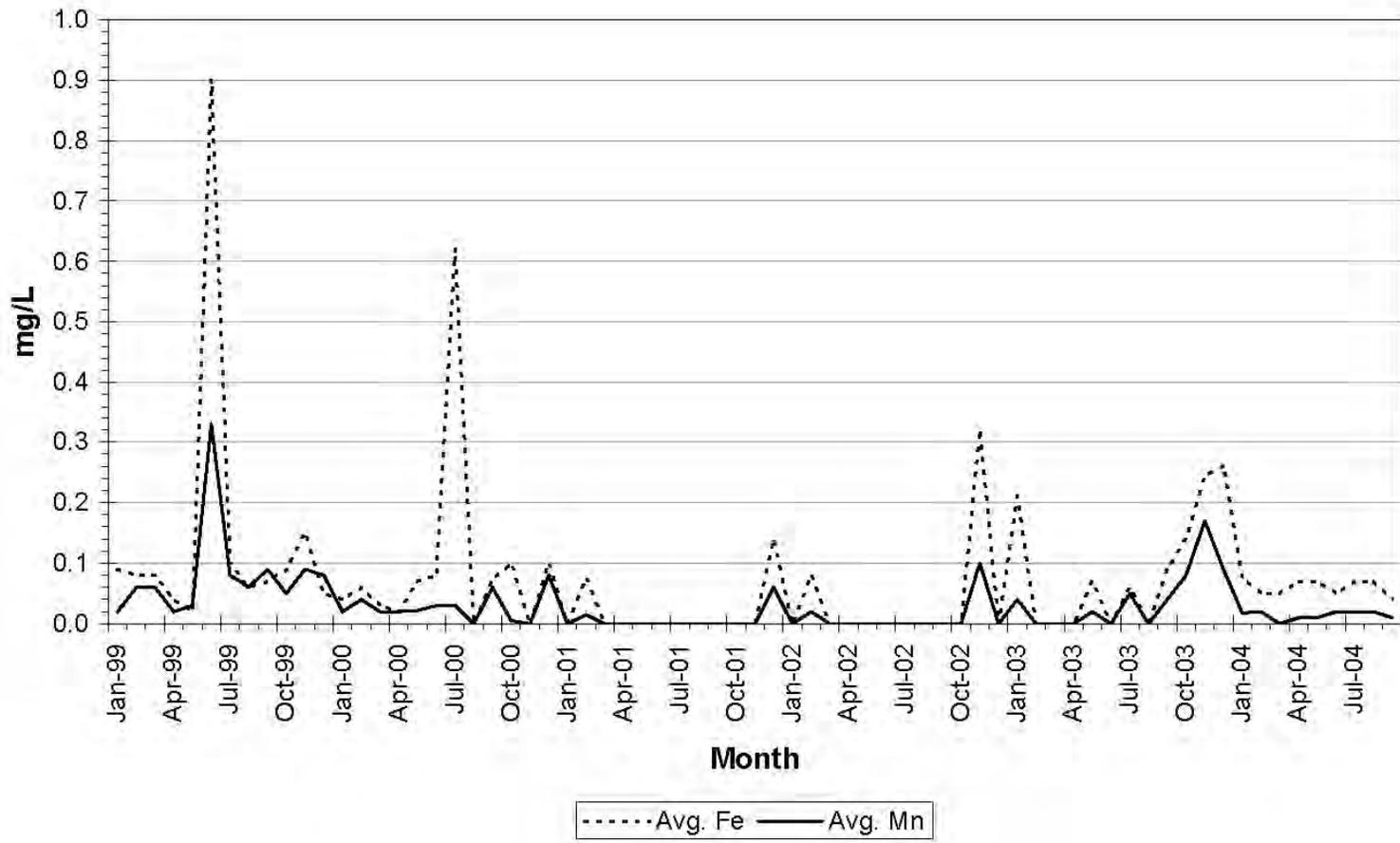
..... Avg. Temp. (°C)    — Avg. pH (Units)    - - - - Avg. Turbidity (NTU)

### MONTHLY TEMPERATURE, PH, AND TURBIDITY AVERAGES AT THE WATER TREATMENT PLANT PIPE INTAKE



SLY PARK RECREATION AREA MASTER PLAN  
MASTER EIR

FIGURE 4.11-2



**MONTHLY AVERAGE IRON AND MAGNESIUM CONCENTRATIONS AT THE WATER TREATMENT PLANT PIPE INTAKE**

## **California Department of Health Services (DHS), Division of Drinking Water and Environmental Management**

**Program:** Drinking Water Reservoirs: Recreational Use

**Regulatory Authority:** California Code of Regulations (CCR), Title 17, § 7626, Health and Safety Code (HSC) § 115825 and HSC § 100275, 115880, 116075, and 116080

**Enforcement Mechanism:** Recreational Use Permits at Domestic Water Supply Reservoirs

### **4.11.2.3 Local Agencies**

#### ***El Dorado County Environmental Health***

**Program:** Liquid Waste Program

**Regulatory Authority:** County Ordinance Chapter 8.05 (Ordinance 3642 §3 (part), 1986)

**Enforcement Mechanism:** Septic Permits

**Program:** Storm Water Management Plan

**Regulatory Authority:** Various county ordinances as outlined in the SWMP

**Enforcement Mechanism:** Grading Permits

#### **National Pollutant Discharge Elimination System (NPDES)**

The National Pollutant Discharge Elimination System (NPDES) permit system was established in Section 402 of the Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the United States. In California, the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) are charged with implementing NPDES programs. SPRA site is within the jurisdiction of the Central Valley (CV) RWQCB.

Non-point source pollution sources originate over a wide area rather than from a definable point. Such non-point sources are generally exempt from federal NPDES permit program requirements, with the exception of discharges caused by general construction activities and the general quality of storm water in municipal storm water systems. The goal of the NPDES non-point source regulations is to improve the quality of storm water discharged to receiving waters to the Maximum Extent Practicable (MEP) through the use of Best Management Practices (BMPs), Best Available Technology economically achievable (BAT) and best conventional pollutant control technology.

In accordance with NPDES regulations, to minimize the potential effects of construction runoff on receiving water quality, the State requires a General Construction Activity Storm Water Permit for any construction activity that: 1) affects one acre or more, 2) is part of a larger common plan of development or scale, or 3) poses a threat to surface water quality. Permit applicants are required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that specifies erosion and sediment control BMPs to reduce or eliminate construction-related impacts on receiving water quality. Because construction of the proposed project would either disturb more than one acre or be part of a larger project, coverage under the General Construction Storm Water Permit would be required, necessitating the development and implementation of a SWPPP and storm-based BMP monitoring.

Examples of construction BMPs identified in SWPPPs include, but are not limited to: using temporary mulching, seeding, or other stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan: installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw wattles or silt fencing, to minimize the amount of uncontrolled runoff that could enter drains or surface water.

El Dorado County has developed an erosion control policy for construction sites designed to meet NPDES storm water requirements as part of the County's Municipal NPDES permit. Compliance with this policy, in conjunction with other policies and ordinances, is required unless the policy is modified based upon new or additional information made available to the County.

### **Water Supply Permit for Drinking Water Reservoirs**

The California Department of Health Services (DHS) is responsible for issuing water supply permits for domestic water supply reservoirs including Jenkinson Lake. The California Code of Regulations (CCR) requires that the recreational use of domestic water supply reservoirs is only allowed if authorized in the water supply permit (CCR, Title 17, §7626). EID applied in 2005 to cover Jenkinson Lake under a new water use permit which includes recreational uses.

The California Health and Safety Code (HSC) states that multiple uses should be made of all public waters within the State to the extent that multiple use is consistent with public health and public safety (HSC § 115825(a)). The HSC also prohibits bodily contact recreation within domestic water supply reservoirs (HSC § 115825(b)) with some reservoirs receiving exceptions. Among these HSC exemptions an exception is included for Sly Park Reservoir (Jenkinson Lake) pending the ability to meet certain criteria (HSC § 115842). On August 25, 2005, the State Senate passed Senate Bill No. 197 (SB 197) which amended the conditions in Health and Safety Code Section 115842 allowing body contact recreation in Sly Park Reservoir should certain provisions be met.

Much of SB 197 requires that EID meet DHS regulations and conditions on Jenkinson Lake. Many of the conditions that will be required by DHS can be inferred from the Draft "Guidelines for Evaluating Applications for Recreational Use Permits at Domestic Water Supply Reservoirs" (November 15, 2000), which reflects the current thinking of the DHS Division of Drinking Water and Environmental Management on recreational use in and around domestic water supply reservoirs even though it is not yet official policy. These guidelines include policies that should be followed, unless amended by DHS, to help ensure that continued recreational uses will be allowed in the reservoir.

### **Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and the San Joaquin River Basin**

The SWRCB and the RWQCBs are responsible for ensuring implementation and compliance with the provision of the federal Clean Water Act (CWA) and California's Porter-Cologne Water Quality Control Act. Specifically, the SWRCB is responsible for the quality of the State's water resources and ensures the proper allocation of those resources. Within the SWRCB there are nine RWQCBs, each of which are responsible for a major hydrologic unit within the state, and each is

responsible for the development and enforcement of water quality objectives as well as implementing Water Quality Control Plans for their respective area. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Within the Basin Plan, water quality standards can either be numeric or narrative criteria. However, where multiple beneficial uses exist for each water body, water quality standards must protect the most sensitive use. The CVRWQCB has developed beneficial uses and water quality standards in the Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and the San Joaquin River Basin.

Section 13260 of the California Water Code requires a Report of Waste Discharge (ROWD) for persons discharging or proposing to discharge waste that could affect the quality of the waters of the State. Generally, activities that involve discharges such as those to land or groundwater, or from diffused sources must file a ROWD with the appropriate Regional Board to obtain Waste Discharge Requirements (WDRs). WDRs may include effluent limitations, as well as monitoring and reporting requirements. WDR's are obtained by submitting Form 200 to the Regional Board. Additionally, all proposed septic systems must be installed and operated according to the guidelines established by the Regional Board. The Project would be required to obtain WDRs from the CVRWQCB as part of the review and approval of the proposed septic systems.

Regional Boards have the authority to implement water quality protection standards through the issuance of permits for discharges to water at locations within their jurisdiction and through multiple enforcement mechanisms. Beneficial Uses (BUs) for Jenkinson Lake and SPRA's creeks are those designated for the Cosumnes River based upon the "tributary rule" because they are tributaries to the Cosumnes. Water quality objectives for the Cosumnes River and its tributaries are specified in the Basin Plan prepared by the CVRWQCB in compliance with the federal CWA and the State Porter-Cologne Water Quality Control Act. The water quality criteria contained in the Basin Plan have been developed to protect the designated beneficial uses of the area. BUs for the Cosumnes River are listed below in Table 4.11 -2. Section III of the Basin Plan contains both narrative and numeric water quality objectives which are intended to protect these beneficial uses.

**Table 4.11 -2 — Cosumnes River Beneficial Uses**

<b>Beneficial Use</b>	<b>Type</b>
<b><i>Municipal</i></b>	
Municipal and Domestic Supply	Existing
<b><i>Agriculture</i></b>	
Irrigation	Existing
Stock Watering	Existing
<b><i>Recreation</i></b>	
Contact	Existing
Canoeing and Rafting	Existing (1)
Other Non Contact	Existing
<b><i>Freshwater Habitat</i></b>	
Warm	Existing
Cold	Existing
<b><i>Migration</i></b>	
Warm	Existing (3)
Cold	Existing (4)
<b><i>Spawning</i></b>	
Warm	Existing (3)
Cold	Existing (4)
<b><i>Wild</i></b>	
Wildlife Habitat	Existing

(1) Shown for streams and rivers only with the implication that certain flows are required for this beneficial use.

(3) Striped bass, sturgeon, and shad.

(4) Salmon and steelhead

### **Liquid Waste Disposal Permit (Septic)**

The El Dorado County Environmental Health Division is responsible for protecting public health and the environment from the potential adverse health and environmental impacts associated with on-site individual sewage disposal systems. An on-site individual sewage disposal system, also referred to as a septic system, is generally used for the disposal of wastewater from structures that do not have access to a public wastewater treatment facility. Wastewater from a septic system may contain many types of contaminants such as nitrates, harmful bacteria, chemicals, and viruses. If a septic system is designed incorrectly or is not constructed in conformance with applicable codes and construction practices, contaminants may enter the groundwater supply; or use of an incorrectly designed or constructed system may result in the ponding of sewage above ground causing direct exposure to people and animals.

Environmental Health’s responsibility is carried out and enforced through a permit process that includes the review of septic system design proposals, review of septic system design criteria, and inspection of new septic system construction and repair of existing systems to determine

conformance with applicable codes. They are also responsible for permitting and oversight of the proper disposal of liquid waste collected from licensed septage haulers through a separate permit issuance and inspection process.

### **4.11.3 Environmental Impact Thresholds/Criteria for Evaluation**

The project would be considered to have a significant adverse impact related to Hydrology and Water Quality if it would:

- a) Violate any water quality standard or waste discharge requirement;
- b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;
- f) Otherwise substantially degrade water quality;
- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map;
- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- i) Expose people or structures to significant risk of loss, injury, or death from flooding, including flooding as a result of the failure of a levee or dam; or
- j) Cause inundation by seiche, tsunami, or mudflow.

### **4.11.4 Environmental Impacts**

This section identifies and discusses potential hydrology and water quality impacts as they relate to the proposed Master Plan elements. The Impact Analysis for this section, including a discussion of the impacts, is provided in tabular format (Table 4.11 -3) to improve the efficiency of identifying impacts as well as to reduce redundancy. A detailed discussion of mitigation measures for each of the impacts can be found in Section 4.11.5.

**Table 4.11 -3 — Impacts Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Construct New Campsites</b>                      13.04 Dogwood Camp                      16.02 Primitive Camp Area</p> <p><b>Construct Post/Pier Structures</b>                      2.09 Scout/Youth Group Camp Mess Hall                      2.12 Scout/Youth Group Camp (North)                      2.13 Scout/Youth Group Camp (South)                      2.17 Scout/Youth Group Camp Mess Hall                      5.02 Jenkinson Camp                      10.04 Chimney Camp                      20.03 Retreat and Event Center                      20.05 Retreat and Event Center (Phase I)                      20.06 Retreat and Event Center (Phase II)</p> <p><b>Reconfigure Campsites</b>                      2.07 Scout/Youth Group Camp                      2.11 Scout/Youth Group Camp                      2.16 Scout/Youth Group Camp                      4.04 Pine Cone Camp                      4.05 Pine Cone Camp                      6.04 Sierra Camp (West)                      6.05 Sierra Camp (East)                      7.03 Stonebraker Camp                      8.03 Hilltop Camp                      9.02 Chimney/Hilltop Host Site                      10.02 Chimney Camp                      12.01 Hazel Creek Camp                      13.02 Dogwood Camp                      14.03 Rainbow Camp                      15.03 Kamloop Camp                      21.01 Main Group Campground (Relocate Host Site)</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>The construction process associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements through the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.</p> <p>In addition, the SPRA Design Standards and Guidelines have been developed to work together such that they protect the park's natural resources including surface and ground waters. Leveled camp sites, defined and protected pathways, containment and collection of trash, and native re-vegetation would all result in a final project that would continue to have a less than significant impact on SPRA's hydrology and water quality.</p>	<p>Less than Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
21.06 Main Group Campground (Tent Sites at Groups Sites #1 and #5) 21.09 Main Group Campground (Tent Sites at Group Site 32) 21.12 Main Group Campground (Tent Sites at Group Site #3 and #4) 21.14 Main Group Campground (Group Kitchens) 23.01 Black Oak Equestrian Camp		
<b>Construct New Day Use Area</b> 19.03 Bumpy Meadow Trailhead <b>Reconfigure Day Use Area</b> 7.04 Stonebraker Camp <b>Trail Construction</b> 1.03 Main Park Entrance 2.05 Scout/Youth Group Camp 7.01 Stonebraker Camp 12.04 Hazel Creek Camp 16.01 Primitive Camp Area 22.01 Mountain Bike Trail 23.05 Black Oak Equestrian Camp	<b>Thresholds a, e &amp; f</b> Construction activities associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.  In addition, the SPRA Design Standards and Guidelines have been developed to work together such that they protect the park's natural resources including its surface and ground waters. Leveled camp sites, defined and protected pathways, containment and collection of trash, and native re-vegetation would all result in a final project that would continue to have a less than significant impact on SPRA's hydrology and water quality.	Less than Significant Impact
<b>Bridges at Trail Crossings</b> 2.20 Scout/Youth Group Camp 12.07 Hazel Creek Camp	<b>Thresholds a, e &amp; f</b> Construction activities associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.  <b>Threshold h)</b> Although the SPRA Design Standards and Guidelines identify clear span bridges where	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
	feasible to minimize impacts to drainage corridors, it may be infeasible to keep all bridge construction out of the 100-year flood hazard area in individual locations, based on site-specific characteristics. The potential for flood flow redirection is not likely; however, certain designs may have the potential to impede flows.	
<b>Infrastructure</b> 2.18 Scout/Youth Group Camp (North) 2.19 Scout/Youth Group Camp (South) 5.04 Jenkinson Camp SPRA13 Increased Phone Service	<b>Thresholds a, e &amp; f</b> Construction activities associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.	Less than Significant Impact
<b>Waterless Toilets/Restrooms</b> 2.08 Scout/Youth Group (North) 2.14 Scout/Youth Group (South) 5.03 Jenkinson Camp 16.03 Primitive Camp Area 19.02 Bumpy Meadow Trailhead 20.04 Retreat and Event Center (1) 20.07 Retreat and Event Center (2) 24.02 Marina Parking Expansion  <b>Showers/Laundry Facilities</b> 2.10 Scout/Youth Group (North)- Showers Only 2.15 Scout/Youth Group (South)- Showers Only 6.06 Sierra Camp 21.02 Main Group Campground	<b>Thresholds a, e &amp; f</b> Construction activities associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.  See Soils & Geology (Section 4.9) for an impact analysis of liquid waste disposal associated with these projects.  See Soils & Geology (Section 4.9) for an impact analysis of grey water disposal associated with these projects.	Less than Significant Impact
<b>Reconfigure Existing Parking</b> 1.05 Main Park Entrance 4.01 Pine Cone Camp 6.01 Sierra Camp 10.01 Chimney Camp (Day Use)	<b>Thresholds a, e &amp; f</b> Construction activities associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Construct New Parking Areas</b></p> <p>2.02 Scout/Youth Group Camp (North)</p> <p>3.01 Miwok Trailhead</p> <p>4.02 Pine Cone Camp</p> <p>6.07 Sierra Camp Shower/laundry</p> <p>11.02 Lake Drive Stabilization (Day Use)</p> <p>12.03 Hazel Creek Camp (Day Use and Trailhead)</p> <p>18.01 The Dog Park</p> <p>19.01 Bumpy Meadow Trailhead</p> <p>20.01 Retreat and Event Center (East)</p> <p>20.02 Retreat and Event Center (West)</p> <p>21.03 Main Group Campground/Shower Parking</p>	<p>environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.</p> <p>Road and parking lot runoff from asphalt or concrete areas regularly used by vehicles would affect water quality. Petroleum based hydrocarbon substances used by vehicles (e.g. fuel, oil, coolant, hydraulic fluid, etc.) will drip from older and poorly maintained vehicles. These drippings would collectively add up until washed off, which typically occurs during the first few rain events each year, and affecting surface water quality. However, the SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the water quality impacts to a less than significant level.</p> <p>All impervious surfaces, including roads, parking lots and roof tops, prevent water from infiltrating into the soil resulting in increased surface water runoff during rain events. This increase in runoff alters and impacts the hydrology and drainage of the project. The SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the hydrology impacts to a less than significant level.</p> <p><i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	
<p><b>Marina Parking Expansion</b></p> <p>24.01 Marina Parking Expansion</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>Construction activities associated with this project would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.</p> <p>Road and parking lot runoff from asphalt or concrete areas regularly used by vehicles would affect water quality. Petroleum based hydrocarbon substances used by vehicles (e.g. fuel, oil, coolant, hydraulic fluid, etc.) will drip from older and poorly maintained vehicles. These drippings will collectively add up until washed off, which typically occurs during the first few rain events each year, affecting surface water quality. However, the SPRA Design</p>	<p>Potentially Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
	<p>Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the water quality impacts to a less than significant level.</p> <p>All impervious surfaces, including roads, parking lots and roof tops, prevent water from infiltrating into the soil resulting in increased surface water runoff during rain events. This increase in runoff alters and impacts the hydrology and drainage of the project site. The SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the hydrology impacts to a less than significant level.</p>	
<p><b>Realign/Improve Campground Access Roads</b></p> <p>2.01 Scout/Youth Group Camp</p> <p>2.03 Scout/Youth Group Camp (North)</p> <p>2.04 Scout/Youth Group Camp (South)</p> <p>2.06 Scout/Youth Group Camp (South)</p> <p>4.03 Pine Cone Camp</p> <p>5.01 Jenkinson Camp</p> <p>6.02 Sierra Camp (West)</p> <p>6.03 Sierra Camp (East)</p> <p>7.02 Stonebraker Camp</p> <p>8.01 Hilltop Camp</p> <p>9.01 Chimney/Hilltop Host Site</p> <p>12.02 Hazel Creek Camp</p> <p>13.03 Dogwood Camp</p> <p>21.04 Main Group Campground (Group Site #1)</p> <p>21.05 Main Group Campground (Group Site #5)</p> <p>21.08 Main Group Campground (Group Site #2)</p> <p>21.11 Main Group Campground (Group Sites #3 and #4)</p> <p>23.02 Black Oak Equestrian Center</p> <p>25.01 Lake Drive Access Improvements</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>Construction activities associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.</p> <p>Road and parking lot runoff from asphalt or concrete areas regularly used by vehicles would affect water quality. Petroleum based hydrocarbon substances used by vehicles (e.g. fuel, oil, coolant, hydraulic fluid, etc.) would drip from older and poorly maintained vehicles. These drippings would collectively add up until washed off, which typically occurs during the first few rain events each year, affecting surface water quality. However, the SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the water quality impacts to a less than significant level.</p> <p>All impervious surfaces, including roads, parking lots and roof tops, prevent water from infiltrating into the soil resulting in increased surface water runoff during rain events. This increase in runoff alters and impacts the hydrology and drainage of the project. The SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the hydrology impacts to a less than significant level.</p>	<p>Potentially Significant Impact</p>
<p><b>Reconfigure Main Entrance</b></p> <p>1.01 Main Park Entrance</p> <p>1.02 Main Park Entrance</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>Construction activities associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g.</p>	<p>Potentially Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
	<p>asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.</p> <p>Road and parking lot runoff from asphalt or concrete areas regularly used by vehicles will affect water quality. Petroleum based hydrocarbon substances used by vehicles (e.g. fuel, oil, coolant, hydraulic fluid, etc.) will drip from older and poorly maintained vehicles. These drippings will collectively add up until washed off, which typically occurs during the first few rain events each year, affecting surface water quality. However, the SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the water quality impacts to a less than significant level.</p> <p>All impervious surfaces, including roads, parking lots and roof tops, prevent water from infiltrating into the soil resulting in increased surface water runoff during rain events. This increase in runoff alters and impacts the hydrology and drainage of the project. The SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the hydrology impacts to a less than significant level.</p> <p>See Soils &amp; Geology (Section 4.9) for an impact analysis of RV wastewater dump station and associated holding tank and leach field.</p>	
<p><b>Install Interpretive/Trail Signage/Kiosks</b></p> <p>1.06 Main Park Entrance  3.04 Miwok Trailhead  7.05 Stonebraker Camp  12.10 Hazel Creek Camp  19.05 Bumpy Meadow Trailhead</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>Construction activities associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.</p>	<p>Potentially Significant Impact</p>
<p><b>Construct Visitor Center/New Maintenance Shop</b></p> <p>1.04 Main Park Entrance  1.07 Main Park Entrance</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>Construction activities associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g.</p>	<p>Potentially Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
	<p>asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.</p> <p>Road and parking lot runoff from asphalt or concrete areas regularly used by vehicles would affect water quality. Petroleum based hydrocarbon substances used by vehicles (e.g. fuel, oil, coolant, hydraulic fluid, etc.) would drip from older and poorly maintained vehicles. These drippings would collectively add up until washed off, which typically occurs during the first few rain events each year, affecting surface water quality. However, the SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the water quality impacts to a less than significant level.</p> <p>All impervious surfaces, including roads, parking lots and roof tops, prevent water from infiltrating into the soil resulting in increased surface water runoff during rain events. This increase in runoff alters and impacts the hydrology and drainage of the project. The SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the hydrology impacts to a less than significant level.</p>	
<p><b>Construct New Facilities</b> 18.02 The Dog Park</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>Construction activities associated with this project would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.</p> <p>Dog urination and defecation in such a relatively small area would create a nutrient and fecal coliform source. If allowed to enter surface water drainages these nutrients and fecal coliform sources would adversely affect water quality. However, by defining the boundary of the dog park and keeping potential contaminants localized, the natural vegetation would utilize the increased nutrients, converting it to biomass instead of a water pollutant.</p>	<p>Less than Significant Impact</p>

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>Fine Arts Center</b> 17.01 Sugarloaf Fine Arts Center</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>Construction activities associated with these projects would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan would work together to reduce construction (temporary) impacts to a less than significant level.</p> <p>Road and parking lot runoff from asphalt or concrete areas regularly used by vehicles would affect water quality. Petroleum based hydrocarbon substances used by vehicles (e.g. fuel, oil, coolant, hydraulic fluid, etc.) would drip from older and poorly maintained vehicles. These drippings would collectively add up until washed off, which typically occurs during the first few rain events each year, affecting surface water quality. However, the SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the water quality impacts to a less than significant level.</p> <p>All impervious surfaces, including roads, parking lots and roof tops, prevent water from infiltrating into the soil resulting in increased surface water runoff during rain events. This increase in runoff would alter the hydrology and drainage of the project site. The SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible, which would reduce the hydrology impacts to a less than significant level.</p>	Potentially Significant Impact
<p><b>Rehabilitate Vegetation</b> 1.08 Main Park Entrance 4.07 Pine Cone Camp 6.08 Sierra Camp 6.09 Sierra Camp 7.06 Stonebraker Camp 8.04 Hilltop Camp 10.03 Chimney Camp 12.05 Hazel Creek Camp 12.06 Hazel Creek Camp 12.08 Hazel Creek Camp 12.09 Hazel Creek Camp 13.01 Dogwood Camp</p>	<p>Native vegetation rehabilitation would help protect soils from erosion, filter out potential pollutants, and improve infiltration rates, resulting in positive improvements to hydrology and water quality of the project.</p>	No Impact

Component ID/Project Name	Impact Analysis	Level of Significance
14.02 Rainbow Camp 15.02 Kamloop Camp 21.07 Main Group Campground (Group Sites #1 and #5) 21.10 Main Group Campground (Group Site #2) 21.13 Main Group Campground (Group Sites #3 and #4) 23.03 Black Oak Equestrian Camp FMP Plant/maintain Seedlings for Forest Health		
<b>Restrict Access</b> 3.02 Miwok Trailhead 3.03 Miwok Trailhead 4.06 Pine Cone Camp (Shore Access) 8.02 Hilltop Camp 14.01 Rainbow Camp (Creek Access Control) 15.01 Kamloop Camp (Creek Access Control) 19.04 Bumpy Meadow Trailhead 23.04 Black Oak Equestrian Center 23.06 Black Oak Equestrian Center	Restricting access would help with vegetation rehabilitation and would decrease soil compaction, thereby improving infiltration rates, positively improving hydrology and water quality within the project area.	No Impact
<b>Dock Expansion</b> 7.07 Stonebraker Camp	<b>Thresholds a, &amp; f</b> While minimal, construction activities associated with this project would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants.  The greatest potential impact to water quality would result from the increased use of rented motorized boats. However, newer 2-stroke and 4-stroke engines that are currently sold are much more environmentally friendly, with reduced emissions and decreased maintenance requirements, reducing their impacts to water quality.  Fuel containment requirements would be regulated through the DHS Water Supply Permit	Less than Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
	which is designed to maintain a high level of water quality related to Jenkinson Lake's status as a drinking water reservoir.	
<p><b>Lake Drive Stabilization</b> 11.01 Lake Drive Stabilization</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>Construction activities associated with this project would have the potential to violate water quality standards and/or waste discharge requirements by resulting in the creation of a source for sediment, petroleum hydrocarbons and other construction chemicals (e.g. asphalt, Portland cement, and paint). The SWRCB's NPDES permit process for construction sites would address prevention and controlling discharges of these and other potential construction pollutants. The NPDES requirements, in conjunction with the environmentally proactive Design Standards and Guidelines set forth in the SPRA Master Plan are designed to work together to reduce construction (temporary) impacts to a less than significant level. However, the shore stabilization work would present an extra challenging set of circumstances due to the fact that part of the active work zone would be located within the Lake's ordinary high water elevation.</p> <p>Road and parking lot runoff from asphalt or concrete areas regularly used by vehicles would affect water quality. Petroleum based hydrocarbon substances used by vehicles (e.g. fuel, oil, coolant, hydraulic fluid, etc.) would drip from older and poorly maintained vehicles. These drippings would collectively add up until washed off, which typically occurs during the first few rain events each year, affecting surface water quality. However, the SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible which would reduce the water quality impacts to a less than significant level.</p> <p>All impervious surfaces, including roads, parking lots and roof tops, prevent water from infiltrating into the soil resulting in increased surface water runoff during rain events. This increase in runoff would have the potential to alter and impact the hydrology and drainage within the project area. The SPRA Design Standards and Guidelines call for the use of infiltration trenches and sediment basins where feasible, which would reduce the hydrology impacts to a less than significant level.</p> <p>According to the SPRA Design Standards and Guidelines shore stabilization should use bioengineering methods to armor and stabilize the shore, where feasible. Once the bioengineering practices were implemented and established, shore line erosion should be reduced to a less than significant level of impact related to water quality.</p> <p><i>Note: Component 11.01 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	Potentially Significant Impact

Component ID/Project Name	Impact Analysis	Level of Significance
<p><b>SPRA Administration</b></p> <p>SPRA01 Increased Staffing            SPRA02 Staff Training            SPRA03 Reservation Systems Software            SPRA05 Website Development            SPRA06 Proactive Maintenance            SPRA07 Annual Maintenance Work Plan            SPRA08 Volunteer Maintenance Events</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>The Proactive Maintenance, Annual Maintenance Work Plan, and Volunteer Maintenance Events would all provide added operational benefits resulting in improvements to and maintenance of SPRA's hydrology and water quality.</p>	<p>No Impact</p>
<p><b>Planning</b></p> <p>SPRA04 Day-Use Carrying Capacity            SPRA09 Trail Maintenance Plan            SPRA11 Emergency Preparedness Plan</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>The project proposes to better define the limits of the parking areas, day use areas, camp sites; and therefore would prevent continued vegetation and ground disturbance outside of designated areas protecting SPRA's hydrology and water quality.</p> <p>The development of a Trail Maintenance Plan would help maintain the integrity of the trails and protect areas in non-designated walking areas, related to the protection of SPRA's hydrology and water quality.</p>	<p>No Impact</p>
<p><b>Fire Prevention</b></p> <p>SPRA10 Fire Prevention</p>	<p><b>Thresholds a, e &amp; f</b></p> <p>The SPRA Master Plan calls for controlled burns, removal of ladder trees and tree thinning to protect against fires. BMPs would be implemented to protect hydrology and water quality. Examples of BMPs include, but are not limited to: using temporary mulching, seeding or other stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan, and using barriers, such as straw wattles or silt fencing, to minimize the amount of uncontrolled runoff that could enter drains or surface water.</p>	<p>Less than Significant Impact</p>
<p><b>Law Enforcement</b></p> <p>SPRA12 Law Enforcement</p>	<p>Law enforcement activities should have no impact on hydrology and water quality.</p>	<p>No Impact</p>

#### 4.11.5 Mitigation Measures

This section identifies mitigation measures that shall be implemented to reduce the impacts for each of the proposed projects as identified in Table 4.11 -3. Each of the mitigation measures are first discussed below in detail and then assigned to the appropriate project(s) in Table 4.11 -4.

**Mitigation Measure HWQ-1:** Proper timing of construction and maintenance activities throughout the year such that potential impacts to water quality are minimized or avoided.

The timing of construction activities can have a large impact on local water quality. Active grading, clearing, or other forms of soil disturbance during the rainy season or during times of snow melt can greatly increase the chance of erosion and sediment conveyance via surface runoff. By limiting active construction to the dry season (May 15 to October 15) as identified in the County's Erosion Control Ordinance, the risk of construction related pollutants entering waterbodies via storm water runoff is avoided except for possible summer thunderstorms.

Likewise, working in and around creeks and the Lake should be done in the late summer or early fall. During this time of year, the smaller creeks go dry, the larger creeks have low flows, and the lake is at or near its lowest annual storage capacity.

**Mitigation Measure HWQ-2:** Storm water runoff from construction areas shall be pre-treated, especially first flush, from roads and parking lots before discharging into existing waterways.

The El Dorado County General Plan Policy 5.4.1.1 "Require(s) storm drainage systems... meet the National Pollution Discharge Elimination System (NPDES) requirements, and preserve natural resources such as wetlands and riparian areas." The use of vegetated swales or "(i)nfiltration trenches and sediment basins" as designated by the SPRA Master Plan Design Standards and Guidelines are preferred for their environmental and aesthetic benefits. If infeasible, then other non-bioengineering techniques can be used such as storm water separators to remove first flush oils and other pollutants as stated in the General Plan Policy 7.3.2.3.

**Mitigation Measure HWQ-3:** A creek drainage study shall be prepared for bridged trail crossings, and design the bridge to either span the 100-year flood hazard or to not impede or redirect flood flows.

It is difficult to determine if the bridges would be within the 100-year flood hazard zone because of limited creek hydraulic data and bridge design information. Therefore, it is not known if they impeded or redirect flood flows. A creek hydrologic/drainage study shall be prepared by a licensed professional to determine the 100-year flood plain within the area of the crossing using a County approved method (e.g. HEC-HMS, HEC-RAS, etc.). If the crossing is to be placed within the 100-year flood plain then an additional study shall be conducted and approved by the County that shows the design will not impede or redirect flood flows.

**Table 4.11 -4 — Proposed Mitigation Measures to Reduce or Eliminate Potential Impacts  
Associated with Implementation of the Sly Park Recreation Area Master Plan**

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Bridges at Trail Crossings</b> 2.20 Scout/Youth Group Camp 12.07 Hazel Creek Camp</p>	<p><b>HWQ-3:</b> Preparing a hydrology/drainage study will ensure that 100-year flood plain is avoided by the bridges, or if circumstanced require all or part of the bridge to be placed within the 100-year flood plain then the design will be such that it does not impede or redirect flood flows.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Reconfigure Existing Parking</b> 1.05 Main Park Entrance 4.01 Pine Cone Camp 6.01 Sierra Camp 10.01 Chimney Camp (Day Use)</p>	<p><b>HWQ-1:</b> Work associated with the projects will avoid polluting storm water runoff by working during the dry season (May 15 to October 15). <b>HWQ-2:</b> Treatment of runoff from impervious surfaces will help remove the majority of pollutants collected from roads and parking lots. Swales, trenches and basins provide storage and infiltration to minimize drainage impacts.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Construct New Parking Areas</b> 2.02 Scout/Youth Group Camp (North) 3.01 Miwok Trailhead 4.02 Pine Cone Camp 6.07 Sierra Camp 11.02 Lake Drive Stabilization (Day Use) 12.03 Hazel Creek Camp (Day Use and Trailhead) 18.01 The Dog Park 19.01 Bumpy Meadow Trailhead 20.01 Retreat and Event Center (East) 20.02 Retreat and Event Center (West) 21.03 Main Group Campground/Show er Parking</p>	<p><b>HWQ-1:</b> Work associated with the projects will avoid polluting storm water runoff by working during the dry season (May 15 to October 15). <b>HWQ-2:</b> Treatment of runoff from impervious surfaces will help remove the majority of pollutants collected from roads and parking lots. Swales, trenches and basins provide storage and infiltration to minimize drainage impacts.</p> <p><i>Note: Component 11.02 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Marina Parking Expansion</b> 24.01 Marina Parking Expansion</p>	<p><b>HWQ-1:</b> Work associated with the projects will avoid polluting storm water runoff by working during the dry season (May 15 to October 15). <b>HWQ-2:</b> Treatment of runoff from impervious surfaces will help remove the majority of pollutants collected from roads and parking lots. Swales, trenches and basins provide storage and infiltration to minimize drainage impacts.</p>	<p>Less than Significant with Mitigation Incorporation</p>

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Realign/Improve Campground Access Roads</b></p> <p>2.01 Scout/Youth Group Camp</p> <p>2.03 Scout/Youth Group Camp (North)</p> <p>2.04 Scout/Youth Group Camp (South)</p> <p>2.06 Scout/Youth Group Camp (South)</p> <p>4.03 Pine Cone Camp</p> <p>5.01 Jenkinson Camp</p> <p>6.02 Sierra Camp (West)</p> <p>6.03 Sierra Camp (East)</p> <p>7.02 Stonebraker Camp</p> <p>8.01 Hilltop Camp</p> <p>9.01 Chimney/Hilltop Host Site</p> <p>12.02 Hazel Creek Camp</p> <p>13.03 Dogwood Camp</p> <p>21.04 Main Group Campground (Group Site #1)</p> <p>21.05 Main Group Campground (Group Site #5)</p> <p>21.08 Main Group Campground (Group Site #2)</p> <p>21.11 Main Group Campground (Group Sites #3 and #4)</p> <p>23.02 Black Oak Equestrian Center</p> <p>25.01 Lake Drive Access Improvements</p>	<p><b>HWQ-1:</b> Work associated with the projects will avoid polluting storm water runoff by working during the dry season (May 15 to October 15).</p> <p><b>HWQ-2:</b> Treatment of runoff from impervious surfaces will help remove the majority of pollutants collected from roads and parking lots. Swales, trenches and basins provide storage and infiltration to minimize drainage impacts.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Reconfigure Main Entrance</b></p> <p>1.01 Main Park Entrance</p> <p>1.02 Main Park Entrance</p>	<p><b>HWQ-1:</b> Work associated with the projects will avoid polluting storm water runoff by working during the dry season (May 15 to October 15).</p> <p><b>HWQ-2:</b> Treatment of runoff from impervious surfaces will help remove the majority of pollutants collected from roads and parking lots. Swales, trenches and basins provide storage and infiltration to minimize drainage impacts.</p>	<p>Less than Significant with Mitigation Incorporation</p>

Component ID/Project Name	Mitigation Measures	Resulting Level of Significance
<p><b>Install Interpretive/Trail Signage/Kiosks</b></p> <p>1.06 Main Park Entrance  3.04 Miwok Trailhead  7.05 Stonebraker Camp  12.10 Hazel Creek Camp  19.05 Bumpy Meadow Trailhead</p>	<p><b>HWQ-1:</b> Work associated with the projects will avoid polluting storm water runoff by working during the dry season (May 15 to October 15).</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Construct Visitor Center/New Maintenance Shop</b></p> <p>1.04 Main Park Entrance  1.07 Main Park Entrance</p>	<p><b>HWQ-1:</b> Work associated with the projects will avoid polluting storm water runoff by working during the dry season (May 15 to October 15).</p> <p><b>HWQ-2:</b> Treatment of runoff from impervious surfaces will help remove the majority of pollutants collected from roads and parking lots. Swales, trenches and basins provide storage and infiltration to minimize drainage impacts.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Fine Arts Center</b></p> <p>17.01 Sugarloaf Fine Arts Center</p>	<p><b>HWQ-1:</b> Grading, trenching, framing and other outdoor work associated with the projects will avoid polluting storm water runoff by working during the dry season (May 15 to October 15).</p> <p><b>HWQ-2:</b> Treatment of runoff from impervious surfaces will help remove the majority of pollutants collected from roads and parking lots. Swales, trenches and basins provide storage and infiltration to minimize drainage impacts.</p>	<p>Less than Significant with Mitigation Incorporation</p>
<p><b>Lake Drive Stabilization</b></p> <p>11.01 Lake Drive Stabilization</p>	<p><b>HWQ-1:</b> Performing the bank stabilization for this project during the late summer and early fall will help avoid active construction adjacent or below the lake water level, thereby avoiding direct water quality impacts to the lake.</p> <p><b>HWQ-2:</b> Treatment of runoff from impervious surfaces will help remove the majority of pollutants collected from roads and parking lots. Swales, trenches and basins provide storage and infiltration to minimize drainage impacts.</p> <p><i>Note: Component 11.01 was initiated during preparation of this final Master Plan as an emergency response to accelerated erosion. The project will be completed in accordance with the Master Plan and its design standards and guidelines.</i></p>	<p>Less than Significant with Mitigation Incorporation</p>

## **4.12 Public Services**

### **4.12.1 Existing Conditions**

Public services available within SPRA include law enforcement, fire protection, and emergency medical services. There are currently two categories of recreational use within SPRA—day use and overnight camping. SPRA park rangers are not deputized, do not have law enforcement authority, and therefore rely on outside services provided by entities.

As discussed in the NOP prepared for the SPRA Master Plan Master EIR (Appendix A), implementation of the SPRA Master Plan and development of individually proposed projects would not result in the generation of increased population or students; therefore no impacts related to schools or parks would result. Potential impacts related to schools or parks are not further discussed within this section. Recreation is discussed within Section 4.13 of this Draft Master EIR.

#### **4.12.1.1 Fire Protection and Emergency Medical Services**

Fire protection services within SPRA are provided by the El Dorado County Fire Protection District, the CDF and the USFS. The fire station closest to SPRA is Station Number 17 of the El Dorado County Fire Protection District, at 6430 Pony Express Trail in Pollock Pines. This station houses a single engine and an ambulance. The USFS operates the Sierra Springs Fire Station located on Sly Park Road, west of SPRA, and CDF operates a station at Mount Danaher northwest of SPRA, in Camino.

The minimum level of service for fire protection response in Rural Centers and Rural Regions is 15 to 45 minutes (El Dorado County Planning Department, 2004). The El Dorado County fire Protection District has established a response time goal of 20 minutes for 90 percent of calls. The existing staffing ratio is 1.16 firefighters per 1,000 residents (El Dorado County Planning Department, 2003).

Additional information relevant to fire protection and wildland fire is included in Hazards and Hazardous Materials, Section 4.10 of this Draft Master EIR.

#### **Emergency Medical Services**

Emergency medical services within the County include first responders, medical transportation, and emergency health care. CDF and local fire districts function as first responders, although service may also be provided by the Sheriff's Department, the County Environmental Management Department, the California Highway Patrol, or trained search and rescue crews. Similarly, CDF and local fire protection districts within the County provide ambulance and paramedic services. Staffing and equipment for CDF and local fire protection stations often includes equipment for fire protection as well as emergency medical services (El Dorado County Planning Department, 2003).

#### ***County Emergency Medical Services Agency***

The County Emergency Medical Services Agency (EMSA) is a division of the County's Public Health Department. The EMSA coordinates and manages emergency medical services systems within the County. The agency also contracts for ambulance services, handles performance

monitoring, enforces standards, and acts as an arbitrator for citizen complaints. EMSA coordinates with the County Office of Emergency Services (OES) to develop emergency response plans for large-scale disasters.

The EMSA, in accordance with federal and state guidelines, has established the response time for rural areas as 20 minutes for 90 percent of calls and wilderness areas within the county as “as soon as possible.”

#### **4.12.1.2 Law Enforcement**

The El Dorado County Sheriff’s Department (Sheriff’s Department) provides law enforcement services within SPRA. The Patrol Division of the Sheriff’s Department is made up of 150 employees patrolling over 1800 square miles, providing vehicular as well as boat patrols. Jenkinson Lake is patrolled by jet boat. Other divisions within the Sheriff’s Department include: Citizen’s Academy, K-9 Patrol, the Sheriff’s Team of Active Retirees (S.T.A.R.), and SWAT. A volunteer program is also administered by the Sheriff’s Department. The Sheriff’s Department currently maintains a station at 6340 Pony Express Trail in Pollock Pines. The station is approximately one-half mile from the SPRA Main Entrance.

#### **Boat Patrols**

Between Memorial Day and Labor Day, one full-time sergeant patrols Jenkinson Lake, the Middle Fork of the American River, and Folsom Lake. During the “off-season” the shoreline is generally patrolled by one full-time officer. Lake patrols typically focus on violations related to speed, direction, registration, and alcohol-related incidences. Scheduling of patrols is generally irregular to avoid predictability.

#### **Volunteer Patrols**

S.T.A.R. patrols do not have law enforcement capacity, but do provide an element of observation within SPRA recreational facilities. S.T.A.R. volunteers patrol regular campgrounds within SPRA during daylight hours, midweek, with occasional visits to the group campgrounds.

#### **Contractual Services**

The Sheriff’s Department has the ability to contract with other agencies for law enforcement services and is currently under contract with the Eldorado National Forest to provide one full-time deputy. These positions are funded at an overtime rate and must rely on the existing pool of sworn officers currently employed by the Department. As such, the Department is not always able to offer these services if slots for voluntary overtime are not filled. Additional staffing would require authorization by the Board of Supervisors.

The Sheriff’s Department has not established a countywide goal for response time in Rural Centers and Rural Regions. Ideal response times in rural and urban areas vary based on the priority and by the area of the call. The acceptable Level of Service ratio identified by the El Dorado County General Plan is established at a minimum of one deputy for every 1,000 residents. Current staffing numbers include 185 sworn officers and additional staffing of non-sworn personnel. Existing staffing levels within the County exceed the level of service standards specified by the General Plan, with an existing service ratio of approximately 1.4 officers per 1,000 residents (El Dorado County Planning Department, 2003).

### **4.12.1.3 Project Setting**

The availability of public services within SPRA is currently restricted by several factors, including constrained access and circulation, inadequate communication facilities and service, as well as Sheriff's Department staffing levels. As component of the SPRA Master Plan, EID is proposing access and circulation improvements within SPRA. Details regarding individual projects can be found in the Project Description, Chapter 3 of this Draft Master EIR. The provision of communications facilities is discussed in Utilities and Service Systems, Section 4.14 of this Draft Master EIR.

Incidences requiring law enforcement within SPRA are largely alcohol-related and often involve some level of domestic dispute. The elimination of personal watercraft on the lake is attributed to a decrease in violations related to water-based recreational activities. However, recreational tourists complain about slow response times, non-responsiveness to calls for law enforcement, and a lacking a capacity for arrest.

## **4.12.2 Regulatory Setting**

### **4.12.2.1 Federal**

#### **Fire Protection**

There are no federal regulations pertaining to fire protection services relevant to the proposed project.

#### **Police Protection**

There are no federal regulations pertaining to police protection services relevant to the proposed project.

### **4.12.2.2 State**

#### **Fire Protection**

There are no state regulations pertaining to fire protection services relevant to the proposed project.

#### **Police Protection**

There are no state regulations pertaining to police protection services relevant to the proposed project.

### **4.12.2.3 Local**

#### **County of El Dorado**

##### ***Fire Protection***

##### **Fire District Improvement Fee**

Chapter 13.20 of the County Code establishes the Fire District Improvement Fee, which is paid by developers at the issuance of building permits for all new discretionary and ministerial projects. The fee is used to finance public improvements and equipment for fire protection

purposes. Each building permit applicant in the County pays a fair share of the total cost of improvements and equipment needed to serve the development proposed.

#### County Emergency Medical Service and Medical Transportation Ordinance

The purpose of the County Emergency Medical Service and Medical Transportation Ordinance, also known as the Ambulance Ordinance, is to ensure a consistent level of service consistent with the minimum acceptable standards established by the State of California. This ordinance sets the standards and/or definitions for emergency medical services and medical transport, personnel and training requirements, equipment and supply requirements, response times, communication requirements, and medical transportation service requirements. The ordinance requires the availability of ambulance service 24 hours a day, 7 days a week.

### **4.12.3 Environmental Impact Thresholds/Criteria for Evaluation**

For the purposes of this Draft Master EIR impacts to Public Services are considered significant if the proposed project would:

- Result in the construction or modification of fire protection facilities to maintain acceptable levels of service ratios, response times, or other performance objectives, the construction or modification of which could result in substantial adverse environmental effects;
- Result in the construction or modification of police protection facilities to maintain acceptable levels of service ratios, response times, or other performance objectives, the construction or modification of which could result in substantial adverse environmental effects; or
- Result in the level of service for emergency service to decline to a level below established levels of service.

### **4.12.4 Environmental Impacts**

**Implementation of the SPRA Master Plan and development of individually proposed projects would result in the construction or modification of fire protection facilities to maintain acceptable levels of service ratios, response times, or other performance objectives, the construction or modification of which could result in substantial adverse environmental effects.**

Primary responsibility for fire protection within SPRA is held by the El Dorado County Fire Protection District which serves the project area with Station Number 17. In addition, CDF and the USFS share responsibilities for fire protection. These agencies all currently have fire protection facilities within the vicinity of SPRA. As discussed in Hazards and Hazardous Materials, Section 4.10 of this Draft Master EIR, EID is implementing a series of proactive planning and management strategies to reduce the risk of fire within SPRA, including improved access and circulation, preparation of an emergency preparedness and evacuation plan, and forest management activities emphasizing fire risk reduction through fuel load management and management for forest health.

However, the Master Plan proposes the construction of new public facilities as well as the reconfiguration of existing facilities within SPRA, which would have the potential to create additional demand for fire protection services, including additional equipment, within the area. Pursuant to Section 13.20 of the County Ordinance Code, developers are required to pay a fire district assessment fee to provide for the provision of adequate fire protection equipment and facilities. Through approval of the special use permit by the County, EID would be responsible for the payment of Fire District Improvement Fees as required by the County Code. These fees would be used to fund additional fire protection as needed by the District for additional equipment; therefore impacts are considered **less than significant**. No mitigation is warranted.

**Implementation of the SPRA Master Plan and development of individually proposed projects would result in the construction or modification of police protection facilities to maintain acceptable levels of service ratios, response times, or other performance objectives, the construction or modification of which could result in substantial adverse environmental effects.**

To provide and maintain adequate public services, as required by the General Plan, consultation with the responsible service providing agency (Sheriff's Department) is required through the discretionary review process by the County. Although the Sheriff's Department has not developed a Facility Master Plan to identify future facility needs (El Dorado County Planning Department, 2003), approval of discretionary development would require a determination be made by the Sheriff's Department as to the adequacy of public services related to project development. Where project-related demand is determined to exceed the capacity of the provider, project approval is conditioned to require expanded facilities or services to meet project demands. Alternatively, a finding may be made that a Capitol Improvement Plan (CIP) is in place and funded to provide for increased service capacity.

General Plan Policy 5.1.2.2 prohibits the reduction of public services below established levels of service related to discretionary approval for any project. As mitigation to ensure service levels do not decrease below established levels and to ensure adequate facilities and equipment, General Plan Policy 5.1.2.3 requires new development to pay a proportionate share of funding for the provision of services. These policies ensure that funding is provided for the development of law enforcement facilities coincidental to the demands generated by development.

Although the existing ratio of offices per capita within the County exceeds the level of service standards specified by the General Plan, law enforcement services are currently not adequate to address problems associated with recreational uses within SPRA, and additional staffing is needed for park patrol and enforcement. EID proposes funding for one-quarter full-time equivalent sheriff's deputy related to implementation of the SPRA Master Plan and development of individually proposed projects. Through discretionary review of the special use permit for the SPRA Master Plan by the County, EID would be responsible for the payment of a proportionate share of funding for law enforcement facilities as required by General Plan Policy 5.1.2.3; therefore, impacts are considered **less than significant**. No mitigation is warranted.

**Implementation of the SPRA Master Plan and development of individually proposed projects would not result in a decline of emergency service to a level below established levels of service.**

Emergency ambulance service is mandated within El Dorado County by the County Emergency Medical Service and Medical Transportation Ordinance, which requires emergency service in accordance with minimum acceptable standards as specified by state law. The EMSA defines the minimum acceptable level of service for rural areas as 20 minutes and “as soon as possible” for wilderness areas. As discussed above, through discretionary review, EID would be required to pay a proportionate share of funding related to the provision of public services, including ambulance services, pursuant to General Plan policy 5.1.2.3. Implementation of the SPRA Master Plan and individual projects therefore, would not result in a level of service below established levels of service for emergency medical services. Therefore, impacts are considered **less than significant**. No mitigation is warranted.

#### **4.12.5 Mitigation Measures**

None warranted.

## **4.13 Recreation**

### **4.13.1 Existing Conditions**

SPRA is a year-round outdoor recreation area located in the foothills of El Dorado County. SPRA offers camping, picnicking, fishing, biking, hiking, swimming, boating, water-skiing, and equestrian trails. Designated Day use areas are scattered throughout SPRA. Camping areas include group and individual campgrounds as well as an equestrian and a handicap campground. A well used trail system encircles Jenkinson Lake. One trail is solely designated as an equestrian trail and the second trail is intended to accommodate hikers as well as bicyclists. Use fees are established for day use, camping, and group area use.

SPRA provides a variety of campsites throughout the Park. There are currently eight distinct family campgrounds located along the north shore of Jenkinson Lake. These campgrounds offer 4 to 55 campsites each for a total of 159 that are available by reservation or on a first come basis if not reserved. There are two major group campsite areas that contain 9 designated campsites within SPRA. These campsites can hold from 50-100 people and are commonly used for family gatherings and as day camp areas. There are two designated day camp areas that are dedicated for the use of Girl Scouts and Boy Scouts each summer. The equestrian campground provides 13 campsites and can accommodate up to 100 people. Ten designated day-use areas are located along the west and north shores of the lake which provide many recreational activities.

Jenkinson Lake has a surface area of 645 acres and has the capacity to store 41,000 acre-feet of water. The lake draws many visitors, campers, and boaters each year. There are two boat launch ramps located at SPRA, one is located on the west end of the lake and one is located on the north shore. Visitors can rent pedal boats, fishing boats, and kayaks along the north shore of the lake. The Marina is along the western part of the lake and has 78 slips for boating activities.

EID also provides additional recreational opportunities within the District along both the Highway 50 and Highway 88 corridors. In addition to SPRA, EID operates the Forebay Reservoir off the Highway 50 corridor. EID also operates three passive recreational areas along the Highway 50 corridor to include Echo Lake, Lake Aloha, and Pyramid Creek/Horsetail Falls. Five additional recreational areas are along the Highway 88 corridor to include Sandy Cove Picnic Area, Ferguson Point Picnic Area, Oyster Creek Roadside Rest, Caples Lake Trailhead, and Woods Creek.

### **4.13.2 Regulatory Setting**

This regulatory framework identifies the local statutes and policies that relate to recreation and must be considered for the proposed project.

#### **Federal**

There are no federal regulations that apply to the recreation component of this project.

#### **State**

There are no state regulations that apply to the recreation component of this project.

## Local

**According to the El Dorado County General Plan Parks and Recreation Element which establishes goals and policies to address provision and maintenance of parks and recreation facilities; The County shall:**

Policy 9.1.1.7 Encourage and support efforts of independent recreation districts to provide parks and recreation facilities. The joint efforts of Community Services Districts, independent recreation districts, school districts, cities, and the County to provide parks and recreation facilities shall also be encouraged.

### **4.13.3 Environmental Impact Thresholds/Criteria for Evaluation**

According to Appendix G of the State CEQA guidelines, a project would have a significant impact to parks and recreational services if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, or
- Include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

The proposed project is not intended to increase use of existing neighborhood and regional parks or other recreational facilities; therefore there would be no significant impact.

The proposed project is intended to improve facilities within an existing recreational facility. Improvements to the existing recreational facilities and potential for new facilities are key elements in the SPRA Master Plan. Improved and/or new facilities including road widening, campground improvements, the meeting and conference center, the fine arts camp, trail improvements, and both vehicle and boat access improvements have the potential to affect the physical environment.

### **4.13.4 Environmental Impacts**

A substantial component of the proposed SPRA Master Plan includes the enhancement of recreational opportunities within SPRA for visitors. Goal 4.0 of the SPRA Master Plan directs EID to “Explore a variety of environmentally and financially sustainable recreational facilities and programs to meet the diverse needs of District residents and other Park visitors.”

**Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Implementation of the proposed SPRA Master Plan and associated components have been developed not only to provide environmentally and financially sustainable recreational facilities and programs, but to protect and enhance Sly Park’s natural resources, scenic quality, water quality, and historical and cultural resources.

As discussed in Chapter 3.0 of this Draft Master EIR, the primary issues with all of the existing campgrounds are density and a lack of campground definition. In combination, these two factors have been contributing substantially to the ongoing environmental degradation of the area, resulting in over- compaction of the soils and erosion, which have the potential to affect water quality and forest health. These two factors also exacerbate the social aspect of camping, contributing substantially to the occurrences of user conflicts. In addition, the current layout and configuration of many of the campsites, particularly on the peninsula, are not in conformance with generally accepted campground standards for grades, dimensions, and layout, such as those developed by the U.S. Forest Service or the U.S. Army Corp of Engineers.

The Recreational Facilities Element outlines 17 projects with a total of 48 project components that are intended to improve the existing recreational opportunities in addition to providing new and improved recreational areas. A complete description of recreation related projects proposed under the SPRA Master Plan Recreational Facilities Element is described in Section 3.3.1 of this Draft Master EIR. Implementation of the SPRA Master Plan and associated components would not result in adverse impacts to recreation, but would result in beneficial effects.

The remaining projects proposed under the SPRA Master Plan fall under the following Master Plan Elements: Education, Access, Natural Resource Protection and Restoration, Park Operations and Maintenance, Public Safety, and the Facilities Infrastructure Element. Projects associated with these elements are designed to meet the following goals: 1) Resource Protection & Enhancement; 2) Fiscal Responsibility; 3) Public Safety; 4) Recreational Uses; 5) Facilities Management; and 6) Community Participation. Therefore, **no impact** to recreational resources is anticipated from implementation of the proposed SPRA Master Plan or the associated components.

**Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Implementation of the proposed SPRA Master Plan and its associated components would result in significant impacts to the following resources:

**4.13.4.1 Land Use**

Existing recreational uses were developed under federal ownership by the USBR and are considered existing non-conforming uses by the County of El Dorado. The proposed recreational improvements associated with implementation of the SPRA Master Plan would be subject to the approval of a General Plan Amendment, Rezone, and Special Use Permit pursuant to the current regulatory land use authority held by the County of El Dorado as a result of the transfer of Ownership of SPRA to EID in 2003. See Section 4.1 Land Use for a detailed discussion of impacts related to Land Use.

**4.13.4.2 Agriculture**

The proposed recreational improvements associated with the Master Plan include provisions for the long-term management of forest resources for fire protection and overall forest health. Improvements have the potential to result in the development nonconforming land uses, as defined by the El Dorado County Zoning Ordinance, adjacent to parcels located in the

timberland protection and residential agricultural zoning districts. See Section 4.2 Agriculture for more detailed information on impacts.

#### **4.13.4.3 Aesthetics**

The proposed recreational improvements are designed to protect natural resources and preserve the unique Alpine forest characteristics of SPRA. Development of the projects associated with recreational improvement has the potential to affect the visual character of SPRA through topographic alterations and the construction of additional structures and facilities. See Section 4.3 Aesthetics for more detailed information on impacts.

#### **4.13.4.4 Transportation**

The proposed recreation improvements are not anticipated to result in adverse impacts related to Transportation. See Section 4.4 Transportation for more detailed information on impacts.

#### **4.13.4.5 Air Quality**

The proposed recreation improvements are components of a long-range resource conservation-based management strategy proposed by EID for SPRA. Improvements may result in temporary, short-term construction-related impacts to Air Quality. The implementation of the Master Plan could contribute to long term regional air quality emissions related to operations and transportation. See Section 4.5 Air Quality for more detailed information on impacts.

#### **4.13.4.6 Noise**

The proposed recreation improvements are designed to decrease the intensity of recreational use, while expanding the range of recreational opportunities within SPRA. Recreational opportunities would be consistent with maintaining the current overall character of the Park. Construction-related equipment and activities would result in increased noise during construction. See Section 4.6 Noise for more detailed information of impacts.

#### **4.13.4.7 Biology**

The proposed recreational improvements are intended to protect the natural elements of the Park and restore degraded habitats caused by a high density of visitors. Improvements may have temporary impacts on trees and riparian growth due to the expansion/construction of roads, trails, campgrounds, and water lines. See Section 4.7 Biological Resources for more detailed information on impacts.

#### **4.13.4.8 Cultural Resources**

The proposed recreational improvements would not substantially change in nature the recreational activities currently ongoing within SPRA. Ground disturbance and increased public access within areas of identified cultural resources could result in adverse impacts to cultural resources. See Cultural Resources Section 4.8 for detailed information of impacts.

#### **4.13.4.9 Geology/Soils**

Proposed recreation improvements include resource management strategies designed to control erosion within SPRA related to current ongoing areas of erosion problems as well as preventative BMPs to be implemented throughout SPRA as components of the long-term planning and management strategies identified by the Master Plan. Implementation of the Master Plan and

development of individually proposed projects could result in adverse impacts related to construction of project components. See Section 4.9 Geology and Soils for more detailed information on impacts.

#### **4.13.4.10 Hazards and Hazardous Materials**

Proposed recreational improvements would not result in land uses that would involve the development of land uses or facilities that would be likely to expose people or the environment to hazards or hazardous materials. Development of proposed improvements could however, result in construction-related exposure to hazardous materials. See Hazards and Hazardous Materials Section 4.10 for detailed information on impacts.

#### **4.13.4.11 Hydrology/Water Quality**

The proposed recreational improvements emphasize the protection of natural resources including water quality. See Hydrology/Water Quality Section 4.11 for detailed information on impacts.

#### **4.13.4.12 Public Services**

The proposed recreational improvements are not expected to have a substantial impact on public services. See Public Services Section 4.12 for detailed information on impacts.

#### **4.13.4.13 Utilities and Service Systems**

The proposed recreational improvements are not expected to have a substantial impact on utilities and service systems. See Utilities and Service Systems Section 4.14 for detailed information on impacts.

As identified within individual sections within this Draft Master EIR, recreational improvements proposed by the SPRA Master Plan would have the potential to result in adverse impacts related to Land Use, Agriculture, Aesthetics, Air Quality, Noise, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, and Hydrology and Water Quality. Although development of the proposed recreation improvements would result in potentially significant impacts to these resources, mitigation measures have been identified to reduce impacts to less than significant levels, with the exception of adverse impacts related to aesthetics associated with the proposed development of the Marina Parking Lot expansion. The analysis of potential impacts related to Aesthetics included within Section 4.3 concludes that the proposed development of this facility would result in significant and unavoidable impacts related to visual resources. Development of this facility would however, result in increased parking to meet current demand for water-based recreational uses, including boating, water skiing, and fishing. These recreational opportunities are among those identified by the SPRA Master Plan for which there is public demand and for which the proposed expansion is required to meet these demands. Impacts related to recreation are therefore, considered **less than significant**.

#### **4.13.5 Mitigation Measures**

None warranted.

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## **4.14 Utilities/Service Systems**

### **4.14.1 Existing Conditions**

Utilities currently available within SPRA include water, electricity, and telephone service. Sanitary wastewater is collected in septic tanks and leach fields, as well as vaults in waterless toilets.

#### **4.14.1.1 Water**

EID supplies potable water within SPRA from the Pollock Pines treated water system and Reservoir A water treatment plant. The existing water system consists of two old water buoys used as water tanks, a small pump station, and small water lines of varying diameters. This water system will be replaced in 2007. Historically, it has been necessary for EID to supplement the SPRA water supply during the summer months with potable water supplied by a water truck (URS, 2003). An EID water main is located at Parkwood Drive in Jenkinson Estates.

In August 2003, EID approved the construction of the Sly Park Campground Water Line Project. This project consists of the installation of an underground pipeline consisting of eight- and ten-inch water lines to convey water throughout SPRA campgrounds and provide fire flow pressure to five fire hydrants. Improvements will also include service lines to individual campgrounds. The total length of the water main alignment extension will be approximately 17,000 feet and will terminate at the Hazel Creek Campground where the water line will tie into the existing two-inch water line extending to the east, supplying Hazel Creek, Rainbow, Kamloop, and Dogwood campgrounds (El Dorado Irrigation District, 2003).

An additional six-inch water line parallels the Mormon Emigrant Trail providing potable water to a portion of SPRA along the south shore of Jenkinson Lake. This line runs to the group campgrounds and up to the Retreat House Complex. There are currently no plans to upgrade or replace this line.

#### **4.14.1.2 Wastewater**

Wastewater generation occurs at the SPRA operations center, RV dump stations, and campground toilet facilities. The Retreat House Complex, the Park Headquarters' office, and the RV dump station have septic systems to handle wastewater. All other wastewater systems within SPRA include self-contained holding tanks requiring regular pumping. During boating and camping season holding tanks are pumped weekly. Septic tanks and leach fields are pumped annually. Wastewater is transported by truck to an offsite wastewater treatment plant for processing and disposal (URS, 2003).

#### **4.14.1.3 Solid Waste**

El Dorado Disposal, Inc. provides waste disposal and recycling services within the project area. Solid waste is hauled to the Western El Dorado Recovery Systems transfer station where garbage and recyclables are separated at the onsite Material Recovery Facility. El Dorado County has a current diversion rate of approximately 41 percent. Non-recyclable solid waste is hauled to Lockwood Landfill.

## **Lockwood Regional Landfill**

The Lockwood landfill is owned and operated by Waste Management, Inc., and located in Sparks, Nevada. The landfill accepts municipal, industrial, and special wastes and receives waste from counties in California and Nevada. Approximately 550 acres of the 37,050-acre property are actively used for disposal operations. The facility receives approximately 1.4 million tons of solid waste annually, with a daily average of approximately 5,700 tons (El Dorado County Planning Department, 2003).

The current facility has a total permitted capacity of approximately 43 million tons and is permitted through the year 2025. The estimated remaining capacity of the facility is approximately 33.8 million tons. An additional 1,000 acres of the facility is available for future development. It is anticipated that Waste Management Inc. will apply for a Use Permit for the remaining 1,000 acres, which would extend the operational life of the facility by 200 years with an anticipated additional capacity of 200 million tons (El Dorado County Planning Department, 2003).

EID currently maintains 42 two-yard solid waste containers within SPRA. Two of the two-yard containers are regularly emptied, once a week during the winter and twice a week during the summer. The additional containers are emptied twice a week or when full. Drivers for the solid waste carrier keep a list of the locations of containers and EID staff monitor the contents during weekly collections (Suse, Joe, pers. comm. 2005).

### **4.14.1.4 Electricity**

Electrical service is provided by PG&E. Electrical service at SPRA Park Headquarters and the Marina comes from a line located within the alignment of Sly Park Road. An additional service line is located within the Mormon Emigrant Trail and provides service to the Black Oak Equestrian campground, the Main Group Campgrounds (sites 1-5), and the Retreat House Complex. Electrical service for Sierra Camp and the host site is provided from overhead lines at the south end of the lake, spanning the “narrows.”

### **4.14.1.5 Telephone**

Telephone service within SPRA is currently only available at the park headquarters. Reliable cellular telephone service depends on several factors including the carrier, the model of telephone, and the physical location within SPRA when attempting to place a call.

## **4.14.2 Regulatory Setting**

### **4.14.2.1 Federal**

#### **Wastewater**

Federal Clean Water Act requirements governing wastewater collection, treatment and discharge are implemented under the NPDES. In California the NPDES program is administered through the State Water Resources Control Board. Within the area of the receiving wastewater treatment plant, the Central Valley Regional Water Quality Control Board (CVRWQCB) has regulatory authority.

The U.S. Environmental Protection Agency (EPA) adopted the National Toxics Rule (NTR) in February 1993 and the California Toxics Rule (CTR) in May 2000. These Rules contain water quality standards applicable to the discharge of wastewater from treatment plants.

### **Solid Waste**

Title 40 of the Code of Federal regulations (CFR), Part 258 (Resource Conservation and Recovery Act RCRA, Subtitle D) contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design, groundwater monitoring, and closure of landfills.

### **Energy**

The Federal Energy Regulatory Commission regulates the transmission and sale of electricity in interstate commerce, licensing of hydroelectric projects, and exercises oversight of related environmental issues.

The Federal Energy Regulatory Commission duties include the regulation of the transmission and sale of electricity in interstate commerce, licensing of hydroelectric projects, and oversight of related environmental matters.

#### **4.14.2.2 State**

### **Wastewater**

The CVRWQCB has adopted a Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins, which establishes water quality objectives, designates beneficial uses, and contains implementation programs and policies to achieve water quality objectives for all waters within the basin.

The State Water Resources Control Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (known as the State Implementation Plan). This Plan contains guidance on implementing the NTR and the CTR.

### **Solid Waste**

#### ***California Public Resources Code***

The federal regulations are enacted by the California Public Resources Code Sections 40000 et seq. (California Integrated Waste Management Act). The state agency charged with the permitting of solid waste facilities is the California Integrated Waste Management Board.

#### ***Assembly Bill 939***

Assembly Bill 939 (AB 939) (Public Resources Code 41780) is designed to increase landfill life and conserve other resources through increased source reduction and recycling. AB 939 requires cities and counties to prepare Solid Waste Management Plans to implement AB 939's goals, particularly to divert approximately 50 percent of solid waste from landfills. AB 939 also requires cities and counties to prepare Source Reduction and Recycling Elements. These

elements are designed to develop programs to achieve diversion goals, stimulate local recycling in manufacturing, and stimulate the purchase of recycled products.

## **Energy**

In 1996, State legislation was enacted that restructured California's electricity market. In accordance with Assembly Bill (AB) 1890, the generation of electricity is open to competition, but the transmission and distribution remain a regulated monopoly. Utilities are required to purchase their electricity needs for the wholesale market. The goal of the legislation was to open the State's energy market to competition, with the expectation that competition would drive down the cost of electricity. Basically, the legislation gave the customers of investor-owned utilities, such as PG&E, the ability to choose the source of electric energy, similar to selecting a long-distance service from telephone companies.

The State experienced a number of problems at the same time the electricity industry was restructured. Many power plants were sold to privately owned, out-of-state energy companies. As a result of statewide economic growth, population growth, technological advances and a lack of construction of new power plants, the demand for electricity grew faster than had been expected during the 1990's. These factors were further exacerbated by a lack of conservation on behalf of the consumer base due to relatively low electricity rates. California produces approximately three-quarters of the energy that is used within the State. The balance is purchased from other western states, which have also experienced dramatic growth, leading to a decline in available supply from those areas and resulting in rolling blackouts and spikes in the cost of electrical energy within California early in the early 2000's. Additionally, power plants in California rely heavily on natural gas for power. Natural gas prices have also dramatically increased, leading to some utilities, including PG&E, experiencing financial problems.

### ***Public Utilities Commission***

The California Public Utilities Commission (PUC) sets forth specific "tariffs" or rules that relate to the design, installation, and management of California's public utilities.

### ***Title 20 and Title 24, California Code of Regulations***

New buildings constructed in California must comply with the standards contained in Title 20, Energy Building Regulations, and Title 24, Energy Conservation Standards, of the CCR. Title 20 contains statutes relating to power plant siting certification. Title 24 (AB 970) contains the energy efficiency standards for residential and non-residential buildings based on a state mandate to reduce California's energy demand.

### ***Warren-Alquist Energy Resources Conservation and Development Act***

#### **Government Code Section 25000 et seq.**

The State Energy Commission regulates energy resources by encouraging, developing, and coordinating research and development into energy supply and demand problems to reduce the rate of growth of energy consumption.

### 4.14.3 Environmental Impact Thresholds/Criteria for Evaluation

For the purposes of this Draft Master EIR, impacts to Utilities and Service Systems are considered significant if the proposed project would:

- Exceed the wastewater treatment requirements of the Central Valley Regional Water Quality Control Board;
- Exceed the ability of the water purveyor to meet project demands with current water entitlements and resources;
- Require or result in the construction of new or the expansion of existing water treatment facilities; or
- Generate enough solid waste to exceed landfill capacity or substantially shorten the life of the landfill.

Impacts related to stormwater drainage are discussed Hydrology and Water Quality, Section 4.11 of this Draft Master EIR.

### 4.14.4 Environmental Impacts

**Implementation of the SPRA Master Plan and development of individually proposed projects would not require or result in the construction of new or the expansion of existing water treatment facilities. Existing entitlements are sufficient to provide water supply to the project.**

To address problems related to aging water supply pipelines within SPRA, EID approved the Sly Park Campground Waterline Project in August 2003. This project will involve the construction of approximately 17,000 linear feet of water line to serve SPRA campgrounds and provide fire-flow water pressure for five hydrants. Project construction is scheduled to be completed in 2007.

Implementation of the SPRA Master Plan would involve the extension of a water line to the north area of the Scout/Youth Group Camp, the extension of the water main to the end of the south summit access road, and the extension of a water line from Jenkinson camp to the proposed pilot cabin. In addition, Sugarloaf Fine Arts Camp would be dependent on drilling a well. That well would be required to meet County standards and provide adequate water for the facility and its users, including fire suppression equipment. More than one well may be needed, depending on the flow available. The extension of conveyance infrastructure to supply water to additional recreational facilities within SPRA was previously approved by EID in August 2003 and not a part of this project. Impacts associated with installation of the wells to provide water to the Sugarloaf Fine Arts Camp would not result in significant impacts; therefore impacts related to water supply are considered **less than significant**.

**Implementation of the SPRA Master Plan and development of individually proposed projects would not exceed the wastewater treatment requirements of the Central Valley Regional Water Quality Control Board.**

According to the conclusions of the ESA prepared for SPRA, based on the frequency of maintenance and ongoing holding tank replacement, the sanitary wastewater system is not

anticipated to pose a REC for the project site (URS, 2003). As the current facility receiving wastewater from SPRA, the Sacramento Regional WWTP is required by state law to operate in compliance with all water quality standards, as enforced by the RWQCB through compliance with the Waste Discharge Order issued for the facility. Impacts are therefore considered **less than significant**.

**Implementation of the SPRA Master Plan and development of individually proposed projects would not generate wastewater that could exceed the capacity of the existing wastewater treatment facility.**

Wastewater generated within SPRA results from septic tanks and vault waterless toilets. Septic tanks are pumped annually at the park headquarters. Septic tanks used within campground and day use facilities have a capacity of approximately 1,000 gallons. These tanks are pumped weekly during the camping and boating season. Wastewater is hauled to the Sacramento County Regional Wastewater Treatment Plant (WWTP), which is operated by the SCRSD. The current capacity of the Sacramento County regional WWTP is 181 million gallons per day (mgd), with a planned expansion for future capacity of 350 mgd (Sacramento Regional County Sanitation District, 2005). Approximately 56,000 gallons of wastewater was hauled to the WWTP in 2002 (URS, 2003).

Projected regional growth and the resulting need for expanded wastewater treatment facilities within the region was analyzed within the Regional Interceptor Master Plan EIR, the SCRSD Master Plan, and the Sewerage Facilities Expansion Master Plan. The need for expansion and rehabilitation of sewerage treatment has been identified in SCRSD master planning documents and is funded by development and service fees.

Additional capacity for sewage sludge wastes exists at the Union Mine facility, which currently receives only a fraction of its annual capacity of 140,000 cubic yards.

The SCRSD funds existing and proposed treatment facility expansion as established through district master planning documents through development and service fees. The Sacramento County Regional WWTP has planned for treatment capacity through the year 2020 within existing master planning documents and additional capacity for sewage sludge disposal also exists at the Union Mine facility; therefore, impacts are considered **less than significant**.

**Implementation of the SPRA Master Plan and development of individually proposed projects would not generate a volume of solid waste that would exceed landfill capacity or substantially shorten life of the landfill.**

Through implementation of the SPRA Master Plan, EID proposes to decrease the intensity of use within SPRA, while facilitating sustainable ongoing recreational uses. The development of additional facilities is intended to increase the distribution of recreational use throughout the year as well as to generate revenue to assist with funding. The Master Plan includes goals and objectives relevant to solid waste including the continued provision of adequate trash pickup to meet user demands. In addition, standards related to solid waste are included in the design standards and guidelines identified in the Master Plan and include:

- Trash receptacles should be located near the entrance to each campground. Additional 30-gallon receptacles or larger dumpsters should be placed in central locations throughout the campground. The number and size of receptacles should be such that trash does not overflow between pick-up.
- Plantings or stone walls can be sited to screen trash receptacles from view.
- Trash receptacles within the campgrounds should be wildlife proof. Trash should be collected twice per day and contained in wildlife-proof storage areas.
- Separate bins should be provided and labeled for bottles and cans to encourage recycling.
- At primitive camp sites, all trash should be carried out by the campers; a refuse container should be provided at the trailhead.

Currently EID has 42 two-yard containers available for solid waste disposal within SPRA. The goals and objectives identified by the Master Plan specify that solid waste disposal should be adequately provided for within SPRA. Although only two containers are typically emptied weekly, using a conservative estimate assuming all containers were emptied weekly, solid waste disposal generation for SPRA would result in approximately 118 tons weekly for an annual total estimated solid waste generation of 6,115 tons. Based on this rate of solid waste generation, solid waste from SPRA would account for 0.4 percent of the annual solid waste disposal for the Lockwood Landfill, which has permitted capacity through the year 2025, and anticipated capacity of approximately 200 million tons over 200 years (El Dorado County Planning Department, 2003). In an effort to meet the diversion requirements specified by AB 939, solid waste from the El Dorado Disposal Inc., is sorted at the MRF before transport to Lockwood Regional Landfill. Impacts related to solid waste disposal are therefore, considered **less than significant**.

**Implementation of the SPRA Master Plan and development of individually proposed projects would not increase the demand for electricity and result in the need for additional supply and/or distribution infrastructure.**

Developers are required to obtain approval from PG&E for the construction of required electrical transmission infrastructure. EID would be required to work with PG&E to locate transmission line corridors for electrical energy distribution for proposed facilities within SPRA.

A transformer currently exists from which an electrical service line could be extended to the pilot cabins proposed at Jenkinson Camp. EID is proposing the extension of an electrical service line from the existing transformer currently located on the north side of Jenkinson Lake within the vicinity of Stonebraker Camp. The service line would be installed underground within the road alignment.

The proposed electrical service line would be constructed within road alignments and the siting and construction of on-site distribution utility infrastructure would be consistent with PG&E requirements. The extension of infrastructure to meet the anticipated electricity demand for the proposed project would therefore, be considered **less than significant**.

#### **4.14.5 Mitigation Measures**

None warranted.

## **5.0 CUMULATIVE IMPACTS**

### **5.1 Cumulative Impacts**

This Draft Master EIR provides an analysis of cumulative impacts of the proposed SPRA Master Plan and associated components as required by Section 15130 of the CEQA Guidelines.

Cumulative impacts are defined in Section 15355 of the CEQA Guidelines as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

The following elements are necessary to an adequate discussion of cumulative impacts (CEQA Guidelines Section 15130[b]):

- Either (A), a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the agency; or (B), a summary of projections contained in a adopted general plan or related planning document that is designated to evaluate regional or area wide conditions. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency;
- A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and
- A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable options for mitigating or avoiding any significant cumulative effects of the proposed projects.

#### **5.1.1 Assessment of Cumulative Impacts**

The assessment of cumulative impacts in this Draft Master EIR is based on (B) in the first bullet above, namely, through reference to analysis of cumulative impacts identified in the 2004 El Dorado County General Plan EIR. That EIR assessed cumulative impacts based on an analysis of the adopted general and regional plans for jurisdictions within and adjacent to El Dorado County (e.g., City of Folsom, City of Placerville, Sacramento County, Amador County, Alpine County, Placer County, etc.). The assessment of cumulative impacts set forth in the County General Plan EIR sets the context and framework for the evaluation of cumulative impacts associated with the proposed implementation of the SPRA Master Plan and associated components.

Chapter 4.0 of this Draft Master EIR evaluates the impacts of implementation of the SPRA Master Plan and its associated components.

##### **5.1.1.1 Air Quality**

The 2004 El Dorado County General Plan EIR concluded that the implementation of the General Plan would result in significant and unavoidable impacts due to long-term operational emissions of ROG, NO<sub>x</sub>, and PM<sub>10</sub>. The combined projects associated with the proposed SPRA Master

Plan result in additional vehicle emissions that are well below the project specific thresholds set by the El Dorado County Air Quality Management District. However, these emissions do contribute incrementally to the air basin's level of pollutants. The Sacramento Regional Ozone Air Quality Attainment Plan (AQAP) is designed to bring the region into attainment with the Federal 8-hour ozone standard. The plan assumes increases in air pollutant emissions will occur from regional growth but also plans for emission offsets from implementation of direct and indirect emission source controls. The AQMD requires that specific projects meet four criteria to be consistent with the AQAP and therefore can be considered less than cumulatively significant:

- The project does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), and projected emissions of ROG and NO<sub>x</sub> from the proposed project are equal to or less than the emissions anticipated for the site if developed under the existing land use designation;
- The project does not exceed the “project alone” significance criteria;
- The lead agency for the project requires the project to implement any applicable emission reduction measures contained in and/or derived from the AQAP; and
- The project complies with all applicable district rules and regulations.

The SPRA Master Plan projects do not exceed the “project alone” criteria, will implement any applicable measures contained in and/or derived from the AQAP, and will comply with all applicable district rules and regulations.

However, the implementation of a general plan amendment from Natural Resource to Tourist Recreational and the rezoning of portions of SPRA from Residential Agriculture to Recreational Facility, as described above under Section 4.1 Land Use and Planning, is required for development of SPRA projects, including the Sugarloaf Fine Arts Center and the Retreat and Events Center. The projected emissions of ROG and NO<sub>x</sub> from the proposed SPRA Master Plan projects, although less than significant as a single project, would be greater than emissions created by development allowed under the existing Natural Resource designation and therefore would be considered **cumulatively significant** by the El Dorado County Air Quality Management District. Because the projected increase in emissions is primarily due to use of group centers, mitigation is proposed in the form of education to increase car pooling and use of buses for group events. Mitigation will reduce the cumulative impacts to **less than significant**.

In addition, the general plan amendment and rezoning would allow for the potential development of uses of greater intensity than even what is being proposed under the SPRA Master Plan. Allowed uses such as golf courses and RV parks with supporting commercial services, although not planned or envisioned as part of SPRA improvements, could potentially generate additional traffic and emissions if proposed and implemented in the future. However, the SPRA Master Plan and its resulting special use permit required for the project would not include such allowed uses. There are no additional probable future projects beyond those proposed in the SPRA Master Plan. Should additional projects beyond those contained in the SPRA Master Plan be proposed in the future, additional environmental analysis would be required. Therefore the cumulative impact from allowed but unexpected and unplanned uses under the general plan amendment is considered less than cumulatively significant.

The following mitigation is proposed to reduce the cumulative impact from the SPRA Master Plan projects to less than significant:

**C-AQ 1:** EID will encourage car pooling, van pooling, and use of buses for groups attending events at the Scout Camps, Sugarloaf Fine Arts Center, and the Retreat and Events Center. This may include but not be limited to, providing information on brochures and event applications on the air quality benefits of group transit alternatives. EID shall consult with the El Dorado AQMD for ideas on appropriate education measures.

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## **6.0 OTHER DISCUSSIONS REQUIRED BY CEQA**

The subjects listed below are discussed as directed in Sections 15126.2 and 15128 of CEQA.

### **6.1 Effects Found Not to be Significant**

#### **6.1.1 Population/Housing**

The proposed SPRA Master Plan represents the continuation and enhancement of existing land uses. The Project would not have a significant impact relative to population growth or housing demands because it does not propose new residential uses nor does it involve substantial job growth that would create an increase in demand for homes or services. No new public roads or infrastructure would be developed under the Master Plan. No housing or people would be displaced.

#### **6.1.2 Energy & Mineral Resources**

The California Geological Survey (CGS), under the California Department of Conservation, maps regions of California according to their likelihood of containing important mineral resources. El Dorado County mineral resources are identified in the CGS Mineral Land Classification of El Dorado County, California (2003).

CGS identifies land as belonging to one of six Mineral Resource Zone (MRZ) classifications. The classifications, which indicate land containing mineral resources of known economic value to the County or State, are MRZ-2a and MRZ-2b. These classifications indicate that the land area has significant mineral resources measured, indicated, or inferred. MRZ-1, MRZ-3a and 3b, and MRZ-4 indicate areas of no resource significance, undetermined resource significance, or unknown resource significance, respectively. MRZ's are classified individually for industrial limestone, construction aggregate and other materials, and gold deposits formed by hydrothermal, volcanogenic, and mechanical concentration processes.

Current classifications indicate that undetermined or unknown resource significance occurs within the project site, by the classifications: 1) MRZ-3a for gold deposits formed by hydrothermal processes, 2) MRZ-4 for deposits formed by volcanogenic processes, 3) MRZ-3a and MRZ-4 for gold deposits formed by mechanical concentration, and 4) MRZ-4 for gold deposits formed by contact metasomatic processes. Because of this and the nature of the project, there will be less than significant or no impact to mineral resources.

### **6.2 Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented**

Implementation of the Proposed Project would result in significant unavoidable environmental effects to aesthetics and cumulative environmental effects for air quality. The Marina Parking Expansion would result in significant unavoidable impacts to aesthetics (see Table .3-5 of this Master EIR for a discussion).

## **6.3 Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented**

### **6.3.1 Aesthetics**

Implementation of the proposed SPRA Master Plan would result in irreversible changes to the viewshed of the project area from grading and construction of the Marina Parking Expansion. Existing sloped forested land with a dense tree canopy would be converted to a level parking lot devoid of trees. The impacts would be to views of the site and Jenkinson Lake from the parking lot site itself and from other areas in the Park. Implementation of mitigation measures outlined in Chapter 4.0 of this Draft Master EIR would reduce these impacts. However following mitigation, Aesthetics impacts resulting from construction of the Marina Parking Expansion would remain significant.

## **6.4 Any Irreversible or Irretrievable Commitments of Resources that would be Involved in the Proposed Project if Implemented**

Implementation of the Proposed Project would involve the commitment of a range of natural, physical, human, and fiscal resources. The implementation of some components of the proposed SPRA Master Plan (e.g., Marina Parking Lot Expansion, Sugarloaf Facility, etc.) represents irreversible commitments. Other components (e.g., campsites) could be converted to another use or ultimately restored to a natural condition if needed in the future. At present, there is no reason to believe that such a conversion would ever be necessary or desirable. Specific potential resource effects would be associated with the construction and operation of the proposed project, with impacts detailed in Section 4.0.

Implementation of the proposed project would involve substantial expenditures of EID and grant funds that would not be retrievable.

Construction of the proposed 20-space Marina Parking Lot Expansion would represent the irreversible loss of about 1.5 acres of the largest undeveloped Ponderosa Pine Series forest in the Park. Located along the shore of Jenkinson Lake, this area includes mature sugar pine, incense cedar, ponderosa pine, Douglas fir, and black oak.

This portion of the forest is near the Park entrance and readily accessible to the hiking or biking public by trail. From picnic sites and the trail that passes through the proposed parking lot site, there are high quality views of both the forest and Jenkinson Lake.

Section 7.0 describes alternatives that could reduce the significant impacts of the proposed parking lot.

## **6.5 Growth-Inducing Impact of the Proposed Project**

This section of the Master EIR analyzes the potential for the SPRA Master Plan and associated components to result in growth-inducing impacts. Such impacts normally occur when a Proposed Project fosters economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment. The types of projects that are normally

considered to result in growth-inducing impacts are those that provide infrastructure that will support additional growth or remove an existing barrier to growth.

Although the Proposed Project would generate additional jobs during the construction period of the specific project components, it is expected that those jobs could be filled by the existing labor force in the area. The Proposed Project is expected to generate new jobs after the completion of the construction period for the maintenance and operation of the new and reconfigured park facilities. However, it is anticipated that these newly created jobs would also be filled by the existing labor force in the area.

The Proposed Project is not expected to result in the construction of additional housing either directly or indirectly. The Proposed Project does not provide infrastructure such as water systems, energy generation, sewer systems, schools, public services, or transportation improvements that could potentially support increased growth in the region. The extension of existing infrastructure would only be used for expansion or development of new facilities, and no new major infrastructure improvements are expected as a result of the proposed activities outlined in the SPRA Master Plan. The surrounding area is largely composed of U.S. Forest Service lands, Sierra Pacific Industries lands, and low density residential.

The project would not foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment.

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## **7.0 ALTERNATIVES TO THE PROPOSED PROJECT**

### **7.1 CEQA Requirement for Alternatives Discussion**

The basic purposes of CEQA include preventing significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.

The CEQA Guidelines Section 15126.6(a) requires EIRs to describe a range of reasonable alternatives to a project or to the location of the project that would attain most of the basic objectives of the project, but would avoid or reduce significant effects of the project, and to evaluate the comparative merits of the alternatives.

The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly (§15126.6[b]).

The range of potential alternatives shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects (§15126.6[e]). The specific alternative of “no project” shall also be evaluated along with its impact (§15126.6[e][1]).

### **7.2 Discussion of Project Alternatives**

This alternatives analysis discusses the:

- No Project Alternative (Alternative 1);
- Proposed Project without New Marina Parking Lot (Alternative 2);
- Widen Marina Drive for Parking on Both Sides – 20 Spaces (Alternative 3); and
- Widen Marina Drive for Parking on One Side – 10+ Spaces (Alternative 4).

These alternatives (except the No Project Alternative) have been identified as feasible alternatives capable of avoiding or substantially lessening the significant environmental impacts associated with the new Marina parking lot as proposed. These alternatives also accomplish to various degrees the basic Marina parking lot objectives, which are more specific than that of the overall Master Plan. The objectives of the Marina Parking lot are to: 1) eliminate safety hazards and emergency vehicle access restrictions posed by illegal parking along Marina Road, and 2) provide additional capacity to meet peak Marina parking demands.

The Master Plan project traffic engineer has identified several management strategies that could be implemented independent of, or in combination with, the proposed project or alternatives to increase parking supplies for boaters.

- Alternative Use of Current Parking Marina Parking Supply - Remove some or all of the 15 auto parking spaces that ring the lake south of the ramp and stripe for up to 4-5 more vehicle/trailer combinations. This would result in a recreation impact by reducing parking for non-boating users and boaters who keep their boats docked at the marina.
- Develop Satellite Parking Elsewhere at the Park - Provide vehicle/trailer parking at designated campsites or elsewhere for campers who normally park their trailers at the Marina Parking Lot for extended periods while their boat is kept near their campsite. This would result in a recreation impact by reducing parking for non-boating campers and possibly day use visitor.
- Enforce “Auto-Trailer Combination” Parking Requirement at Marina Parking Lot - This option would have freed-up 5 spaces for vehicle trailer combinations on the date of the traffic study (Appendix B).

Figure 7-1 presents a summary comparison of the alternatives compared to the proposed project and the No Project Alternative.

### **7.2.1 No Project Alternative (Alternative 1)**

Under the No Project Alternative, the proposed SPRA Master Plan would not be implemented. EID would continue to operate and maintain SPRA under existing policies and standards. There would be no application to the County for a GPA. The new Marina parking lot would not be constructed; and therefore, no adverse impacts to aesthetics would occur. As a result, the scenic views much appreciated by Park visitors would not be affected, but the lack of a master plan would mean that the park would continue to degrade over time because of overuse and lack of resources for much needed maintenance and restoration efforts. SPRA would continue to be understaffed. Safety, access, group events, retreat potential, and education would continue to be considered inadequate by some members of the public. The main entrance would not be improved, campgrounds would not be reconfigured, the Retreat/Events Center and Sugarloaf Fine Arts Camp would not be constructed, nor would the remaining components proposed under the SPRA Master Plan be implemented. Ultimately, the No Project Alternative would not facilitate EID’s mission statement and objectives, allowing significant adverse impacts to aesthetics, water quality, and biological resources to continue.

### **7.2.2 Proposed Project without New Marina Parking Lot (Alternative 2)**

This alternative involves approval of the Master Plan without the new Marina Parking Lot component. None of the aesthetic impacts associated with the new Marina Parking Lot would occur. Parking supplies at the existing Marina parking area would continue to be inadequate when boating demands are high.

Enforcing the existing “no parking” rule along Marina Road could avoid the circulation and safety issues discussed in Section 4.4.1.1. This could result in a de-facto reduction in the current level of boating on peak days only (primarily in June, July and August) as boaters may find it too difficult to find a place to park.

Implementation of this alternative would be facilitated by reducing the maximum number of boats allowed at SPRA to match available parking supplies. This would prevent the admission of

vehicles/trailers to the park when no spaces are available and the generation of needless traffic as drivers search for unavailable spaces.

### **7.2.3 Widen Marina Drive for Parking on Both Sides — 20 Spaces (Alternative 3)**

Under this alternative, Marina Drive would be widened from the existing Marina restrooms northeast for about 500 feet (Figure 7-1). This location is adjacent to the northeast boundary of the new Marina Parking Lot proposed in the SPRA Master Plan. Road widening would provide adequate room for two-way traffic circulation and a total of 20 designated parallel parking spaces with 10 spaces located on each side of the road. This number of spaces is equivalent to that which would be provided by the proposed new Marina Parking Lot. The road would need to be shifted northwest by approximately 10' to allow space for parking on the southeast side. A drainage ditch on the northwest side of the existing road would also need to be relocated to the northwest of the new parking lane and possibly resized to handle the additional runoff. This alternative would require establishing a new turnout lane on an existing dirt road that would connect Marina Drive with Lake Drive southeast of its existing intersection. Vehicles with trailers would enter this lane, turn left on Lake Drive, and left on Marina Drive to either park on the northwest side of Marina Drive or to return to the boat launch to pick up their boats.

The existing cut slope would be cut back by an average of about 20 feet to create the necessary space, and an approximately 12-foot retaining wall constructed. No lower fill slope with a retaining wall would be involved. Along the cut slope, tree density is similar to that of the proposed new parking lot. With this alternative, approximately 17,500 square feet of area would be disturbed with an estimated loss of 70 trees. The retaining wall would not be visible from the lake because it would be screened by mature conifers downslope of Marina Drive. However, the retaining wall would be visible from Marina Drive.

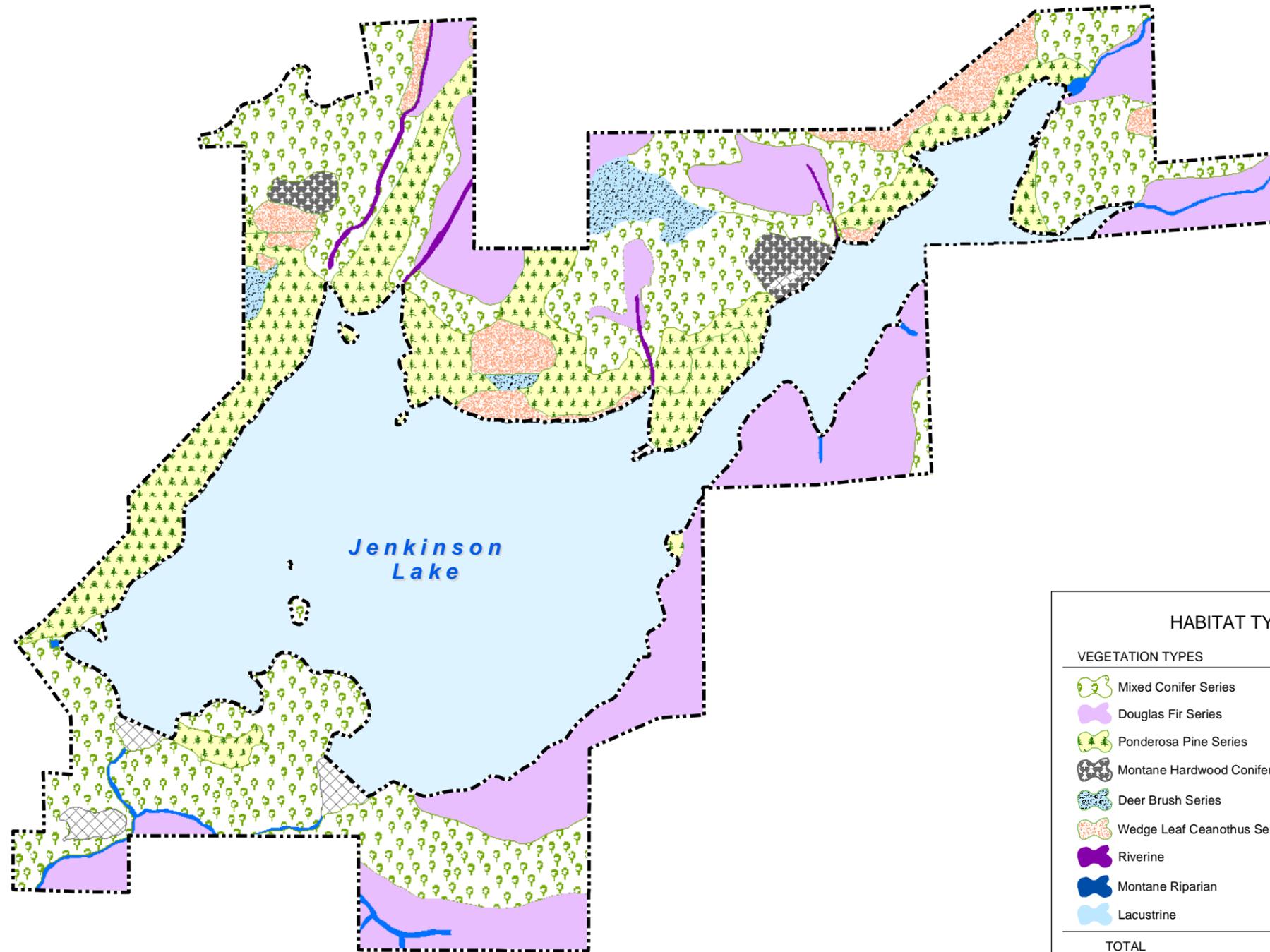
While tree loss would be an impact of this alternative, the loss would occur along an existing road and farther from Jenkinson Lake than the proposed project, and would be better screened from the lake and trail area. Impacts to the existing trail and the forest alongside the lake through which it passes would be avoided.

### **7.2.4 Widen Marina Drive for Parking on One Side —10 Spaces (Alternative 4)**

This alternative is similar to Alternative 3 (Widen Marina Drive for Parking on Both Sides), except the widening would be limited to an average of 10 feet to provide 10 designated parallel parking spaces on the northwest (uphill) side of the road (**Error! Reference source not found.**). Adequate two-way traffic circulation would also be provided. As with Alternative 3, the drainage ditch on the northwest side of the existing road would need to be relocated to the northwest of the new parking lane and possibly resized to handle the additional runoff. This alternative would require the same addition of a turnout lane to facilitate turning at the Lake Drive and Marina Drive intersection.

Because the existing slope would not be cut back as far as in Alternative 3, it would also not be as high. The retaining wall would be an estimated 10 feet high. Approximately 10,000 square feet of area would be disturbed with approximately 40 trees removed.

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HABITAT TYPES	
VEGETATION TYPES	ACREAGE
Mixed Conifer Series	426.82
Douglas Fir Series	285.21
Ponderosa Pine Series	214.22
Montane Hardwood Conifer	17.56
Deer Brush Series	24.21
Wedge Leaf Ceanothus Series/Grassland	56.08
Riverine	6.08
Montane Riparian	8.82
Lacustrine	651.62
<b>TOTAL</b>	<b>1690.62</b>

Other      Boundary

PLANT COMMUNITIES  
& HABITAT TYPES

SLY PARK  
RECREATION AREA  
MASTER PLAN  
MASTER EIR

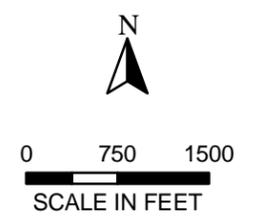


FIGURE 4.7-1

**Table 7-1— Comparison of Alternatives Identified for the Sly Park Recreation Area Master Plan**

Attribute		Alternative 1	Alternative 2	Alternative 3	Alternative 4
	<i>Proposed Project with Marina Parking Lot Expansion</i>	<i>No Project Alternative</i>	<i>Proposed Project without New Marina Parking Lot</i>	<i>Widen Marina Drive for Parking on Both Sides – 20 Spaces</i>	<i>Widen Marina Drive for Parking on One Side – 10 Spaces</i>
<b>Additional parking spaces provided</b>	20	0	0	20	10
<b>Area impacted</b>	50,000 square feet	0 square feet	0 square feet	±17,500 square feet with retaining wall	±10,000 square feet
<b>Additional area paved</b>	30,000 square feet	0 square feet	0 square feet	±10,000 square feet	±5,000 square feet
<b>Length of cut/fill slope</b>	550 linear feet	0 linear feet	0 linear feet	±500 linear feet of re-cut slope	±500 linear feet of re-cut slope
<b>Height of cut slope</b>	Up to 12 vertical feet with retaining wall	0 linear feet	0 linear feet	±12 vertical feet with retaining wall	±10 vertical feet with retaining wall
<b>Number of Trees removed</b> (over 6 inches in diameter at breast height)	182	0	0	±70	±40
<b>Location of disturbance</b>	Near shore. Within largest remaining area (approx. 38 acres) of undeveloped Ponderosa Pine series forest. Below and adjacent to existing road.	No disturbance required.	No disturbance required.	Away from shore. Within approx. 7-acre Ponderosa Pine series forest fragment. Above and adjacent to existing road.	Away from shore. Within approx. 7-acre Ponderosa Pine series forest fragment. Above and adjacent to existing road.

Attribute		Alternative 1	Alternative 2	Alternative 3	Alternative 4
	<i>Proposed Project with Marina Parking Lot Expansion</i>	<i>No Project Alternative</i>	<i>Proposed Project without New Marina Parking Lot</i>	<i>Widen Marina Drive for Parking on Both Sides – 20 Spaces</i>	<i>Widen Marina Drive for Parking on One Side – 10 Spaces</i>
<b>Recreation Experiences Affected</b>	Displaces existing trail. Reduces scenic value for trail users and boaters.	None.	None.	None.	None.
<b>Type of visual impact</b>	New cut slope. New retaining wall. Wide paved area.	None.	None.	Existing cut slope made 12' higher. New retaining wall. Road widened by 20 feet.	Existing cut slope made 10' higher. New retaining wall. Road widened by 10 feet.
	Tree loss, grading, and vehicles noticeable to users along shoreline and in lake.	None.	None.	Tree loss and grading noticeable to persons accessing marina. May be minimally noticeable to people out on the lake.	Tree loss and grading noticeable to persons accessing marina.
<b>Operational</b>	Safe parking, turnaround, and traffic circulation per CBW standards.	Would not meet current parking demand during peak periods.	Would not meet current parking demand during peak periods.	Would require vehicle/trailer turnout lane connecting Lake Drive and Marina Drive to allow return to ramp or parking space.	Would require vehicle/trailer turnout lane connecting Lake Drive and Marina Drive to allow return to ramp or parking space.  Would only partially meet current parking demand during peak periods.
<b>Walking distance to marina</b>	Approximately 500 feet.	Not applicable.	Not applicable.	Approximately 500 feet.	Approximately 500 feet.

Source: El Dorado Irrigation District, 2007.

Note: (1) Values for Widening Marina Road alternatives are rough estimates based on concepts

### **7.3 Environmentally Superior Alternative**

Section 15126.6 of the State CEQA Guidelines requires that an “environmentally superior” alternative be selected and the reasons for such a selection be disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the fewest adverse impacts. However, Section 15126(e)(2) of the State CEQA Guidelines states if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

Although the No Project Alternative would avoid the significant impacts associated with the proposed project, the No Project Alternative would result in its own significant impacts. Under existing conditions, campsites, day use areas, roads, and parking areas have been and continue to be heavily impacted by users. Uncontrolled parking and trampling at campsites and picnic facilities; heavy use of trails, roads and parking areas; inadequate parking supplies; and lack of adequate visitors’ facilities all contribute to loss of vegetation cover, soil compaction, erosion, dust, road damage, and circulation problems. These lead to water quality, air quality, illegal parking, traffic circulation, traffic safety, and personal safety impacts. A continuation of this condition would worsen the environment at Sly Park and further damage the very resources that the public expects to be present and goes there to enjoy. Thus, the No Project Alternative may not be the environmentally superior alternative.

The proposed Marina Parking Lot component of the Master Plan involves the only significant and unavoidable impacts. Thus, the alternatives discussion has focused on ways to reduce or avoid them.

Alternative 2 (“Proposed Project without New Marina Parking Lot”) described in Section 7.2.2, is the Environmentally Superior Alternative. This would completely avoid parking lot construction impacts, avoid all visual impacts associated with the proposed new parking lot and eliminate the existing illegal parking impacts, which in turn would eliminate restrictions to traffic circulation along Marina Road.

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Appendix A  
Initial Study, Notice of Preparation and Comments

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CEQA: California Environmental Quality Act

*Appendix I*  
**NOTICE OF PREPARATION**

To: \_\_\_\_\_  
\_\_\_\_\_  
(Address)

From: El Dorado Irrigation District  
2890 Mosquito Road  
Placerville, CA 95667 (Address)

**Subject: Notice of Preparation of a Draft Environmental Impact Report**

El Dorado Irrigation District will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study ( is  is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to W. Chris Word at the address shown above. We will need the name for a contact person in your agency.

Project Title: Sly Park Recreation Area Master Plan

Project Applicant, if any: \_\_\_\_\_

Date: September 28, 2004

Signature: *Jana Saboodeh*

Title: Director, Env. Compliance & Resource Mgmt

Telephone: (530) 642-4021

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15062(a), 15103, 15375.

# Notice of Completion & Environmental Document Transmittal

## Appendix C

For U.S. Mail: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044

For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH#

### Project Title:

Sly Park Recreation Area Master Plan

Lead Agency: El Dorado Irrigation District

Contact Person: W. Chris Word

Street Address: 2890 Mosquito Road

Phone: (530) 842-4021

City: Placerville, CA

Zip: 95867

County: El Dorado

### Project Location:

County: El Dorado County

City/Nearest Community: Pollock Pines, CA

Cross Streets: Sly Park Road

Zip Code: 95867

Assessor's Parcel No.:

Section: Sly Park, Calif. Twp. 10 North Range: 13 East Base:

Within 2 miles: State Hwy#: U.S. 50

Waterways: Hazel Creek, Sly Park Creek

Airports: None

Railways: None

Schools: Emigrant Trails, Sierra Ridge

### Document Type:

#### CEQA:

- NOP  
 Early Cons  
 Neg Dec  
 Mit Neg Dec
- Draft EIR  
 Supplement to EIR  
 Subsequent EIR  
 Other:

#### NEPA:

- NOI  
 EA  
 Draft EIS  
 FONSI

#### Other:

- Joint Document  
 Final Document  
 Other:

### Local Action Type:

- General Plan Update  
 General Plan Amendment  
 General Plan Element  
 Community Plan  
 Specific Plan
- Master Plan  
 Planned Unit Development  
 Site Plan  
 Rezone  
 Prezone
- Use Permit  
 Land Division (Subdivision, etc.)  
 Annexation  
 Redevelopment
- Coastal Permit  
 Other

### Development Type:

- Residential: Units \_\_\_\_\_ Acres \_\_\_\_\_  
 Office: Sq. ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_  
 Commercial: Sq. ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_  
 Industrial: Sq. ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_  
 Educational \_\_\_\_\_  
 Recreational \_\_\_\_\_
- Water Facilities: Type \_\_\_\_\_ MGD \_\_\_\_\_  
 Transportation: Type \_\_\_\_\_  
 Mining: Mineral \_\_\_\_\_  
 Power: Type \_\_\_\_\_ MW \_\_\_\_\_  
 Waste Treatment: Type \_\_\_\_\_ MGD \_\_\_\_\_  
 Hazardous Waste: Type \_\_\_\_\_  
 Other:

Total Acres: (approx.) \_\_\_\_\_

### Project Issues That May Have A Significant Or Potentially Significant Impact:

- Aesthetic/Visual  
 Agricultural Land  
 Air Quality  
 Archeological/Historical  
 Biological Resources  
 Coastal Zone  
 Drainage/Absorption
- Economic/Jobs  
 Fiscal  
 Flood Plain/Flooding  
 Forest Land/Fire Hazard  
 Geologic/Seismic  
 Minerals  
 Noise  
 Population/Housing Balance
- Public Services/Facilities  
 Recreation/Parks  
 Schools/Universities  
 Septic Systems  
 Sewer Capacity  
 Soil Erosion/Compaction/Grading  
 Solid Waste  
 Toxic/Hazardous
- Traffic/Circulation  
 Vegetation  
 Water Quality  
 Water  
 Supply/Groundwater  
 Wetland/Riparian  
 Growth Inducement  
 Land Use  
 Cumulative Effects  
 Other

### Present Land Use/Zoning/General Plan Designation:

Recreational Facilities, Residential Agriculture - 80 acre

### Project Description: (please use a separate page if necessary)

The proposed project is the preparation of a Master Plan for the Sly Park Recreation Area (SPRA) to guide improvements and management of the SPRA over the next 10-15 years. A Master Environmental Impact Report will be prepared.

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2004

**Reviewing Agencies Checklist**

*Appendix C*

*continued*

*Lead Agencies may recommend State Clearinghouse distribution by marking agencies below.*

- |   |  |
|---|--|
| <input type="checkbox"/> Air Resources Board                    | <input type="checkbox"/> Office of Emergency Services            |
| <input type="checkbox"/> Boating & Waterways, Department of     | <input type="checkbox"/> Office of Historic Preservation         |
| <input type="checkbox"/> California Highway Patrol              | <input type="checkbox"/> Parks & Recreation                      |
| <input type="checkbox"/> Caltrans District # _____              | <input type="checkbox"/> Pesticide Regulation, Department of     |
| <input type="checkbox"/> Caltrans Division of Aeronautics       | <input type="checkbox"/> Public Utilities Commission             |
| <input type="checkbox"/> Caltrans Planning                      | <input type="checkbox"/> Reclamation Board                       |
| <input type="checkbox"/> Coachella Valley Mountains Conservancy | <input type="checkbox"/> Regional WQCB # _____                   |
| <input type="checkbox"/> Coastal Commission                     | <input type="checkbox"/> Resources Agency                        |
| <input type="checkbox"/> Colorado River Board                   | <input type="checkbox"/> S.F. Bay Conservation & Development     |
| <input type="checkbox"/> Commission                             |  |
| <input type="checkbox"/> Conservation, Department of            | <input type="checkbox"/> San Gabriel & Lower Los Angeles Rivers  |
| <input type="checkbox"/> Corrections, Department of             | <input type="checkbox"/> & Mountains Conservancy                 |
| <input type="checkbox"/> Delta Protection Commission            | <input type="checkbox"/> San Joaquin River Conservancy           |
| <input type="checkbox"/> Education, Department of               | <input type="checkbox"/> Santa Monica Mountains Conservancy      |
| <input type="checkbox"/> Office of Public School Construction   | <input type="checkbox"/> State Lands Commission                  |
| <input type="checkbox"/> Energy Commission                      | <input type="checkbox"/> SWRCB: Clean Water Grants               |
| <input type="checkbox"/> Fish & Game Region # _____             | <input type="checkbox"/> SWRCB: Water Quality                    |
| <input type="checkbox"/> Food & Agriculture, Department of      | <input type="checkbox"/> SWRCB: Water Rights                     |
| <input type="checkbox"/> Forestry & Fire Protection             | <input type="checkbox"/> Tahoe Regional Planning Agency          |
| <input type="checkbox"/> General Services, Department of        | <input type="checkbox"/> Toxic Substances Control, Department of |
| <input type="checkbox"/> Health Services, Department of         | <input type="checkbox"/> Water Resources, Department of          |
| <input type="checkbox"/> Housing & Community Development        |  |
| <input type="checkbox"/> Integrated Waste Management Board      | <input type="checkbox"/> Other:                                  |
| <input type="checkbox"/> Native American Heritage Commission    | <input type="checkbox"/> Other:                                  |

**Local Public Review Period (to be filled in by lead agency)**

Starting Date \_\_\_\_\_ Ending Date \_\_\_\_\_

**Lead Agency (Complete if applicable):**

El Dorado Irrigation District  
 Consulting Firm: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City/State/Zip: \_\_\_\_\_

**Applicant:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**City/State/Zip:** \_\_\_\_\_  
**Phone:** (\_\_\_\_) \_\_\_\_\_

Contact: Chris Word  
 Phone: (530) 642-4021

Signature of Lead Agency Representative Steve Schmalz Date: 9/30/04

Authority cited: Sections 21083 and 21087, Public Resources Code. Reference: Section 21161, Public Resources Code.

**Sly Park Recreation Area Master Plan**  
**Notice of Preparation**  
**& Initial Study**

Prepared for:

El Dorado Irrigation District



September 30, 2004

Submitted by:

 **FOOTHILL ASSOCIATES**

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# **1.0 NOTICE OF PREPARATION INFORMATION SHEET**

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**PROJECT TITLE:**

Sly Park Recreation Area Master Plan

**PROJECT LOCATION:**

Sly Park Recreation Area

4771 Sly Park Road

Pollock Pines, CA

**LEAD AGENCY AND ADDRESS:**

El Dorado Irrigation District

2890 Mosquito Road

Placerville, CA 95667

**CONTACT PERSON:**

W. Chris Word

El Dorado Irrigation District

**PROJECT DESCRIPTION:**

Development of a Master Plan to guide improvements to the Sly Park Recreation Area (SPRA). The Master Plan will include SPRA goals, objectives, and the following plan elements:

- Recreation Element
- Camping
- Trails
- Lakeside Uses
- Educational Element
- Museum/Visitor Center
- Interpretive Programs
- Youth Group Camp
- Meeting/Conference Center
- Sugarloaf Fine Arts Camp
- Access Element
- Realigned Park Entrance
- Lake Road Improvements
- Trails Staging Areas
- Parking
- Non-automobile Park Access

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- Resource Management, Protection and Restoration Element
- Historical/Archaeological Preservation
- Natural Resource Management
- Park Maintenance Element
- Maintenance Facilities

**PROJECT APPLICANT:**

El Dorado Irrigation District

2890 Mosquito Road

Placerville, CA 95667

**DECLARATION:**

The El Dorado Irrigation District has determined that the above project may have a significant effect on the environment and therefore requires the preparation of an Environmental Impact Report (EIR).

**Submit comments regarding this NOP no later than 30 days from receipt to:**

W. Chris Word

El Dorado Irrigation District

2890 Mosquito Road

Placerville, CA 95667

Or by e-mail to: [cword@eid.org](mailto:cword@eid.org)

## 2.0 INTRODUCTION

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### 2.1 Introduction and Regulatory Guidance

This document is an Initial Study that provides notification of preparation of a Master Environmental Impact Report (MEIR) for the Sly Park Recreation Area Master Plan project. This Notice of Preparation (NOP) has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., and the State CEQA Guidelines, 14 California Code of Regulations (CCR) Section 15000 et seq. A separate Program Timberland EIR (PTEIR) will be prepared, including a separate Notice of Preparation, by the California Department of Forestry, and will be included as an appendix to the Master EIR. The Department of Forestry will act as Lead Agency for the PTEIR.

An Initial Study is conducted by a Lead Agency to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063). According to CEQA Guidelines Section 15064, an EIR shall be prepared for a project subject to CEQA when the Initial Study indicates there is substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment.

A Master EIR may be prepared for certain classes of projects, including projects that consist of smaller individual projects which will be carried out in phases (CEQA Guidelines Section 15175). The Master EIR procedure will form the basis for later decision making. Per CEQA Guidelines Section 15175, a Master EIR shall, to the greatest extent feasible, evaluate the cumulative and growth inducing impacts and irreversible significant effects on the environment of subsequent projects.

### 2.2 Lead Agency

Pursuant to CEQA Guidelines Section 15051, the El Dorado Irrigation District is the Lead Agency for the Sly Park Recreation Area Master Plan project.

### 2.3 Purpose and Document Organization

The purpose of this Initial Study is to determine if the proposed Sly Park Recreation Area Master Plan project may have a potentially significant impact on the environment.

This document is divided into the following sections:

**1.0 Notice of Preparation Information Sheet** - project location, description summary and contacts.

**2.0 Introduction** - provides an introduction and describes the purpose and organization of this document.

**3.0 Project Description** - provides a detailed description of the proposed project including the location of the project and applicable project figures and maps.

**4.0 Initial Study of Environmental Setting, Environmental Impacts, and Determination** - describes the environmental setting for each of the environmental subject areas, and evaluates a range of impacts in response to the environmental checklist.

**5.0 Report Preparation and References** - identifies staff and consultants responsible for preparation of this document along with references used in preparation of the Initial Study.

## 2.4 Terminology Used in This Document

The Environmental Checklist in this document utilizes the following terminology to describe the various levels of significance associated with project related impacts:

**Potentially Significant Impact:** An impact that may have a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (CEQA Guidelines Section 15382); the existence of a potentially significant impact requires the preparation of an EIR with respect to such an impact;

**Less Than Significant Impact:** An impact which is less than significant and does not require the implementation of mitigation measures; and

**No Impact:** Utilized for checklist items where the project will not have any impact and does not require the implementation of mitigation measures.

## 2.5 Additional Information and Commenting on This Notice of Preparation

In order to obtain additional information regarding this project, review studies or reports referenced in this report or comment on this document, please contact:

W. Chris Word

El Dorado Irrigation District

2890 Mosquito Road

Placerville, CA 95667

Or by e-mail to: [cword@eid.org](mailto:cword@eid.org)

## **3.0 PROJECT DESCRIPTION**

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### **3.1 Development of the Proposed Master Plan**

Selection of program elements has been guided by suggestions from the public and from EID staff, particularly the Recreation management staff. Between April 2004 and August 2004, a total of 4 public meetings were held in Shingle Springs and Pollock Pines, and fifth public meeting in the form of a design charrette was conducted in Placerville. Other local public agencies were interviewed to obtain their input during the process, including the El Dorado County Planning Department, Parks & Recreation Department and Sheriff's Department; the City of Placerville Parks & Recreation Department, the Eldorado National Forest Recreation Division, and the Sacramento Environmental Education Center.

Baseline environmental analyses were conducted during the Master Plan Program process. The information assisted in the development of opportunities and constraints and assisted in the screening various elements based on the location and sensitivity of resources present and the potential for impacts that could result from implementation of the proposed facilities and programs.

The Master Plan establishes the EID's vision for improvement and management of the recreation area for the next 10-15 years. Program elements will be identified for specific phases of development. When necessary, subsequent environmental analysis will occur when project-specific design is undertaken for future phases.

The Master Plan will also contain a Forest Management Plan (FMP) and Historic Properties Management Plan. The purpose of the FMP is to provide baseline information needed to prepare a California Timber Harvest Plan consistent with California Department of Forestry (CDF) requirements for cost share programs. Commercial timber harvest opportunities will be identified and appraised in the FMP, and fire management measures will be outlined. The FMP will include a strategy for retaining and generating large tree forest structure.

A Historic Properties Management Plan will be prepared under guidelines provided by the California Office of Historic Preservation.

The project site and vicinity is shown in Figure 1. A map depicting the current ownership is shown in Figure 2.

### **3.2 Introduction**

The following program elements will be considered in the alternatives phase of the master plan design process. As noted below, not all of the program elements will be included in each alternative, and some program elements may not be included in the final master plan.

In addition, as spatial and operational relationships are further refined, the size and scope of some of the program elements may change. The following is a summary list of the program elements to be described in more detail:

#### 1) Recreation Elements

- Camping
- Trails
- Lakeside Uses

## 2) Educational Elements

- Museum/Visitor Center
- Interpretive Programs
- Youth Group Camp
- Meeting/Conference Center
- Sugarloaf Fine Arts Camp

## 3) Access Elements

- Realigned Park Entrance
- Lake Road Improvements
- Trails Staging Areas
- Parking
- Non-automobile Park Access

## 4) Resource Management, Protection and Restoration

- Historical/Archaeological Preservation
- Natural Resource Management

## 5) Park Maintenance

- Maintenance Facilities

## 3.3 Recreation Elements

### 3.3.1 Camping

The existing campgrounds currently provide 159 family camp sites. The Group Camp area consists of five sites that can accommodate up to 390 campers.

#### **Proposed improvements to existing campgrounds:**

It is one of the goals of the Master Plan to improve the quality of the visitor experience at the recreation area. This could be achieved by reducing the density of existing campgrounds and up-grading the remaining sites. Reducing campground density could be accomplished by selectively removing camp sites, particularly those experiencing or causing erosion problems and to reduce impacts on existing trees that are in good health and to enhance camp site privacy. Up to 25% of remaining spaces could also be replaced with tent cabins, wagons, yurts or cabins (see discussion below under New Camping Facilities) to further reduce impacts in shoreline campgrounds and negate the need for grading.

At remaining camp sites, vehicle pads at camp sites could be paved utilizing permeable pavement to reduce runoff and compaction. Slopes at campsites could be reduced to provide flatter areas and to reduce runoff and erosion; where needed, boulders or timber retaining walls can provide an aesthetic means of retaining cuts and fills.

More clearly defining camp sites and walkways through campgrounds could help to reduce user impacts on campgrounds and reduce user conflicts. This could be achieved using slit-rail fencing and other natural materials, such as boulders and logs. In addition, native plants might be used, where feasible, to revegetate bare areas, reduce erosion and enhance camp site

privacy. Where ever feasible, Best Management Practices could be implemented to enhance soil infiltration and reduce runoff and erosion.

Additionally, vehicular circulation could be realigned in most of the campgrounds to provide greater efficiency and minimize maneuvering, especially for large vehicles or those with trailers.

Providing coin-operated, hot-showers centrally located to larger campgrounds would add to the quality to a visitor's experience. Minimal parking could be provided to enhance handicap access and provide access for those coming from more remote campgrounds.

### **New Camping Facilities:**

One of the strategies for increasing revenue and reducing impacts of camping include providing other types of camp structures in new areas. Below is a description of camp structures being used successfully by Oregon State Parks that would be consistent with the goals and objectives of the recreation area and be consistent with the natural forest environment:

- **Tent Cabins, Yurts, Wagons and Housekeeping Cabins.** A mixture of tent cabins, yurts and cabins would provide opportunities to reserve all-season lodging for parties of two to eight while staying with the natural rustic qualities of the recreation area. These types of units, in combination with site location and varying amenities, could provide a wide range of affordability from very basic, more affordable units to more deluxe accommodations accessible by car. People interested in staying at the park frequently inquire about the availability of these types of accommodations and would provide the opportunity to not only increase revenues and expand the season for camping, but would the opportunity to reduce the types of impacts currently occurring at the existing camp sites.

In keeping with the spirit of camping, those wanting to leave the tent and RV behind would still need to provide their own bedding, food and camp kitchen. With little exception, cooking would be required to be done outdoors. And, unless units were provided with indoor restrooms or showers, guests would utilize common facilities, such as toilets, showers and water spigots for potable water.

Basic amenities common to all units would include a fire ring, picnic table and parking space for one to two vehicles.

- **Tent cabins.** This would be one of the most basic and affordable units. They are generally constructed on a wood platform and, depending on construction, can withstand a minimal amount of snow. Amenities could include a small wood stove, beds, bunk beds, and a small deck.
- **Yurts.** A circular domed tent with a plywood floor, structural wall support, and a clear plexiglass skylight, a yurt can withstand high winds and efficiently retain heat in the winter.
  - Rustic yurts (16' in diameter) can sleep up to 5 and can generally be used year-round. They can be provided with comfortable furniture, including futon sofa, single/double-size bunk bed, and coffee table. If provided with electricity, they can be lighted and heated and a venting skylight provides for summer ventilation. The door can be locked for security.
  - Deluxe yurts measure 24-feet in diameter can also be used year-round to sleep up to 7. They're made of a sturdy, wooden lattice covered in canvas; have a skylight; and a

locking, wooden door. They would be provided with beds with mattresses, a bathroom with shower, a small kitchen area with a refrigerator and convection/microwave oven and dining table.

- **Wagons.** Fun for a family of four, and similar to the accommodations of a basic tent cabin, a wagon would feature 2 Double beds. Wagons would generally on be available late spring through fall.
- **Cabins.** Cabins have the advantage of being usable year-round, even when the snow flies. All are lockable and if electricity is available, can be air conditioned and provided with lighting and a small refrigerator. A number of cabin types can serve a wide variety of potential users:
  - 1-room rustic cabins can sleep 4, and would include a double bed, a single-sized bunk bed, dining table and chairs, covered porch with a bench and a deck on the view side.
  - 2-room rustic cabins are slightly larger, sleeping up to 6, and would be provided with a double bed, single-sized bunk bed, futon sleeper sofa (double size), dining table and chairs
  - Duplex cabins can be rented individually or together. They sleep four on two bunk beds on one side and three on a double/single bunk bed on the other side.
  - Deluxe cabins afford more creature comfort. They can sleep five on a futon couch/double bed, double/single-sized bunk bed, and include a dining table and chairs, refrigerator, convection/microwave oven, a gas barbecue grill, a bathroom with a solar shower, heating, air conditioning, lighting, and electrical outlets.
- **Recreational Vehicles (RV) Campground.** Due to site constraints on the north shore, it would be very difficult to accommodate any significant number of additional RVs in existing campgrounds.

A number of sites, primarily above Lake Road have been identified as potential new campgrounds. These are discussed in the order that they occur from the entrance going east:

- **Area above the main day-use area.** This area is linear in nature and somewhat gentle in slope and affords a wonderful view of the lake. Vegetation in this area consists of more mature pines and oaks with a groundcover of mountain misery, but little in the way of other shrubbery. With careful site planning, little removal of vegetation would be necessary to locate approximately 12 sites. An existing maintenance road currently provides access to this area.
- **‘Boy’ Scout Hill.** This area would be particularly suitable for youth camping for groups of up to 300. This area could be used by primarily by scouts, youth corps, schools, church or other groups. Depending on group sizes and functions, it would be potentially feasible to accommodate two different groups at a time. Facilities likely to be provided include:
  - Tent cabins, wagons, yurts, rustic cabins and and/or defined tent sites organized in pods linked by paths of designated walkways
  - Camp kitchen area(s) for portable kitchen(s)
  - Potable water
  - Waterless or composting toilets
  - A solar shower facility
  - Fire rings with grates ((centered in each pod)
  - Amphitheater for evening “campfire” programs located at end of point

- Parking for equipment/supply vehicles and handicap access only
- **Areas above Jenkinson and Stonebraker Camps.** These two areas would potentially be topographically suitable for the location of new camping areas. These areas are accessible by existing dirt roads, although they are currently gated and locked to keep unauthorized vehicles out. Some selective tree removal would probably be required to accommodate the siting of approximately 12 to 24 units in each area.
- **Remote Walk-in, Boat-in or Ride-in Campsites at Hazel/Sly Creek Peninsula.** Remote camping areas accessible only by trails or from the lake; must be reserved. Given the overall size of the park, the number of remote camping areas should be limited to 8 to 12 sites. No fires allowed in these areas. Some remote camping areas may have facilities for horse camping (small paddocks with hay and water) that can be reserved by equestrians. Facilities would include:
  - Designated, defined sites
  - Composting toilets
  - Possible tent cabins, wagons or camp platforms could be provided.

***Elements to be included in the Alternatives:***

Alternatives may explore size, number and location of additional camping facilities, such as the youth campground and remote camping areas.

### *3.3.2 Trails*

Hiking, equestrian and bicycling trails should be separated to the greatest extent possible to reduce inherent conflicts. Separation and definition should be a high priority in areas affording minimal horizontal and vertical visibility. Consider developing a competition-level mountain bike trail that could be constructed in partnership with a mountain biking organization or corporate sponsor. Also consider one-way “loop” trails. More advanced trails would be longer and incorporate a variety of topographic conditions.

Utilize methods and guidelines established by established trails authorities, such as CA State Parks, etc., to layout and construct trails to enhance durability and usability and minimize impacts. Some trails should achieve current standards for universal accessibility, including surfacing and signage near staging areas on relatively flat ground. Consider development of some road-adjacent trails that would allow non-automobile access to the park (see access elements). Provide rest areas along more isolated stretches of trails to maximize opportunities to have quite experiences such as wildlife viewing, reading, etc. Portions of selected trails should be considered “interpretive trails” with appropriate signage and other features.

Clearly define designated trails and provide barriers to discourage use or minimize confusion about non-designated trails. Where ground-level signage is constantly removed by vandals, utilize tree-friendly flagging beyond reach on trunks, especially where trails cross to designate appropriate user-type (i.e., mountain bikes, equestrian, and pedestrian). Revegetate or obliterate extraneous trails that are not a part of the designated trail system and/or those contributing to drainage and erosion problems.

Provide connectivity to the major trail system from all campground areas to encourage walking and biking vs. driving within the park.

Trails Staging Areas should be provided in key locations and include restrooms, potable water, shade areas, staging areas, picnic areas, water and hitching facilities for equestrian

trails, bicycle parking facilities for bicycle trails, emergency and service access, signage, gates and fencing where needed. Trails Staging Areas are discussed in more details under the heading of ACCESS.

**Elements to be Considered in Alternatives:**

- Location, extent and types of trails may vary in the alternatives.

**3.3.3 Lakeside Uses**

Current waterfront uses should be maintained, such as the boat launches, boat trailer parking areas, day-use areas and campgrounds. Regulations that impact recreational lake use (number and types of boats, water levels, etc.) are controlled by State water quality regulations and the California Department of Boating and Waterways and are not under the jurisdiction of El Dorado County or EID. Therefore, management of the lake's recreational resources will require continued close collaboration between EID and these agencies. Roads within the park are currently the responsibility of EID; however, approval of El Dorado County will be needed for any proposed development, including roadway improvements within the park.

- **Swimming Lagoon**  
The lagoon to the south of the marina could be designated as a swimming area. Providing water-play amenities, such as inflatable, floating play equipment (trampolines, climbing/diving tower, etc.) and/or swimming platforms would provide an additional recreation attraction that could generate additional day-use fees. Beach improvements might include a geotextile-stabilized sand surface along the north shore of the lagoon. Parking for lagoon use could potentially conflict with boat-trailer parking.
- **Fishing**  
Fishing could include enhancement to lakeside fishing and supplies as noted in the "lakeside uses" section. In addition, youth-oriented or specialized fishing events could be sponsored by EID in partnership with the City of Placerville Parks & Recreation Department and local sporting goods shops. These events could be scheduled prior to the Memorial holiday in order to encourage use off-season. Additionally, fish cleaning stations could be located at boat launch parking areas.
- **Increase Capacity for Boat Rentals**  
Currently, there is a floating boat rental facility at the Stonebraker Boat Launch area. Access to the rental facility is via a narrow concrete stairway on a steep section of shoreline. Improvements should be considered for access and are discussed in more detail under the heading ACCESS.  
Increasing boat rental capacity could be achieved through either expansion of the existing facility or the addition of a similar facility elsewhere on the shoreline. The types of boats added to the existing inventory should be based on the relative popularity of boat types and need for more to meet demand.
- **Improved Day-use Areas**  
The primary issue associated with day-use areas is accessibility due to the lack of parking and handicap accessibility from the parking areas to the sites. This is discussed in more detail under the heading ACCESS.
- **Beaches**  
Evaluate areas of the shoreline, especially in the vicinity of day use areas and campgrounds, where it may be feasible to create one or two coarse sand beaches;

design and construction should utilize materials and methods that will minimize the likelihood of erosion of these areas.

**Improvements to existing lakeside uses that may be considered:**

- Designation of the lagoon as a swimming area
- The addition of water play amenities at the lagoon
- Construction of a geotextile sand surface at the lagoon
- The addition of fish cleaning stations at boat launch parking areas
- Improvements to the boat parking/launch ramp areas
- Expansion of the existing boat rental facility

**Elements to be considered in the Alternatives:**

Alternatives may include lakeside uses, such as addition of a new boat rental facility and providing water play equipment at the swimming lagoon, while other alternatives may not include these uses.

## **3.4 Educational Elements**

### *3.4.1 Museum/Visitor Center*

The museum/visitor center would focus on providing services and education for park visitors. This would include education of the natural and cultural history of the park, as well as information on the recreation area and other recreation opportunities in the immediate vicinity. The visitor center could also be a common meeting point for docent-led programs. There is currently a small Miwok Interpretive Center located at the Sacramento Environmental Education Center, which is approximately 2 miles away. However, due to the need to control access to the Environmental Center, the Miwok Interpretive Center is not generally available to the public. Relocating the Miwok Interpretive Center to the Sly Park location could provide more public access to this program.

The area to the right of the park entrance could potentially be a good site for this facility as it is the least sloped area within the site along Sly Park Road and allow access to the center without entering the park. Potential partners for development and operation of the center could include the El Dorado County Museum, the El Dorado County Indian Council and the Church of the Latter Day Saints.

Facilities could include the following:

- Display areas
- Administrative office and storage
- Restrooms
- Telephones
- Parking and access for school buses
- Observation deck

**Elements to be considered in the Alternatives:**

Location and size of the visitor center may vary in the alternatives.

### *3.4.2 Interpretive Programs*

In addition to the visitor center and education center, the park provides many opportunities for interpretation of the area's natural and cultural history. There is currently a short, looped trail, called the Miwok Trail, which includes interpretive signage at the existing museum and along the trail. It is used by small school groups and park visitors. Facilities to support interpretive programs could include interpretive signage and displays along trails and at distinctive sites.

#### **Elements to be considered in the Alternatives:**

An interpretation program and themes should be developed once a direction for the Master Plan is determined. This will not be a significant factor in the alternatives.

### *3.4.3 Youth Corps Camp*

California Conservation Corps (CCC) camps are being closed due to lack of state funding. In addition, due to mandates to be fiscally self-sufficient, it has become cost prohibitive to utilize crews for projects at the recreation area.

Based on the model of the Oregon-based Northwest Youth Corps, it might be possible for an interested non-profit organization to develop a similar program, with corporate and forest products industry support and grants from willing foundations, to establish an education-based, work experience for teenagers modeled after the historic Civilian Conservation Corps of the 1930's could be based at Scout Hill.

It is envisioned that the recreation area would be the beneficiary of projects constructed for training purposes in exchange for providing the facility for the Corps housing and training. The facilities required to house the Corps were discussed previously for 'Boy' Scout Hill under the heading of RECREATION.

### *3.4.4 Meeting/Conference Center*

The existing Dam Keeper's Compound, as described in detail in Existing Conditions, could be utilized, with fairly minor modifications, as a meeting/conference center for group of up to 75 people. It is currently envisioned that the two building will be linked with decking that will also provide handicap accessibility to the facilities. Staff at the Sacramento Science Center has indicated that there is a major gap in the area to be able to provide for groups of under 50 persons as their facilities are to large to do it economically.

The Girl Scout Day Camp area (also know as Flash Mountain), located immediately west and adjacent to the Gate Keeper's Compound, could used to provide about a dozen rustic housekeeping cabins (as described previously under the heading of RECREATION) to house conference attendees. This would provide an opportunity to rent the facility for multiple-day conferences, meetings and retreats and generate additional revenue.

Sly Park management would like to see the Girl Scouts moved to Scout Hill because of conflicts that the Girls Scout's uses sometimes pose for the adjacent group campgrounds. Given the Girls Scouts current uses the site for crafts, archery and other group activities that would be better accommodated on flatter terrain, moving their use to Scout Hill will afford them greater opportunity and comfort.

The two existing shop buildings could potentially be utilized for arts, crafts and shop classes taught as a part of a seminar or workshop or with improvements provide additional classroom space.

It is also possible that the existing water tower adjacent to the garage might be a good candidate to serve as a cellular signal relay tower. Cellular service in the park can be very poor. Improving service would improve communications capability, especially for emergency purposes.

### *3.4.5 Sugarloaf Fine Arts Camp*

A fine arts camp would be a facility for week-long and or day use by school or other groups to promote the arts for young artists 10 - 17 years, and other educational programs, such as 4-H. This would be an opportunity to create a unique setting that is relatively accessible to a substantial urban population, and could be modeled after some of the “science camps” that exist in Northern California, including the nearby Sacramento Environmental Education Center.

The facility is proposed to be located on the north side of the Mormon Emigrant Trail along the east boundary of the recreation area. Approved in concept the EID Board of Directors in May of 2004, this facility would be developed in partnership with the El Dorado County Office of Education, with the Sugarloaf Station Foundation as their primary partner. This facility will be able to accommodate up to 300 people. Facilities could include the following:

- Cabins, dormitories, tent cabins or other structures for overnight accommodations.
- Kitchen and dining area
- Amphitheater
- Administrative office
- Emergency/service vehicle access
- Parking or access to staging area for school buses, vans, and cars
- Indoor and outdoor classroom space
- Restrooms/showers

### **Elements to be considered in the Alternatives:**

The education center may not be included in all of the alternatives. Location and size may also vary in some of the alternatives.

## **3.5 Access Elements**

### *3.5.1 Park Entrance Improvements*

Issues of traffic congestion have been identified in the baseline Traffic and Circulation Analysis prepared for the project. One of the groups at the design charrette for the project developed an alternative layout for the entrance that would improve access at the entrance to reduce congestion and traffic conflicts, including moving the entrance booth further down the entry drive to allow more stacking on site and hopefully reduce that occurring on Sly Park Road. The dump station was also considered for relocation to an adjacent area to reduce traffic conflicts at the exit. New software also could be evaluated that would allow for quicker check-in of guests; also, allowing guests already checked in to use the right-hand lane for re-entering the park might also reduce congestion at the entrance at peak times.

- Road geometrics for adequate stacking and turning radii

### 3.5.2 Lake Road Improvements

Improvements are need to Lake Road from the entrance to roads-end at Dogwood Camp primarily to increase road width to meet Fire Department minimum standards. Where topography allows, the road could be widened to a 2-lane minimum to allow passing or at minimum, where opportunities exist, loops and/or pull-outs could be created to allow passing.

### 3.5.3 Staging Areas

Staging areas provide controlled and managed entry to the park trails. Two areas a the recreation area are being considered for staging areas: one on the south side of the lake just east of the second dam at Bumpy Meadows and the other at the Hazel Creek Day-use Area, which also functions as a trail head/mid-point for the trails that circle the lake.

Final programs for each staging area will depend on the number and type of vehicles, the adjacent recreational facilities the staging area is intended to serve, as well as the available space and existing environmental conditions of each proposed staging area. Staging areas may include the following:

- Car/Truck Parking, including handicap parking
- Horse/Bike Trailer Parking
- Bus stop (if appropriate for mass transit)
- School bus parking (if needed for educational programs)
- Restrooms
- Trail map/information
- Emergency phone
- Emergency access
- Benches/seating/picnic areas
- Signage
- Fee collection system (kiosk or automated system)
- Access control gates/fencing
- Trash/recycle containers
- Bicycle racks or other bicycle parking facilities
- Watering troughs and hitching posts for horses
- Infrastructure (potable water, electricity, telephone, etc.)

#### **Elements to be considered in the Alternatives:**

Size, features and locations of the staging areas will vary in the alternatives based on the various uses that are proposed.

### 3.5.4 Parking

Additional parking should be provide in the vicinity of day-use areas using short retaining walls to retain cuts and fills, if necessary, to create the spaces and/ or widening shoulders along Lake Road whenever feasible to accommodate shoulder parking. Shoulders should either be clearly wide enough to park on or barriers placed where they are substandard to prohibit parking so that parked vehicles do not interfere with road traffic. Individual parking spaces should be clearly marked to maximize use of existing parking areas.

### 3.5.5 *Non-automobile Park Access*

Public transit to the park could provide youth and disabled and elderly persons with access to day-use facilities and activities, including hiking, swimming, picnicking and fishing, particularly during the summer months. The El Dorado County Stage currently provides service to Pollock Pines on the north side of Highway 50.

## 3.6 **Resource Management and Protection**

### 3.6.1 *Historic and Cultural Preservation*

This includes preservation and interpretation of existing archaeological sites. A Historic Properties Management Plan is being prepared parallel to the Master Plan for the project.

### 3.6.2 *Natural Resource Management*

- **Shoreline Stabilization**

Implement bioengineering methods of armoring and stabilizing all shorelines showing evidence of erosion and cutting. These might include practices such as placement of boulders, straw wattles used in conjunction with willow cuttings, etc. This will also serve to provide additional habitat for birds.

- **Forest Management Plan**

A Forest Management Plan (FMP) is being prepared parallel to the Master Plan. The FMP will be consistent with the California Department of Forestry (CDF) requirements for cost share programs and contain the required baseline information needed to prepare a California Timber Harvest Plan. Commercial timber harvest opportunities will be identified and appraised in the FMP, and fire management measures will be outlined. The FMP will include a strategy for retaining and generating large tree forest structure. The FMP will include:

- Evaluation of Roadways/Access Issues. The FMP will evaluate access and roadway conditions and future transportation needs for timber management operations. A road maintenance plan will be included in the FMP that addresses road surface drainage, dust abatement, and watercourse crossings consistent with CDF requirements.
- Forest Inventory. A forest inventory will be conducted to assess and describe the current forest stand characteristics such as species composition, age classes, present stocking level, present volume per acre, size class distribution, forest pests and diseases, and presence of hazard trees. This inventory will be used to stratify the property into management units based on similar forest characteristics, productivity and land uses.
- Identification of Constraints. The FMP will identify timber management constraints such as operational start and stop times, duration of operations, and protection zones based on the park's recreational needs and environmental issues such as archaeology, biology, noise, and aesthetics. This will be based largely on environmental information gathered through the CEQA review process, and integrated with the goals and objectives outlined for the Master Plan.
- Alternatives. Forest management alternatives will be identified and evaluated, using conifer growth projections for each management unit. This will include projections of future timber volumes and tree sizes available for harvesting by management unit, and target stand characteristics by management unit. Forest management alternatives will address projected frequency of management

- activities, silvicultural prescriptions, types of equipment used, and the period of time over which harvest would be balanced with forest growth. These alternatives will incorporate long-term management practices as well as small, interim, forest maintenance measures.
- Forest Valuation and Appraisal. The FMP will also include a forest valuation and project appraisal. A cost/benefit analysis of proposed management alternatives will be prepared, based on identification of commercial products and markets for these products.
  - Wildland Fire Potential and Hazard Reduction. An analysis will be made of wildland fire potential and a plan for fire hazard reduction. This will involve description of current vegetative characteristics with respect to vertical and horizontal connectivity and ground fuels, description of fire hazard reduction methods, and identification of areas where fuel profiles can be returned to a condition where reintroduction of low intensity fire will be possible.
  - Enhancement Opportunities. The FMP will identify opportunities for enhancing recreational and environmental values through timber management practices. This may include interpretive educational opportunities related to forest ecology and management, and opportunities for fish and wildlife enhancement such as increasing nesting, foraging, and perching habitat for raptors or increasing relative percentage of hardwoods.
  - Regulatory Framework. Identification and discussion of relevant State and Federal regulatory requirements and agencies responsible for evaluating forest related projects will be provided. Agency approval will not be necessary for completion of the FMP, but adherence to specific regulatory requirements and agency approvals will likely be necessary for some of the management projects to be implemented under the FMP. The FMP will provide guidance for meeting state and federal regulatory requirements. It will also include discussions of local and federal fire protection plans, and regional planning issues related to forest management.

The FMP will be prepared as an appendix to the Master Plan. Additionally, a section of the Master Plan will summarize key components of the Forest Management Plan and describe how Master Plan goals and objectives have been incorporated.

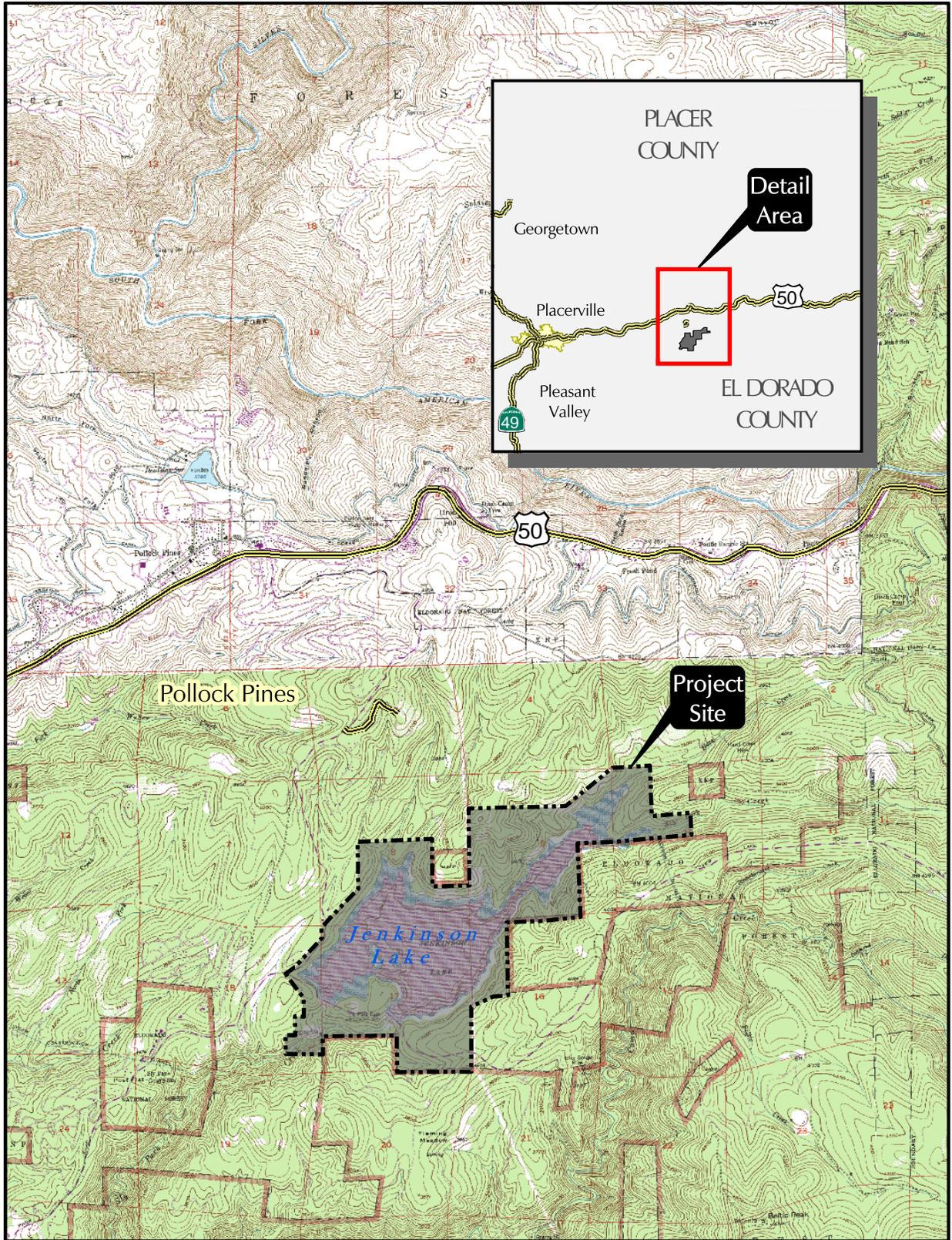
## **3.7 Park Operations**

### *3.7.1 Maintenance Facilities*

Maintenance facilities could be consolidated and reorganized to improve function and efficiency at the existing corporation yard adjacent to park headquarters. Equipment and operations currently located at the Dam Keeper's compound could be moved to the corporation yard. Satellite storage sheds should be considered in the vicinity of the marina and larger campgrounds and day-use areas to store commonly used small tools, equipment and materials frequently needed in day-to-day maintenance activities.

#### **Elements to be considered in the Alternatives:**

Size and location of satellite maintenance sheds will vary with the design program of each alternative.



**SITE AND VICINITY**

**FOOTHILL ASSOCIATES**  
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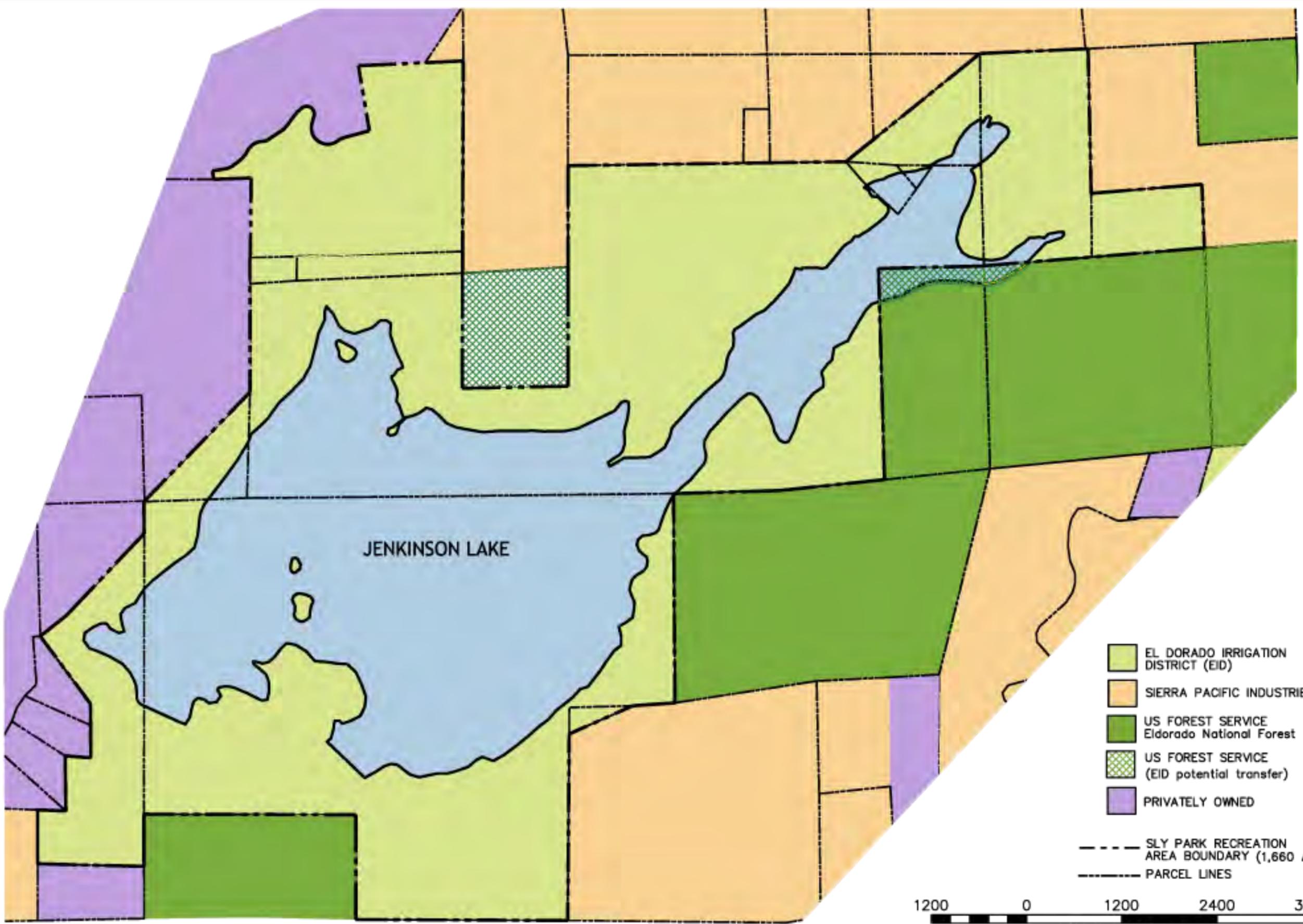
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 SCALE IN MILES

Drawn By: ARB, AH  
 Date: 07/09/04

**FIGURE 1**



# LAND OWNERSHIP

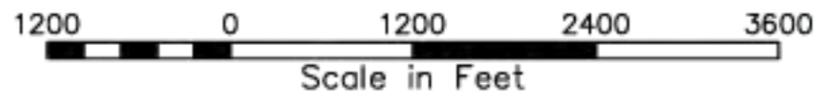


# SLY PARK RECREATION AREA MASTER PLAN



-  EL DORADO IRRIGATION DISTRICT (EID)
-  SIERRA PACIFIC INDUSTRIES
-  US FOREST SERVICE Eldorado National Forest
-  US FOREST SERVICE (EID potential transfer)
-  PRIVATELY OWNED

-  SLY PARK RECREATION AREA BOUNDARY (1,660 AC)
-  PARCEL LINES



## 4.0 INITIAL STUDY

TITLE OF PROJECT: Sly Park Recreation Area Master Plan

EVALUATION OF ENVIRONMENTAL IMPACTS:

### 4.1 Aesthetics

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

The majority of the project site is currently developed as a recreational destination. Visitors to the Sly Park Recreation Area (SPRA) are attracted by the scenic qualities of the lake and surrounding mountains. Local residents in the communities around the lake also value the recreation area for its scenic qualities. This section of the EIR will describe the existing character of the site and surrounding environment and will assess the anticipated changes to the visual character resulting from development of the proposed project including potential impact of proposed elements on views from the adjacent roads and within the park. Photos to and from the site will be included from select public vantage points in order to highlight the results of the aesthetic analysis.

The nearest California designated scenic highway to the project site is U.S. Highway 50, approximately three to four miles to the north of the lake. The SPRA is not anticipated to be within the viewshed from Highway 50, nor is the magnitude of the proposed changes such that they would influence views at this distance even if the lake was visible. No State of California scenic vistas designations have been found that include the SPRA.

While no specific County references were identified designating Sly Park or Jenkinson Lake as a scenic resource, the El Dorado County General Plan (2004) does include a policy of “maintaining areas of importance for outdoor recreation including areas of outstanding scenic, historic and cultural value.” (Policy 7.6.1.1-C). The County General Plan (2004) also includes a definition for a “Scenic Area” as “An open or mostly undeveloped area, the natural features of which are visually significant, or geologically or botanically unique.” The SPRA might qualify for scenic area status under this definition.

The El Dorado County General Plan calls for development of a Scenic Corridor Ordinance, the purpose of which is to map sensitive views and viewsheds within the entire County. Until this Ordinance is adopted by the County, the General Plan makes provision for review

of any projects visible from the important scenic viewpoints identified in Table 5.3-1 and Exhibit 5.3-1 of the El Dorado County General Plan DEIR (2003). The SPRA is not included in any of the significant viewpoints identified in Table 5.3-1 or Exhibit 5.3-1.

Even though the recreation area is not formally designated as a scenic vista or visible from a state scenic highway, certain elements proposed in the Master Plan have the potential to result in significant impacts to visual character of the SPRA. While it is unlikely that widening the roads, reconfiguring the campgrounds or increasing day use parking will significantly degrade the visual character of SPRA, the new marina parking lot, the Bumpy Meadows staging area, the RV campground and the Sugarloaf Fine Arts Camp have the potential to do so if not designed to minimize visual impacts. The EIR will include a viewshed analysis from five viewpoints thought to best represent the important potentially sensitive views and will analyze the impacts of the proposed elements based upon the visibility from these viewpoints. The viewpoints selected are as follows: 1) entry road, 2) southern dam, 3) Sierra campground, 4) Hazel day use area, 5) south shore trail. Visual simulation may be utilized if proposed projects have the potential to significantly impact the sensitive viewpoints.

Some of the elements such as the RV campground and the Fine Arts Camp also have the potential to increase light pollution in the area. This potential will be reviewed in relationship to the existing El Dorado County lighting ordinance.

The EIR will identify significance thresholds and evaluate standard mitigation measures for adverse aesthetic impacts.

Timber management operations also have the ability to significantly impact the scenic quality of a natural area. A separate Program Timberland EIR (PTEIR) is being developed to address the potential impacts of the Forest Management Plan (FMP) and will be an appendix to the Sly Park Master Plan MEIR.

## 4.2 Agricultural Resources

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. The FMMP Important Farmland Map for El Dorado County includes classifications for urban/built up land, grazing land, prime farmland, farmland of statewide importance, unique farmland, farmland of local Importance, water and other lands.

According to the El Dorado County General Plan Farmland Map (El Dorado County Planning Department, 2004; Figure AF-1), there are no Prime Farmlands, Unique Farmlands, or Farmlands of Statewide Importance at the project site. Farmland of local importance is located in the vicinity and development of recreational facilities at Sly Park could result in conversion of timberland to non-agricultural use. However, the location of the farmland of local importance and its conversion in the context of timberland operations is expected to be minimal and less than significant.

A Forest Management Plan (FMP) is being developed for the recreation area as part of the Master Plan EIR. The FMP will identify commercial timber harvesting opportunities, and fire management measures within the project area and will be consistent with California Department of Forestry (CDF) requirements. The FMP will also provide baseline information needed to prepare a California Timber Harvest Plan, and while the Master Plan MEIR will also cover the FMP, a separate CEQA review is required for a Program Timberland EIR (PTEIR). This PTEIR will be prepared by CDF and included as an appendix to the Master Plan MEIR for this project. Potential impacts to agricultural resources (i.e. – timberlands) will be addressed in the MEIR and PTEIR.

### 4.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Where available, the significance criteria established by the applicable air quality management or air pollution control district is relied upon to make the following determinations. Would the project:</b>			
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

The project site is located within the portion of the Sierra Nevada Foothills that is situated within the Mountain Counties Air Basin (MCAB) which includes portions of Plumas, Sierra, Nevada, Placer (middle portion), El Dorado (western portion), Amador, Calaveras, Tuolumne, and Mariposa counties. The MCAB lies along the northern Sierra Nevada mountain range, close to or contiguous with the Nevada border, and covers an area of roughly 11,000 square miles. The MCAB includes the western slope of El Dorado County, from Lake Tahoe on the east to the Sacramento County boundary on the west. The prevailing wind is southwesterly and air pollution generally moves west to east through the air basin.

Air quality concerns in El Dorado County include the most common pollutants including ozone, particulate matter from dust and diesel exhaust, and state defined Toxic Air Contaminants (TAC's). The U. S. Environmental Protection Agency (EPA) and the

California Air Resources Board (CARB) has established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants, which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called “criteria” pollutants because the health and other effects of each pollutant are described in criteria documents.

Both the federal and State governments have enacted laws mandating the identification of areas not meeting the ambient air quality standards and development of regional air quality plans to eventually attain the standards. Under the federal Clean Air Act, El Dorado County has been designated “attainment or unclassified” for all national ambient air quality standards except the 1-hour ozone standard. El Dorado County is designated “severe non-attainment” for the Federal 1-hour Ozone standard. Under the State of California system, El Dorado County is designated “severe non-attainment” for the California standards of ozone and "non-attainment" for 24 hr. PM10. MCAB is either attainment or unclassified for the remaining federal and State standards for nitrogen dioxide, sulfur dioxide, carbon monoxide, sulfates, hydrogen sulfide, lead, and visibility reducing particles.

Air Quality Impacts resulting from implementation of the project are categorized as follows:

1. Short-term impacts related to construction activities; and
2. Long-term impacts related to operation of the project.

Short-term air quality impacts are the result of the use of construction equipment, transport of materials (i.e. equipment, supplies, and construction material) to and from the site, and construction employee commute trips. Short-term air quality emissions typically consist of reactive organic gases (ROG), oxides of nitrogen (NOx), and fugitive dust. Nitrogen oxides (NOx) and reactive organic gases (ROG) are the primary reactive compounds, or precursors, contributing to the formation of ozone and are largely generated from the operation of gas and diesel powered equipment. Fugitive dust and Particulate Matter is largely generated from earth moving activities and wind erosion.

Long-term air quality impacts are associated with the operational characteristics of the project and typically are the result of the use of equipment that directly generates pollutants (i.e. diesel powered water pump or electrical generator). Additionally, long term air quality impacts are associated with mobile emissions related to vehicle trips to the SPRA

Impacts to air quality from the construction and operation of potential elements of the Sly Park Master Plan will be evaluated in the EIR and mitigation measures will be identified and proposed.

#### 4.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption or other means?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

Natural communities occurring on the project site include mixed conifer, mixed conifer/hardwood, chaparral, grasslands, and riparian. The site also supports stream habitat along Camp Creek, Sly Park Creek, and Hazel Creek, several seeps and springs along minor drainages, and lacustrine habitat at Jenkinson Reservoir. These natural communities will be classified and described in greater detail in the EIR.

One federally listed threatened species, bald eagle (*Haliaeetus leucocephalus*), forages and roosts on the project site during both the breeding and non-breeding seasons, and this species nests on adjacent US Forest Service land. Other raptors observed on the project site include California spotted owl (*Strix occidentalis occidentalis*), osprey (*Pandion haliaetus*), sharp-shinned hawk (*Accipiter striatus*), and red-tailed hawk (*Buteo jamaicensis*). Goshawk (*Accipiter gentilis*) has a high likelihood of occurrence on-site. Two additional special status species, foothill yellow-legged frog (*Rana boylei*) and western pond turtle (*Clemmys marmorata*) have been observed on-site, along Sly Park Creek. Black-tailed mule deer (*Odocoileus hemionus columbianus*) is present on-site, and California Department of Fish and Game has designated critical deer winter and holding habitat on lands in the vicinity of Sly Park. The project site is within an area proposed by the US Fish and Wildlife Service as critical habitat for the California red-legged frog (*Rana aurora draytoni*). However, the site does not exhibit habitat characteristics that are typically necessary for supporting this species. The aquatic habitat on-site does not support anadromous fish.

The project site does not support habitat for any plant species that are state or federally listed as threatened or endangered. The site supports suitable habitat for 14 special status plant species that have a moderate likelihood of occurrence on-site. Pleasant Valley mariposa lily, a California Native Plant Society (CNPS) List 1B species, has a high likelihood of occurrence on-site.

A biological analysis will be prepared for incorporation into the EIR, including an independent evaluation of existing data and information from biological assessments previously prepared for the project site, information from the US Forest Service and state and federal wildlife agencies, and results of a field reconnaissance conducted in spring and summer of 2004 to assess existing biological conditions. Potential direct and indirect impacts to biological resources resulting from the Recreation Master Plan will be identified and discussed in the EIR. Recreational facilities will be designed to avoid and minimize impacts to natural communities, wetlands, and special status species, and to minimize habitat

fragmentation. Mitigation measures for all identified unavoidable impacts will be developed in consultation with EID staff and representatives of responsible and trustee agencies.

Potential impacts to biological resources resulting from implementation of the Forest Management Plan will be addressed in the PTEIR. Forest management measures will be developed to mitigate potential impacts to biological resources, and these measures will be incorporated into the PTEIR.

## 4.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

Cultural resources can include historic and archaeological objects, structures, records, and sites which are associated with past human activities. A substantial adverse change in the significance of an historical resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. (Section 15064.5 (b)(1), CEQA Guidelines).

Per the CEQA Guidelines, historical resources include the following:

- A resource listed in, or eligible for listing in, the California Register of Historical Resources (California Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.)
- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code.
- Any object, building, structure, site, area, place, record, or manuscript, which:
  - a) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
  - b) is associated with the lives of persons important in our past;
  - c) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic value; or
  - d) has yielded, or may be likely to yield, information important in prehistory or history.

Per Public Resources Code Section 21983.2(g), an archaeological resource shall be considered unique if "it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person."

Pursuant to the above referenced regulations and guidelines, development of the proposed project may adversely impact paleontological, archaeological, and historic resources unless mitigated. Development of the project also offers opportunities for protection of cultural resources from the effects of weathering, and opportunities for the interpretation of a number of prehistoric and historic themes. A current cultural resources inventory and evaluation report is being prepared and the results will be included in the EIR. The EIR will discuss and analyze any cultural resources located on the project site and will include information from the current record searches and site reconnaissance studies. The EIR will also provide mitigation measures necessary to address potential impacts to cultural resources that may exist on the project and steps to be taken should any resources be discovered during project construction.

## 4.6 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death, involving:			
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

This analysis is based upon the Draft Geologic/Geotechnical Considerations for the Sly Park Recreation Master Plan and Environmental Impact Report, (2004) by Youngdahl Consulting Group.

According to the Draft Geologic/Geotechnical Considerations Report, all fault related movement would come from faults outside of the project area, and as a result the project

would not have an impact on faults or ground shaking. The only areas prone to liquefaction are the alluvium deposits located where Hazel Creek enters Jenkinson Lake, and will likely not be affected by the project. If a seismic event were to occur, it would likely trigger small localized landslides and shoreline bank collapses. These areas should be identified and appropriate set backs established.

The project has the potential for increased soil erosion during the possible construction of buildings, parking lots, road widening, additional camping areas and recreational vehicles (RV) spaces, boating ramps and marinas. These construction areas will need to mitigate on-site erosion with appropriate Best Management Practices (BMPs) as required by the County’s Storm Water Management Plan (SWMP) and outlined by the California Association of Stormwater Quality Association (CASQA). Increased runoff as a result of newly formed impervious areas will need to be mitigated with properly designed and engineered drainage plans. The designation and use of existing and new trails will need to be considered for their erosion potential.

Any project proposed to occur within the alluvium deposits located where Hazel Creek enters Jenkinson, or near the lake’s shoreline may be on soils that exhibit instability. A complete geotechnical study and if appropriate adequate engineering techniques may need to be applied for any such project.

There is the potential for moderate collapsible and expansive soils within the project site. A complete geotechnical study should be performed prior to any land improvement activities.

Where a sewer system is not available, the park currently uses a dry-restroom method which requires regular pumping of the holding tank but is not affected by the geology. The possible incorporation of an extended sewer system may be included in the project, but would not prohibit the disposal of wastewater.

## 4.7 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

The EIR will discuss hazards relating to current and former site activities, and any potential increased fire hazards resulting from proposed recreational uses. A Phase 1 Hazardous Materials Assessment of the Sly Park Unit lands to be transferred out of federal ownership was conducted by URS Corporation and revealed no significant sources of contamination and no concerns regarding hazardous materials.

The Forest Management Plan will include an analysis of wildland fire potential and a plan for fire hazard reduction. This will involve descriptions of current vegetative characteristics with respect to vertical and horizontal connectivity, a description of ground fuel fire hazard reduction methods, and identification of areas where fuel profiles can be returned to a condition where reintroduction of low intensity controlled burns will be feasible.

Implementation of the Forest Management Plan is expected to reduce fire hazard at the site. This will be addressed in the PTEIR.

## 4.8 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Violate any water quality standards or waste discharge requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure of a levee or dam?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami or mudflow?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

Groundwater aquifer recharge is typically reduced when excessive impervious surfaces are constructed with storm drain systems that collect and concentrate flows, reducing the amount of storm water that may infiltrate the soils and move vertically down through the soil profile to the existing groundwater table. The project does involve the construction of additional impervious surfaces and the EIR will evaluate the impact of these surfaces and include any appropriate mitigation measures.

The proposed Sugarloaf Fine Arts Center will require the installation of a well or connection to the existing Sly Park water lines. The local groundwater levels are likely controlled by the lake elevation. While an additional well may have the ability to draw down the aquifer, the close proximity to the lake results in no net changes to the groundwater levels.

The project site's basic drainage patterns will not be altered. Some existing man-made drainages will likely require re-engineering and reinforcement to reduce their erosion potential and meet current regulatory standards. Campsite compaction will likely also be addressed, which will increase storm water infiltration in certain areas, resulting in a decrease in surface runoff.

The project will likely not result in increased surface runoff that may exceed the capacity of existing or planned storm water drainage systems. Alternate drainage designs are recommended for all land improvement projects that would increase impervious areas. In addition, proposed increased impervious surface areas would result in a minimal amount of runoff in comparison to the storage capacity of Jenkinson Lake.

Storm water and lake water quality may be impacted by excessive erosion from active construction sites and motorized visitor activities such as boats and vehicles that can leak or spill petroleum based products (e.g. oil and gasoline). Construction site erosion may be mitigated and minimized through the use of currently approved and applied Best Management Practices (BMPs) as authorized and endorsed by the County and the Regional Water Quality Control Board.

Flood hazard areas are delineated on federal Flood Hazard Boundary or Flood Insurance Rate Map. The project does not have proposed housing to be built within the 100-year flood hazard area.

Floodplain maps are compiled and distributed by the Federal Emergency Management Agency (FEMA). According to the FEMA Q3 maps of El Dorado County, only Jenkinson Lake and its immediate shoreline and bank, are within the FEMA 100-year floodplain. The only structure that may be proposed by the project that may have potential to impede or redirect flood flows would be the channel crossing over Hazel and Sly Park Creeks.

Floodplain maps are compiled by the FEMA. According to the FEMA Q3 maps of El Dorado County, the project site, excluding Jenkinson Lake and its immediate shoreline and bank, is located outside of the FEMA 100-year and 500-year floodplains. The project will likely not impact either of the floodplains, but proper lakeshore setbacks should be established.

Jenkinson Lake is formed behind two earthen dams. The failure of either dam due to the project is not likely because the project does not involve dam alterations or modifications.

Seiche is a periodic oscillation of a body of water as a result of the ground shaking. Because of the low to moderate chance of ground movement determined by the Draft Geologic/Geotechnical Considerations Report, the chance of seiche is less than significant.

Tsunami is a sea wave caused by an earthquake or volcanic activity. The project is over 100 miles away from the Pacific Ocean and as such would not be impacted by tsunamis.

Mudflow is the movement of soils with a high water content caused by ground shaking that overcomes weakened soil shear stress that is the result of increased soil pore pressure. This may be possible in the alluvium that has been deposited by Hazel Creek as it enters Jenkinson Lake.

Impacts to hydrology and water quality will be evaluated in the EIR and mitigation measures to reduce impacts will be identified.

## 4.9 Land Use Planning

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

Along with describing the vision, fiscal requirements, facilities management and community involvement for the Sly Park Recreation Area, the Sly Park Master Plan includes proposals for resource protection, construction, and enhancement of the existing resources of the park area. These include the construction of new recreational facilities, including camping and conference facilities, roads and parking areas, and trails. Improvement of existing facilities including existing campgrounds and associated amenities, and the relocation of existing boating and camping facilities are also proposed. The land designated for these improvements include areas that are currently undeveloped as well as areas that have existing recreational facilities.

Jenkinson Lake, the central component of the recreation area, and the surrounding park lands are owned, maintained and operated by the El Dorado Irrigation District. While EID owns most of the park facilities and land surrounding the lake, one exception is a small portion of land and water located along the northeastern shore, which is owned by the U.S. Forest

Service (Service). The Service and EID are currently undergoing negotiations to transfer ownership or purchase of this land. In addition, Sierra Pacific Industries is also undergoing negotiations with EID for the transfer of ownership or purchase of a larger parcel of land currently owned by Sierra Pacific Industries, located north of the EID boundary. The land north and south of the EID boundaries is largely owned by the Service or Sierra Pacific Industries, with privately owned land located along the western boundary.

The park area is covered by the El Dorado County General Plan. A Writ of Mandate (Writ) issued by the Sacramento County Superior Court invalidated the 1996 El Dorado County General Plan as a result of inadequacies in the environmental review process that accompanied the adoption of the General Plan. This Writ subsequently limited new development, particularly residential development within El Dorado County, and allowed the County to process, approve, and carry out any capital improvement projects, except those that are for the sole or primary purpose of serving future development that would require approvals prohibited by the Writ. The Writ allows those capital projects that would be warranted in the absence of such future development. Permissible capital improvements include improvements needed for the preservation of the public health and safety, hazard elimination, serving existing needs and those anticipated as a result of approved development or development not requiring discretionary approval, and improving operating efficiency of existing facilities. (Writ of Mandate, page 13, paragraph 5(6).)

On July 19, 2004, the El Dorado County Board of Supervisors approved a new General Plan and its associated EIR. However, the policies outlined in the General Plan cannot be implemented until the Writ of Mandate has been lifted by the Superior Court. Until then, the Writ currently still limits the County's ability to approve discretionary projects. According to the newly adopted General Plan, zoning surrounding Jenkinson Lake, including the Sly Park Recreation Area, is designated as Recreational Facilities (RF), with the exception of the small parcel owned by the Service, which is designated as Residential Agriculture eighty-acre (RA-80). Other zoning designations for the lands surrounding the Sly Park Recreation Area include Timberland Preserve Zone (TPZ), Residential Agriculture twenty-acre (RA-20), and Estate Residential ten-acre (RE-10).

A Forest Management Plan (FMP) is also being developed for the recreation area as part of the Master Plan EIR. The FMP will identify commercial timber harvesting opportunities, and fire management measures within the project area and will be consistent with California Department of Forestry (CDF) requirements for cost share programs. The FMP will also provide baseline information needed to prepare a California Timber Harvest Plan, and while the Master Plan EIR will also cover the FMP, a separate CEQA review is required for a Program Timberland EIR (PTEIR). This PTEIR will be prepared by CDF and included as an appendix to the Master Plan EIR for this project.

The proposed development and enhancement of recreational facilities and forestry practices proposed for the Sly Park Recreation Area are not expected to physically divide an established community based on the rural nature and existing zoning of the area. The land use planning section of the Master Plan EIR will include a description of the existing environment including existing and proposed land uses, and will identify and summarize applicable goals and policies of the El Dorado County General Plan and requirements of the CDF for the FMP. While the proposed improvements and development are expected to comply with the policies outlined in the General Plan and comply with CDF requirements, the land use section of the Master Plan EIR will describe any potential conflicts and potential inconsistencies with these policies. No habitat conservation plans or natural community

conservation plans exist for the area and as such no discussion of these policies will be included in the Master Plan EIR.

#### 4.10 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

The California Geological Survey (CGS), under the California Department of Conservation, maps regions of California according to their likelihood of containing important mineral resources. El Dorado County mineral resources are identified in the CGS Mineral Land Classification of El Dorado County, California (2001).

In this report, land is identified as belonging to one of six Mineral Resource Zone (MRZ) classifications. The classifications, which indicate land containing mineral resources of known economic value to the County or State, are MRZ-2a and MRZ-2b. These classifications indicate that the land area has significant mineral resources measured, indicated, or inferred. MRZ-1, MRZ-3a and 3b, and MRZ-4 indicate areas of no resource significance, undetermined resource significance, or unknown resource significance, respectively. MRZ's are classified individually for industrial limestone, construction aggregate and other materials, and gold deposits formed by hydrothermal, volcanogenic, and mechanical concentration processes.

Current classifications indicate that undetermined or unknown resource significance occurs within the project site, by the classifications: 1) MRZ-3a for gold deposits formed by hydrothermal processes, 2) MRZ-4 for deposits formed by volcanogenic processes, 3) MRZ-3a and MRZ-4 for gold deposits formed by mechanical concentration, and 4) MRZ-4 for gold deposits formed by contact metasomatic processes. Because of this and the nature of the project, there will be less than significant or no impact to mineral resources.

#### 4.11 Noise

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project result in:</b>			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

The primary noise sources in the Sly Park Recreation Area vicinity consist of traffic on Sly Park Road, boat noise on Jenkinson Lake, and camp activities. Improvements to existing facilities and the creation of additional recreational facilities have the potential to generate noise in the construction and use phases of the Master Plan elements. Increased use of camping facilities, lakeside use, and group campgrounds may generate new sources of noise. A noise analysis will be conducted for the EIR to adequately analyze impacts relating to noise.

### 4.12 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

The project is expected to have a less than significant impact relative to population projections and substantial growth inducement in the area based on existing zoning requirements and the temporary nature of the site's use for recreational activities. The extension of existing infrastructure will be utilized for expansion or development of new facilities, and no new major infrastructure improvements are expected as a result of the proposed activities outlined in the Master Plan. The housing facilities proposed for this project include conference and camping facilities, which are used on a temporary basis by recreational users, and the proposed development and forestry activities will not displace existing residential housing, affordable or otherwise. This section of the EIR will discuss the project's impact on regional and local population projections and the project's direct and indirect growth inducing impacts.

## 4.13 Public Services

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:</b>			
a) Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

Implementation of the Master Plan will potentially require new public services to serve the project area. Currently the area is served by fire protection and emergency services, sheriff protection, boat patrols, volunteer patrols, contractual services, and road/public facility maintenance, including parks. Emergency vehicle access and slow response times have been identified as potential problems in the project area. The proposed improvements may impact access and response times. The proposed master plan elements will also potentially increase public service maintenance (e.g., roads, restrooms, etc.) and staffing needs in the park. However, the proposed project also offers an opportunity to upgrade the public service facilities at the park. The EIR will include descriptions of the existing levels of service for the various county services mentioned above and will include an analysis of the project's potential impacts to these services. Mitigation measures will be identified to address significant impacts to public services resulting from construction and operation of the project.

## 4.14 Recreation

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

Improvements to the existing recreational facilities and the potential for new facilities are key elements in the Sly Park Recreation Area Master Plan. Improved and/or new facilities, including road widening, campground improvements, the meeting and conference center, the fine arts camp, trail improvements, and both vehicle and boat access improvements have the

potential to impact the physical environment. These potential impacts will be reviewed and analyzed in the EIR, with appropriate mitigation measures identified and recommended.

## 4.15 Transportation/Traffic

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

The project site is currently heavily used during the summer months by local residents and visitors from outside of the area. Currently access roads to and within the SPRA are congested during peak use periods. The proposed project includes measures to increase the capacity of the existing internal roads and reduce congestion at key locations. However, the overall improvements to the SRPA could increase usage of the parks facilities during the summer months resulting in potential increases in the number of vehicle trips, volume-to-capacity ratios on local roads and highways, and possibly exceed designated levels of service on local roads. For these reasons, the proposed project may result in potentially significant impacts unless mitigation is developed in the EIR and incorporated.

The proposed project will also improve internal road conditions to facilitate the access and egress of emergency vehicles to the SRPA. These measures include increased road widths within the SRPA to accommodate Fire Department minimum standards, widening roads to two lanes, and creating pull-outs and loops to allow for passing. However, potential increases in traffic during peak use periods on adjoining local roads may result in potentially significant impacts unless mitigation is developed in the EIR and incorporated.

Currently the SRPA does not have adequate and efficient parking to meet the level of use during peak use periods. The proposed project will provide for more parking by clearly labeling parking spots to maximize the use of space, widening shoulders, and locating additional parking closer to day use areas. Potential increase in usage of the SRPA as a result of the overall improvements could result in an increased demand for parking and these impacts will be evaluated in the EIR.

This EIR section will analyze the project's impact on transportation and traffic. A traffic impact study is currently being prepared to analyze Sly Park Road and its intersections with Mormon Emigrant Trail, North Access Road, Ridgeway Drive, and on- and off-ramps to US Highway 50. This study will identify existing site trip generation, calculate current levels of service, and identify parking utilization. A field review will be conducted to identify any existing safety problem locations or capacity bottlenecks at the SPRA access or on the internal street system. The study will also address project traffic characteristics including; identifying trip generation and distribution, and identify parking demands. From this information the study will determine project impacts and propose mitigation measures.

The information and data developed as part of the traffic study will be the basis of the traffic section of the EIR. The EIR will provide mitigation measures to address significant adverse traffic impacts.

#### 4.16 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Would the project:</b>			
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state and local statutes and regulations related to solid waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### POTENTIAL IMPACTS AND PLANNED EIR ANALYSIS

The only two utilities currently available at the park are potable water and electricity. The water lines are old and unprotected, providing weak water pressure and limited quantities of potable water for the park. Electricity is provided via overhead lines. The park offices and the old Bureau office building are on septic systems. All other toilets in the park have self-contained holding tanks (i.e., waterless toilets) that must be pumped on a regular basis. Development of the proposed park improvements will require new and/or upgraded public utilities and services to serve the project. EID is the recipient of a federal grant that will provide for the design and installation of a new water line along the north shore. Water will also potentially need to be provided to warm water showers and additional potable water sources throughout the developed areas of the park. Additional waterless toilets will also be needed as a result of the project. Storm water drainage from developed and disturbed areas

will cause potential impacts to water quality during and after construction activities. The need for solid waste disposal will potentially increase as a result of increased park capacity and the resulting increase in the number of visitors. In addition to describing the existing setting for these utility systems in detail, this section of the EIR will address the project's impacts to these utility and service systems. An analysis of this project's need for utilities and services will be included in the impact analysis, and mitigation for significant impacts will be addressed.

#### 4.17 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>Does the project:</b>			
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 4.18 Environmental Factors Potentially Affected

<i>ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:</i>		
The environmental factors checked below will be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or is "Potentially Significant Unless Mitigated" as indicated by the checklist on the previous pages.		
<input checked="" type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture	<input checked="" type="checkbox"/> Air Quality
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Geology/Soils
<input checked="" type="checkbox"/> Hazards & Hazardous Materials	<input checked="" type="checkbox"/> Hydrology/Water Quality	<input type="checkbox"/> Land Use/Planning
<input type="checkbox"/> Energy & Mineral Resources	<input checked="" type="checkbox"/> Noise	<input type="checkbox"/> Population/Housing
<input checked="" type="checkbox"/> Public Services	<input checked="" type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation/Traffic
<input checked="" type="checkbox"/> Utilities/Service Systems	<input checked="" type="checkbox"/> Mandatory Findings of Significance	

Note: Although not all of the environmental factors listed above are considered potentially significant, all of the issues listed will be considered in the EIR to provide a comprehensive document.

## 5.0 DETERMINATION

---

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on the attached sheets have been added to the project. A NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a significant effect on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based upon the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that, although the proposed project could have a significant effect on the environment, there will NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project. Nothing further is required.

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Signature

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Date

---

Printed Name

---

For

## 6.0 REPORT PREPARATION AND REFERENCES

---

### 6.1 Report Preparation

El Dorado Irrigation District – Lead Agency

#### Foothill Associates

Kit Veerkamp, Project Manager, Sr. Landscape Architect, RLA #2791

Kevin Derby, Senior Regulatory Specialist

Joe Looney, Regulatory Specialist

Ellen Berryman, Senior Conservation Planner/Regulatory Specialist

Christian Carleton, Water Resource Specialist/Hydrologist

Linda Rivard, Biologist/Resource Specialist

Ed Armstrong, Manager, GIS and Technical Services/Visual Simulation Specialist

### 6.2 References

California. Department of Conservation. California Geological Survey. (2003). *Mineral Land Classification of El Dorado County, California, CGS Open-File Report 2000-03*. Sacramento: Author.

El Dorado County. Air Quality Management District (AQMD). (2002, February). *Guide to Air Quality Assessment*. Retrieved September 3, 2004 from the World Wide Web: [http://www.co.el-dorado.ca.us/emd/apcd/guide\\_airquality.htm](http://www.co.el-dorado.ca.us/emd/apcd/guide_airquality.htm).

El Dorado County Planning Department. 2004. 2004 El Dorado County General Plan: A Plan for Managed Growth and Open Roads; A Plan for Quality Neighborhoods and Traffic Relief. Adopted July 19, 2004, Resolution Number 235-2004.

Youngdahl Consulting Group, Inc. (July 2004) Draft Geologic/Geotechnical Considerations for the Sly Park Recreation Master Plan and Environmental Impact Report.



## EL DORADO COUNTY PLANNING DEPARTMENT

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<http://www.co.el-dorado.ca.us/planning>

Phone: (530) 621-5355  
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November 3, 2004

Post-It Fax Note	7671	Date	11/8/04	# of pages	10
To	Kit Veerkamp	From	Chris Word		
Co./Dept.	Foothill Assoc.	Co.	EID		
Phone #		Phone #	(530) 642-4021		
Fax #	(916) 435-1205	Fax #	(530) 622-8597		

W. Chris Word  
El Dorado Irrigation District  
2890 Mosquito Road  
Placerville, CA 95667

Subject: Notice of Preparation & Initial Study for  
Sly Park Recreation Area Master Plan

Dear Mr. Word:

Thank you for the opportunity to review and comment on the referenced document. The Planning Department is pleased to submit the following comments.

General Comments:

We agree that the District is the appropriate lead agency in the preparation of an environmental impact report.

Please note that the uses at the Sly Park Recreation Area falls within the land use regulatory authority of the County. As such, the Master Plan is subject to consistency with the County General Plan and Zoning Ordinance. The Master Plan area is zoned Recreational Facilities (RF). The uses contemplated by Master Plan are subject to a special use permit in accordance with Section 17.48.060 of the County Code.

Specific Comments:

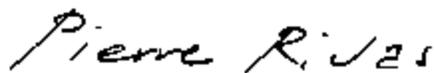
1. Section 4.2, Agricultural Resource section, page 4-2: This section should also discuss the potential impacts to timber production lands and the adjoining lands that are zoned Timber Preserve Zone (TPZ). Non-compatible uses would be required to provide for a setback of 200 feet per section 17.06.150 of the County Code (copy attached).
2. Section 4.9, Land Use Planning section, 3rd paragraph, page 4-12: This paragraph should clarify that under subparagraph (3) of the Writ, the County may approve non-residential development provided that the project is consistent with the 1996 General Plan and the 1994 Public Review Draft of the General Plan and that the project comply with the provision of subparagraph (8). The section cited with respect to "capital improvements" is referring to infrastructure improvements typically carried out by government entities in support of existing development.

3. Section 4.9, Land Use Planning section, 4<sup>th</sup> paragraph, page 4-12: This paragraph should clarify and briefly discuss that the General Plan land use designation is Natural Resource (NR) on both the operative 1996 General Plan and on the 2004 General Plan. The NR land use designation identifies important natural resource areas, including important watershed lands, and allows compatible recreational uses (General Plan Policy 2.2.1.2 attached). Typically, the NR land use designation allows more passive, less intensive recreational uses. The Tourist Recreational (TR) land use designation was developed to allow more intensive recreational uses such as RV parks and transient lodging; and tourist related uses such as museums or visitor centers. Many of the uses contemplated by the Master Plan would require a General Plan amendment to modify the NR designation to TR.

Also, the discussion on the Recreational Facilities zoning (Chapter 17.48 attached) should briefly describe what is generally permitted within this zone district and that the project is consistent and would require approval of a special use permit.

Please call me should you have any comments regarding these comments.

Sincerely,



Pierre Rivas  
Acting Principal Planner

Attachments (3)

**Policy 2.2.1.2**

To provide for an appropriate range of land use types and densities within the County, the following General Plan land use designations are established and defined.

**Multi-Family Residential (MFR):** This land use designation identifies those areas suitable for high density, multifamily structures such as apartments, single-family attached dwelling units (i.e., air-space condominiums, townhouses) and multiplexes. Mobile home parks, as well as existing and proposed manufactured home parks, shall also be permitted under this designation. Lands identified as MFR shall be in locations with the highest degree of access to transportation facilities, shopping and services, employment, recreation, and other public facilities. The minimum allowable density is five dwelling units per acre, with a maximum density of 24 dwelling units per acre. The provision of single-family attached dwelling units in the MFR land use designation is subject to the use of planned development design concepts which may result in zipper-lot zero-lot line, cottage-type, or comparable developments. Except as provided in Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers.

**High-Density Residential (HDR):** This land use designation identifies those areas suitable for intensive single-family residential development at densities from one to five dwelling units per acre. Allowable residential structure types include single-family attached (i.e., air-space condominiums, townhouses) and detached dwellings and manufactured homes. Except as provided in Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers. Standard residential subdivisions shall maintain a density range from one to two dwelling units per acre. Residential subdivisions utilizing the planned development concept shall maintain a density range from one to five dwelling units per acre. Residential development of single-family attached dwelling units are to be designed to satisfy the upper range of the allowable density under this designation. Proponents of single-family detached or manufactured home projects consistent with the HDR designation shall not be subject to the Planned Development combining zone if their projects meet the criteria set forth in Policy 2.2.5.4. (Res. No. 298-98; 12/8/98)

**Medium-Density Residential (MDR):** This land use designation establishes areas suitable for detached single-family residences with larger lot sizes which will enable limited agricultural land management activities. This designation shall be applied where the character of an area is single-family residences; where the absence or reduced level of infrastructure including roads, water lines, and sewer lines does not justify higher densities; where the topography poses a constraint to higher densities; and as a transitional land use between the more highly developed and the more rural areas of the County. The maximum allowable density shall be one dwelling unit per 1.0 acre. Parcel sizes shall range from 1.00 to 5.00 acres. Except as provided in Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers.

Low-Density Residential (LDR): This land use designation establishes areas for single-family residential development in a rural setting. In Rural Regions, this designation shall provide a transition from Community Regions and Rural Centers into the agricultural, timber, and more rural areas of the County and shall be applied to those areas where infrastructure such as arterial roadways, public water, and public sewer are generally not available. This land use designation is also appropriate within Community Regions and Rural Centers where higher density serving infrastructure is not yet available.

The maximum allowable density shall be one dwelling unit per 5.0 acres. Parcel size shall range from 5.0 to 10.0 acres. Within Community Regions and Rural Centers, the LDR designation shall remain in effect until a specific project is proposed that applies the appropriate level of analysis and planning and yields the necessary expansion of infrastructure.

Rural Residential (RR): This land use designation establishes areas for residential and agricultural development. These lands will typically have limited infrastructure and public services and will remain for the most part in their natural state. This category is appropriate for lands that are characterized by steeper topography, high fire hazards, and limited or substandard access as well as "choice" agricultural soils. The RR designation shall be used as a transition between LDR and the Natural Resource (NR) designation. Clustering of residential units under allowable densities is encouraged as a means of preserving large areas in their natural state or for agricultural production. Typical uses include single-family residences, agricultural support structures, a full range of agricultural production uses, recreation, and mineral development activities. The allowable density for this designation is one dwelling unit per 10 to 160 acres. This designation is considered appropriate only in the Rural Regions.

Natural Resource (NR): The purpose of the Natural Resource (NR) designation is to identify areas that contain economically viable natural resources and to protect the economic viability of those resources and those engaged in harvesting/processing of those resources including water resources development from interests that are in opposition to the managed conservation and economic, beneficial use of those resources. The important natural resources of the County include forested areas, mineral resources, important watershed, lakes and ponds, river corridors, grazing lands, and areas where the encroachment of development would compromise these natural resource values. Land under both public and private ownership that contain these resources are included in this category. This designation shall be applied to those lands which are 40 acres or larger in size and contain one or more important natural resource. Compatible uses may include agriculture, rangeland, forestry, wildlife management, recreation, water resources development, and support single-family dwellings. The maximum allowable density for this designation is one dwelling unit per 160 acres or larger outside the National Forest Service lands and within "timber production" areas and one dwelling unit per 40 acres within river canyons outside of

the "timber production" areas. This designation is considered appropriate only in the Rural Regions. Isolated parcels outside the National Forest Service lands and below 3,000 feet elevation may be exempt from the one dwelling unit per 160 acre parcel size. If it is determined that such lands are unsuitable for "timber production," one dwelling unit per 40 acres maximum density can be considered. Any modifications of this land use designation shall require one of the following findings: 1. No important natural resource exists on the property; or 2. If a project is proposed, it will significantly enhance the long-term production and preservation of the on-site resources through the application of development strategies such as fuels management plans, timber management plans, self imposed setbacks buffers, and open space.

**Commercial (C):** The purpose of this land use category is to provide a full range of commercial retail, office, and service uses to serve the residents, businesses, and visitors of El Dorado County. Mixed use development of commercial lands within Community Regions and Rural Centers which combine commercial and residential uses shall be permitted provided the commercial activity is the primary and dominant use of the parcel. The residential component of the project shall only be implemented following or concurrent with the commercial component. Except for Community Care Facilities described in Objective 4.1.2, developments in which residential usage is the sole or primary use shall be prohibited on commercially designated lands. Numerous zone districts shall be utilized to direct specific categories of commercial uses to the appropriate areas of the County. Except as provided in Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers.

**Research & Development (R&D):** The purpose of this land use designation is to provide areas for the location of high technology, non-polluting manufacturing plants, research and development facilities, corporate/industrial offices, and support service facilities in a rural or campus-like setting which ensures a high quality, aesthetic environment. This designation is highly appropriate for the business park/employment center concept. Lands designated as R&D can be located in Community Regions and in Rural Centers.

**Industrial (I):** The purpose of this land use category is to provide for a full range of light and heavy industrial uses. Types of uses that would be permitted include manufacturing, processing, distribution, and storage. Incompatible, non-industrial uses, excluding support services, shall be prohibited. Industrial uses shall be restricted to industrial lands within, or in close proximity to, Community Regions, and Rural Centers. Industrial lands in Rural Regions shall be constrained to uses which support on-site agriculture, timber resource production, mineral extraction, or other resource utilization. This designation is considered appropriate within Community Regions, Rural Centers and Rural Regions.

Open Space (OS): This land use category can be used to designate public lands under governmental title (County, State Parks, BLM, U.S. Bureau of Reclamation, U.S. Forest Service, etc.), where no development other than that specifically needed for government-related open space uses is desired. This land use includes State parks, ecological preserves, and public lands acquired specifically for open space uses. It may also be used on private lands to maintain natural features within clustered development where a General Plan amendment is processed. This designation is considered appropriate within Community Regions, Rural Centers, and Rural Regions.

Public Facilities (PF): This land use category includes only publicly-owned lands used for public facilities such as sanitary landfills, storage and maintenance yards, regional parks and recreation facilities, fire stations, schools, community parks and recreation facilities, libraries, administration and support buildings, hospitals (including non-profit), airports, transit facilities, water and sewer treatment facilities, etc. This designation is considered appropriate within Community Regions, Rural Centers, and Rural Regions.

Adopted Plan (AP): This land use category recognizes areas for which specific land use plans have been prepared and adopted. These plans (e.g., specific plan or community plan) are accepted and incorporated by this reference, and the respective land use map associated with each such plan is hereby adopted as the General Plan map for each such area. The plans recognized by the AP category do not include the now-superseded Area Plans that comprised the County's General Plan prior to the adoption of this General Plan.

Tourist Recreational (TR): This land use designation is to provide areas for tourist and resident serving recreational uses, transit and seasonal lodging facilities, and supporting commercial activities. The land use category would have differing intensities of use based on the location. In the Community Regions and Rural Centers where infrastructure exists or can be extended, the uses permitted would be more intense and commercial in nature. In the Rural Regions, uses will be encouraged and defined that are compatible with the rural residential nature of those regions. Types of uses would include campgrounds, golf courses, ski areas, snow parks, riding stables, trail heads, museums, and other similar recreational and sight seeing activities. Lodging uses would include RV parks and other appropriate transit lodging. Tourist recreational activities, facilities, and industries shall be allowed throughout the County; however, specific activities and facilities shall be identified through zoning and permitted by right or special use permit, as appropriate.

- B. Changes in each of the zoning districts of the unincorporated portion of the county may be changed by ordinance of the board of supervisors according to criteria established within this article. The changes shall be incorporated into official county index maps and sectional district maps and shall be made a part of this article by reference. (Ord. 3182 §1, 1981; Ord. 3174 §5, 1981; prior code §9405)

17.06.150 Special setbacks for agricultural protection.

- A. Notwithstanding any other provision, where agricultural and timber uses abut noncompatible uses as defined in Section 17.06.050, the following setbacks shall apply:

Use	Parcels in Existence as of August 11, 1983	Parcels Created Subsequent to August 11, 1983	
		Abutting Agricultural Land Located in Agricultural Districts or Timberland in Natural Resource Districts	Abutting Agricultural Land or Timberland Located in Rural Regions
Timberland	No special setback if 10 acres or less	200 feet	200 feet
	200 feet if greater than 10 acres	50 feet if subject parcel located in Community Region or Rural Center	
Horticulture	100 feet if 5 to 20 acres	200 feet	200 feet if 10 acres or larger
	200 feet if greater than 20 acres	50 feet if subject parcel located in Community Region or Rural Center	None if less than 10 acres
	No special setback if less than 5 acres		
Grazing Land	None	200 feet	200 feet if 10 acres or larger
		50 feet if subject parcel located in Community Region or Rural Center	None if less than 10 acres
High-density Livestock	50 feet if less than 5 acres	200 feet	200 feet if 10 acres or larger
	100 feet if greater than 5 acres	50 feet if subject parcel located in Community Region or Rural Center	None if less than 10 acres
	200 feet if greater than 10 acres		

Measurement. The setback shall be measured from the property line of the abutting noncompatible use.

- B. New Agricultural Zoning. Where new timberland or agricultural land is created subsequent to the adoption of this ordinance outside of agricultural districts designated in the general plan the special setbacks established in subsection A shall not apply except on parcels subdivided after the establishment of the agricultural or timber zoning.
- C. Administrative Relief. The County shall adopt by resolution of the Board of Supervisors criteria for providing administrative relief from the setback requirements established in subsection A.  
(Ord. 4458 §1, 1997)

17.060.160 Family day care homes - permitted use. Family day care homes are considered to be a permitted accessory use in all zone districts which list single-family dwellings as a permitted use. As such, family day care homes must meet the same development standards applicable to a single family dwelling within the zone district in which it is located. (Ord. 4324, 1994)

## CHAPTER 17.48

RECREATIONAL FACILITIES (RF) ZONESections:

- 17.48.010 Purpose.  
17.48.020 Recreation district defined.  
17.48.030 General provisions.  
17.48.040 Uses permitted by right.  
17.48.050 Uses requiring site plan approval.  
17.48.060 Uses requiring special use permit.  
17.48.070 Development standards.

17.48.010 Purpose. The purpose of the recreational facilities zone is to provide for the orderly development and maintenance of lands and areas suitable and desirable for recreational pursuits and to protect them from the encroachment of unrelated uses having an adverse effect to this resource. (Prior code §9433(a))

17.48.020 Recreation district defined. For the purposes of this chapter, the definition of a recreation district shall be as follows:

Land and water areas which can accommodate one or more public recreation activities and/or public service facilities without causing irreversible changes to soil, vegetation, air, water, aesthetic values and human resources. (Prior code §9433(b))

17.48.030 General provisions. Recreation districts shall be subject to the applicable provisions of Chapters 17.14, 17.16 and 17.18. (Prior code §9433(c))

17.48.040 Uses permitted by right. The following uses are allowed by right without special use permit or variance:

- A. Raising and grazing of domestic farm animals and the cultivation of tree and field crops;
- B. Any structure or use incidental or accessory to any of the foregoing uses;
- C. Drilling of wells and excavation of earth exclusively for authorized purposes on that parcel subject to the county grading ordinance;
- D. Local underground distribution lines for public utilities. (Prior code §9433(d))

## Recreational Facilities

## Page 2

**17.48.050 Uses requiring site plan approval.** The following uses are allowed without special use permit or variance but only after obtaining approval of a complete site plan including architectural detail, when requested, from the planning director, who shall act thereon within fifteen days after submittal of the required plans. If the applicant is not satisfied with the actions or conditions initiated by the planning director, a review may be requested by the planning commission which shall hear the appeal within thirty days of request by the applicant:

- A. Picnic areas;
- B. Ball fields and courts;
- C. Public utilities structures or overhead lines;
- D. Playgrounds;
- E. Golf courses, golf carts permitted;
- F. Swimming pools;
- G. Snowplay areas, nonmotorized;
- H. Stables;
- I. Riding and hiking trails;
- J. Lakes and marinas for nonpower craft, nonmotorized;
- K. Fishing and hunting, farms or facilities or clubs (for non-firearm use), electric trolling motors permitted;
- L. Other such similar uses and accessory structures as determined by the planning director following the general guidelines that all uses allowed by right shall be for day use only and will not be operated after dark or require lighting and that they will be of such a design and nature that not more than fifty people will be accommodated by the facility at any one time;
- M. One unlighted sign not exceeding sixteen square feet in area and twelve feet above ground level, advertising authorized activities on the premises;
- N. Reserved;
- O. Parking and processing of agricultural products produced on the premises without changing the nature of the products. (Ord. 3606 §59, 1986; prior code §9433(e))

**17.48.060 Uses requiring special use permit.** The following uses are allowed only after obtaining a special use permit from the planning commission or zoning administrator:

- A. Any dwellings, campgrounds, cabins, recreational vehicle parks, dormitories or mobile home units (mobiles not to exceed two in number for the use of owner, operator and/or caretaker); (Ord. 4376, 1995)
- B. Eating and drinking establishments, clubs and places of entertainment when fully enclosed within a building with no outside storage or display of goods;
- C. Amusement parks;
- D. Recreational uses designed for motorized vehicles or firearms use;
- E. Any recreational use such as those enumerated in Section 17.48.050 which by their nature or design will operate after daylight hours or are designed for overnight use or will create a nuisance beyond the confines of the property or are designed for the use of more than fifty people at any one time or will produce or create visual or other modifications that are inconsistent with the surrounding environment. (Prior code §9433(f))
- F. Any use of property adjoining the streams and rivers specified in subsection (c) of section 5.48.030 for ingress or egress into or from such stream or river, or for other day or camping use, other than for the personal and noncommercial use of the property owner or lessee. (Ord. 4226, 1992)

## Recreational Facilities

Page 3

17.48.070 Development standards. The following provisions shall apply in all recreational districts unless and until a variance is obtained from the planning commission or zoning administrator:

- A. Minimum lot area, five acres;
- B. Minimum lot width, three hundred feet;
- C. Minimum yards: front, fifty feet; sides, fifty feet; rear, fifty feet or one hundred feet each when adjacent to a National Forest. (Ord. 4236, 1992)
- D. Maximum building height, thirty-five feet (35') (Ord. 4236, 1992);
- E. Minimum single-family residential dwelling unit area, six hundred square feet of living area;
- F. Minimum dwelling unit area for rent, lease, transient use, four hundred square feet of living area. (Prior code §9433(g))
- G. Maximum density of campgrounds, recreational vehicle parks, cabins and dormitories shall be seven (7) units per acre in the rural regions as identified in the County General Plan, and twelve (12) units per acre in community regions and rural centers. Units shall be defined as individual campsites, RV spaces, dormitory rooms or cabins. (Ord. 4376, 1995)

(Recopied 09/92)

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Appendix B  
Traffic Analysis

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**SLY PARK MASTER PLAN  
TRAFFIC ANALYSIS**

Prepared For:

**FOOTHILL ASSOCIATES**

655 Menlo Drive, Suite 100  
Rocklin, CA 95765

Prepared By:

**kdANDERSON Transportation Engineers**

3853 Taylor Road, Suite G  
Loomis, CA 95650  
(916) 660-1555

November 16, 2005

3358-001

*Sly Park report.rpt*

**TRAFFIC IMPACT ANALYSIS FOR  
SLY PARK MASTER PLAN**

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November 16, 2005

# SLY PARK MASTER PLAN TRAFFIC ANALYSIS

## INTRODUCTION

This report summarizes **kdANDERSON Transportation Engineers'** assessment of key issues relating to Access / Circulation / Parking at Sly Park. The information that follows is based on discussions with EID representatives, field review, traffic counts and parking utilization surveys conducted at Sly Park and published data relating to the El Dorado County General Plan. In addition, this analysis assesses the impacts of developing the expansion on both existing and year 2025 GPU conditions.

## EXISTING SETTING

### Study Area Circulation System - Regional Context

Sly Park is served by US 50, the primary regional arterial linking El Dorado County with the Sacramento Metropolitan area to the west and with the Lake Tahoe resort area to the east. Locally, Sly Park is connected to US 50 via the grade separated Sly Park Road interchange. Local access to the Park occurs via a primary intersection on Sly Park Road that serves the northern portions of the park and via Emigrant Trail, an El Dorado County road that provides access to the south shore portions of the park. The text that follows describes these facilities.

**US Highway 50** is the primary regional east-west arterial across El Dorado County. In the area of Sly Park US 50 is a four-lane expressway. Access to this portion of US 50 occurs at both grade separated interchanges at a at grade intersections. The most recent traffic volume counts published by the California Department of Transportation (Caltrans) indicated that the highway carries an *Annual Average Daily Traffic (AADT)* volume of 14,900 vehicles per day west of Sly Park Road and 10,900 AADT east of the interchange. Trucks and recreational vehicles comprise about 7% of the total traffic on US 50 in this area. The daily traffic volume varies throughout the year, and during peak summer months the daily volumes rise to 19,100 vehicles per day and 15,100 vehicles per day west and east of the Sly Park Road interchange, respectively.

**Sly Park Road** is identified in the Draft El Dorado County GP as a Regional two-lane road. Sly Park Road links the Pollock Pines area around US 50 with Jenkinson Reservoir and with the community of Pleasant Valley to the south. In the area of Sly Park, Sly Park Road is a rural two-lane road, which follows the general terrain of the foothills along an alignment that would be classified as "mountainous". The road typically provides two 12' travel lanes and shoulders that range from 1 to 4 feet. Access is allowed at both private driveways and public street intersections. Daily traffic volume counts conducted for this study revealed that the volume of traffic on Sly Park Road near Mormon Emigrant Trail ranged from 4,500 to nearly 6,000 vehicles per day over the five days surrounding the July 4<sup>th</sup> weekend.

The **US 50 / Sly Park Road Interchange** is a grade separated interchange in a tight diamond configuration. Two Sly Park Road travel lanes pass underneath the highway. The eastbound and westbound US 50 ramp intersections on Sly Park Road are controlled by stop signs on the ramp approaches. Traffic counts conducted by Caltrans reveal that the EB off- and WB on-ramps each carry about 3,500 vehicles per day, while the EB on- and WB off-ramps carry less than 900 vehicles per day.

**Mormon Emigrant Trail** is designated a 2 lane Regional road in the Draft El Dorado County General Plan. This road begins at an intersection on Sly Park Road and continues easterly along the south shore of Jenkinson reservoir to the Amador County line and SR 88. Along the south shore Mormon Emigrant Trail features two 12' travel lanes and paced shoulders that are 2-4 feet wide. Traffic counts conducted over the July 4<sup>th</sup> weekend indicated that this road carries about 1,200 to 2,400 vehicles per day just east of Sly Park Road and 900 to 2,000 vehicles per day east of the Sly Park group camp area.

The **Sly Park Road / Mormon Emigrant Trail intersection** is a "tee" intersection controlled by a stop sign on the westbound Mormon Emigrant Trail approach. The intersection has single lane approaches and has not been widened to include auxiliary turn lanes.

**Lake Drive** links Sly Park's north shore area with Sly Park Road. The **Sly Park Road / Lake Drive intersection** is a four legged intersection controlled by stop signs on the east and west legs. The east leg of the intersection includes two inbound and two outbound lanes. The west leg of the intersection is a single lane approach to a convenience market / gasoline sales. No auxiliary turn lanes exist on Sly Park Road at the intersection.

### **Sly Park Circulation System – Internal Roads**

**Functional Classification.** The circulation system serving Sly Park Recreation Area is comprised of roads that fall into one of four general classifications.

*Major Access Roads* link the park with Sly Park Road and are intended to provide the capacity to accommodate peak traffic flows near the main gate. The portion of Lake Drive from Sly Park Road through the main gate to the Mooring Area Road intersection is the only Major Access Road. This road is about 48 feet wide, with two travel lanes in each direction and paved shoulders that are about 4 – 8 feet wide.

*Collector Roads* link the regional circulation system with the primary recreation area attractions, such as boat ramps, campgrounds, day use areas and trailheads. Lake Drive and the Mooring Area Road are collector roads. Collector Roads range in width from 22' to 12' with the narrowest sections existing near the far end eastern end of Lake Drive. On street parking is permitted at various designated locations along Collector streets. The posted speed limit on Collector streets is 15 mph, although some curves are posted with advisory speeds as low as 5 mph.

*Campground Access Roads* are paved roads that provide access within campgrounds to day use areas and to individual campsites. Campground Access Roads are generally 10 to 12 feet wide, although some portions of these roads are as narrow as nine feet in locations constrained by trees and other natural features. While these widths would preclude two-way travel in most urban settings, two-way traffic flow is accommodated by motorists who move onto the dirt shoulder to permit opposing vehicles to pass.

**Existing Conditions on Area Roads.** Table 1 summarizes the characteristics of the existing circulation system inside of Sly Park in terms of road width and daily traffic volume.

## **Parking**

Because most travel to and from Sky Park is by automobile, the availability of parking is an important issue to campers and day users alike. To address the current parking situation a parking utilization survey was conducted on Saturday July 3, 2004 to identify the number and type of vehicles parked at Sly Park on a peak weekend.

**Parking Supply.** The parking spaces that are available throughout Sly Park take several forms.

*Designated Parking Areas Near Boat Launching Areas.* These paved areas are intended to provide spaces for automobile / trailer combinations, as well as for individual automobiles and boat trailers. The spaces in these areas are individually striped for both pull in and drive through use.

*Designated Parking Areas Near Group Use Facilities along Lake Drive.* In some locations Lake Drive has been widened to provide on-street parking for day use activities. This is the case immediately north of the mooring area, in the major day use area immediately north of the main entrance and the chimney camp day use area. While the road has been widened in these areas, individual parking spaces have not been striped.

*Unimproved Day Use Parking Areas.* Some parking is available for day users at Sierra Camp Point and Hazel Creek Camp. However, these parking areas are not paved and are difficult to distinguish from the areas that are allocated to adjoining camping sites.

*Unimproved Campsite Parking.* Each campsite is intended to provide space for vehicles to park, and Sly Park staff have an estimate of the number of spaces that each site may accommodate. However, these spaces are not paved and it is often difficult to distinguish the limits of the parking areas allocated to each campsite.

**Parking Utilization.** The number of vehicles parked at Sly Park was determined through a field review conducted at two midday times on Saturday July 3, 2004. The results of this survey are presented in Table 2. As shown, in the mid-afternoon there were more than 400 automobiles, 31 auto/trailer combinations, 14 isolated boat trailers and 9 large RV's parked somewhere on the north shore of Sly Park

**TABLE 1  
CURRENT DAILY TRAFFIC VOLUMES**

#	Road	From	To	Classification	Width	Daily Traffic Volume July 1 - July 5, 2004						
						Thursday	Friday	Saturday	Sunday	Monday		
1	Mormon	Group Camp	East			900	1,412	1,702	1,575	1,966		
2	Emigrant Trail	Sly Park Road	Group Camp			1,184	1,676	2,104	1,982	2,375		
4	Sly Park Road	Park Access	US 50			4,642	5,549	5,829	5,498	5,720		
5		Park Access	Mormon Emigrant Trail			4,575	5,262	5,297	4,824	5,084		
6		Mormon Emigrant Trail	South			3,933	4,285	3,950	3,668	3,906		
3	Lake Drive	Sly Park Road	Mooring Access Road	Collector	45'	625	907	1,526	1,542	1,289		
8		Mooring Access Road	Day Use	Collector	20'	490	945	1,498	1,855	1,441		
9		Day Use	Pine Cone Camp	Collector	18'-20'	452	895	1,335	1,625	1,179		
10		Sierra Camp	Stonebraker Camp	Collector	18'	228	506	786	793	626		
11		Stonebraker Camp	Hilltop Camp	Collector	16'	153	388	691	660	427		
12		Chimney Camp	Hazel Creek Camp	Collector	12'	105	343	594	609	363		
7	Mooring Access Road	Lake Drive	Ramp	Collector	16'-21'	283	300	721	680	771		

Note: These are unadjusted raw counts based on axle counts that include trailers. Thus, the actual number of vehicles is likely to be slightly lower. Also, the counts made at the Entrance may not be reliable due to lane controls used during counts.

**TABLE 2  
PARKING UTILIZATION SURVEY AT SLY PARK  
SATURDAY JULY 3, 2004**

Area	Description	Vehicle Type	Parked Vehicles Saturday 7/3/04	
			12:30 p.m. to 1:00 p.m.	2:30 p.m. to 3:00 p.m.
1	Mooring Facility	Automobile	19	24
		Auto w/ trailer	27	29
		Trailer only	9	7
2	Day Use	Automobiles	34	48
3	Pine Cone Camp (1-19)	Automobiles	31	46
		RV's	3	3
4	Pine Cone Camps (20-38)	Automobiles	23	28
5	Sierra Camp west (50-68)	Automobiles	20	21
6	Sierra Camp Day Use	Automobiles	32	39
7	Sierra Camp east (69-104)	Automobiles	42	49
		RV's	4	4
8	Stonebraker ramp	Automobile	8	10
		Auto w/ trailer	5	2
		Trailer only	6	7
9	Stonebraker camp	Automobiles	9	6
10	Hilltop camp	Automobiles	27	29
11	Chimney camp / day use	Automobiles	28	33
12	Hazel Creek Camp	Automobiles	28	33
		RV's	1	1
13	Dogwood camp	Automobiles	8	7
		RV's	1	1
14	Rainbow camp	Automobiles	20	27
15	Kamloop camp	Automobiles	7	12
16	overflow	Automobiles	2	1
	Total	Automobiles	341	413
		Auto/trailer	32	31
		Trailer	15	14
		RV	9	9
		<b>Total</b>	<b>397</b>	<b>467</b>

In general this level of parking demands represents full utilization of the parking in some areas. The parking supply in the mooring area was nearly full, but there was parking available in the day use area just to the north. Parking in the large day use area immediately north of the main entrance was fully utilized. Parking in the other day use areas (Sierra Point, Chimney and Hazel Creek) was well used and was spilling over into adjoining campsites.

To put these observations in perspective information collected by EID regarding attendance on the July 4<sup>th</sup> weekend has been assembled and presented in Table 3. As shown, day use was higher on Sunday and Monday than on the Saturday observed for this study, although the number of "extras" associated with camping was higher on Friday. Thus, it is possible that parking demands would have been higher on Sunday.

<b>TABLE 3 ATTENDANCE ON THE 4<sup>TH</sup> OF JULY WEEKEND – 2004</b>				
	<b>July 2 Friday</b>	<b>July 3 Sat</b>	<b>July 4 Sun</b>	<b>July 5 Mon</b>
<b>Non-CF Boats</b>	10	14	7	16
<b>SC Boats</b>	6	0	2	3
<b>Regular Boats</b>	62	56	46	49
<b>Family Campers</b>	637	637	637	290
	259	49	70	80
<b>Additional Camping People</b>	717	336	95	98
<b>Group Campers</b>	200	200	200	40
<b>Pets</b>	105	18	29	21
<b>Day Use</b>	242	889	1,117	1,008
<b>SC DU</b>	7	67	98	101
Note: Numbers are “numbers of people” on that given day; the formula used was multiplying the “number of vehicles” by 3.5 people (FS standards also).				

**Planned Improvements.** EID intends to develop additional parking adjoining the Mooring area. Space will be developed uphill from the existing parking lot and will be configured to handle automobile / trailer combinations. While the creation of additional parking elsewhere in the park has been discussed in the past, there are no formal plans to install additional parking.

## **REGULATORY ENVIRONMENT**

The extent to which the operation of Sly Park is subject to standards adopted by outside agencies has been considered.

### **Level of Service**

On public roads, the quality of traffic flow is described in terms of operating Levels of Service. "Level of Service (LOS)" is a qualitative measure of traffic operating conditions whereby a letter grade "A" through "F", corresponding to progressively worsening operating conditions, is assigned to an intersection or roadway segment. Table 4 presents the characteristics associated with each LOS grade.

Levels of Service can be determined for individual intersections and for segments of roadways, although the basis for this determination varies by facility type. The Level of Service (LOS) standard presented in the Draft El Dorado General Plan is LOS C.

A traffic impact is considered significant if it renders an acceptable Level of Service on a street segment or at a signalized intersection, or if it worsens already unacceptable conditions on a street segment or at a signalized intersection.

<b>TABLE 4 LEVEL OF SERVICE DEFINITIONS (2000 HCM)</b>			
<b>Level of Service</b>	<b>Signalized Intersection</b>	<b>Unsignalized Intersection</b>	<b>Roadway (Daily)</b>
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay $\leq$ 10.0 sec	Little or no delay. Delay $\leq$ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay $>$ 10.0 sec and $\leq$ 20.0 sec	Short traffic delays. Delay $>$ 10 sec/veh and $\leq$ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay $>$ 20.0 sec and $\leq$ 35.0 sec	Average traffic delays. Delay $>$ 15 sec/veh and $\leq$ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestions of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay $>$ 35.0 sec and $\leq$ 55.0 sec	Long traffic delays. Delay $>$ 25 sec/veh and $\leq$ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay $>$ 55.0 sec and $\leq$ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay $>$ 35 sec/veh and $\leq$ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay $>$ 80.0 sec	Intersection blocked by external causes. Delay $>$ 50 sec/veh	Forced flow, breakdown.

Sources: 2000 Highway Capacity Manual.

**Intersections.** Traffic conditions at unsignalized intersections are judged to exceed County standards when minimum Level of Service standards are exceeded and when the volume of traffic exceeds Caltrans' warrants for signalization. At unsignalized intersections, a traffic impact would be considered "adverse but not significant" if the County LOS standard is exceeded but the projected traffic does not satisfy traffic signal warrants. When Level of Service is poor the only means to completely alleviate delays to stop controlled vehicles would be to install a traffic signal. However, the unmet signal warrants would imply that the reduction in delay for the stop-controlled vehicles may not justify the new delays that would be incurred by the major street traffic (which is not currently not stopped). Under these circumstances, installation of a signal would not be recommended and the substandard LOS for stop-controlled vehicles would be considered an "adverse but not significant" impact.

**Roadway Systems.** This report section also describes the methodology selected to determine Levels of Service at intersections that are controlled by traffic signals, all-way stops or side street stop signs. All intersection Levels of Service analysis is predicated on the length of delays experienced by motorists waiting at the intersection.

At unsignalized intersections, gap acceptance and corresponding delays are used for Level of Service analysis. Procedures used for calculating unsignalized intersection Level of Service are as presented in the 2000 Highway Capacity Manual. Levels of Service at unsignalized intersections, which are controlled by side street stop signs, are indicative of the magnitude of the delay incurred by motorists that must yield the right of way at an intersection.

Table 5 presents the El Dorado County General Plan EIR thresholds for roadway segment Level of Service based on hourly traffic volumes. The 2015 CIP lists Sly Park Road as operating at LOS “D” to LOS “E”.

TABLE 5 TABLE OF FUNCTIONAL CLASS AND LOS THRESHOLDS TWO-WAY VOLUMES						
Code	Facility Type	A	B	C	D	E
2R	Minor Two-Lane Highway	90	200	680	1,410	1,740
2U	Major Two-Lane Highway	120	290	790	1,600	2,050
2A	Two-Lane Arterial			970	1,760	1,870
4AU	Four-Lane Arterial, Undivided			1,750	2,740	2,890
4AD	Four-Lane Arterial, Divided			1,920	3,640	3,740
4A	Six-Lane Arterial, Divided			2,710	5,320	5,600
2F	Two-Lane Expressway/Freeway	1,100	2,010	2,880	3,570	4,010
3F	Three-Lane Freeway	1,700	3,080	4,400	5,410	6,060
4F	Four-Lane Freeway	2,320	4,200	5,950	7,280	8,140

### Existing Levels of Service

**Intersection Levels of Service.** To determine existing traffic volumes and obtain more information about traffic conditions in the study area, new traffic counts were taken during the weekday morning and evening peak traffic periods and on Saturday at the key intersections on Sly Park Road. These counts were made on Thursday July 1 and Saturday July 3. Counts were taken at the US 50 / Sly Park Road interchange section.

Existing intersection Levels of Service at each intersection are shown on Table 6. As shown, because existing weekday traffic volumes are relatively low, the Levels of Service at nearly every intersection meets El Dorado County’s minimum standards (i.e., LOS C or better). However, on Saturday afternoon the length of delays at the EB US 50 off ramps are indicative of LOS E conditions for motorists waiting to turn onto Sly Park Road and LOS “F” during the weekday evening peak hour. In addition, warrants for signalization are currently met at this intersection under both study periods.

**TABLE 6  
EXISTING PEAK HOUR LEVELS OF SERVICE  
AT INTERSECTIONS ON SLY PARK ROAD**

	Control	Level of Service			
		Weekday P.M.		Saturday Afternoon	
		Average Delay	LOS	Average Delay	LOS
WB US 50 Ramps NB left turn WB left +right turn	WB Stop	8.7 sec 12.9 sec	A B	9.0 sec 16.7 sec	A C
EB US 50 ramps SB left turn EB left+right turn	EB Stop	7.9 sec 58.3 sec	A F	8.5 sec 41.9 sec	A E
Ridgeway Drive NB left turn SB left turn EB left + right turn WB left + right turn	EB/WB Stop	8.6 sec 7.7 sec 18.7 sec 11.3 sec	A A C B	8.3 sec 8.0 sec 21.8 sec 12.4 sec	A A C B
Recreation Area Access NB left turn SB left turn EB left+thru+right turn WB left+thru+right turn	EB / WB Stop	7.7 sec 7.5 sec 10.0 sec 10.6 sec	A A B B	7.6 sec 7.6 sec 12.1 sec 11.9 sec	A A B B
Mormon Emigrant Trail SB left turn WB left + right turn	WB Stop	7.5 sec 10.0 sec	A B	7.7 sec 10.1 sec	A B

While projected Levels of Service at the recreation area access onto Sly Park Road are calculated to be LOS B or better, long delays were occasionally observed at this location on Saturday afternoon. Congestion at the intersection is the result of delays at the entry gate as staff process arriving guests. While two entry lanes are available, new arrivals are generally limited to the inside lane, and there were occasions when the queue of traffic at the gate extended back to Sly Park Road. As a result, some traffic wishing to turn left into the park was delayed. In turn, these waiting motorists sometimes blocked the path of motorists waiting to turn left out of the recreation area.

**Roadway Segment Level of Service.** The El Dorado County General Plan EIR includes evaluation of roadway segment Level of Service based on hourly traffic volumes. The LOS C-D threshold for Sly Park Road is identified as 680 vehicles per hour.

The GPU EIR suggests that the portion of Sly Park Road from Mormon Emigrant Trail to Park Creek Road carries a weekday peak hour volume of 340 vph and operates at LOS C. The segment from Park Creek Road to US 50 is reported to carry 470 vph and operate at LOS C.

As a comparison, the highest hourly traffic volumes observed over the July 4<sup>th</sup> weekend on Sly Park Road north of the recreation area entrance ranged from 350 vph on Thursday to 515 vph on Saturday. These volumes are indicative of LOS C.

## **PROJECT IMPACTS**

New facilities have been envisioned in the Sly Park Recreation Area in addition to the renovation to campgrounds and day use areas. These new facilities include development of the Sugar Loaf Fine Arts Camp, a Retreat/Events Center and Boy Scout Hill. Both the Sugar Loaf Fine Arts Center and the Retreat/Events Center are to be located on Mormon Emigrant Trail. Boy Scout Hill is located on Lake Drive.

### **Project Description/Trip Generation**

While the exact operation and characteristics of the three new facilities have not been finalized, assumptions have been made based on data provided in order to determine the probable number of trips generated and to assess the impacts of the Sly Park Recreation Area expansion on traffic conditions in the area.

**The Sugar Loaf Fine Arts Center.** The Sugar Loaf Fine Arts Center is envisioned to hold approximately 300 people and provide 150 parking spaces. This equates to one parking space per two attendees. Assuming an auto occupancy of two attendees per vehicle, a total of 150 vehicles or 300 daily trips would be associated with this use. As this facility is also planning on having participants arrive at the beginning of the week and leave during the end of the week, it was assumed that all of the 150 vehicles would drop off the participants after parking and unloading.. Assuming that vehicles would arrive over a two-hour time period, a total of 150 trips per hour are anticipated. It should be noted that based on the operational program of this facility, arrivals and departures from this facility would not coincide with the peak hour of commuter traffic.

**The Retreat/Events Center.** The Retreat and Events Center is to have lodging available for 75 people and have a capacity of 300 patrons. A total of 75 parking spaces are to be constructed. As for the Sugar Loaf Fine Arts Center, an auto occupancy rate of two patrons per vehicle was assumed. As such sufficient parking is not available for all participants to park most of the participants will have to be dropped off.

A total of 150 vehicles would be required to transport the 300 attendees. Assuming utilization of all 75 parking spaces by lodge patrons and those spending the day, the remaining 75 vehicles would be required to drop off their attendees and pick them up later that day. These 75 vehicles would generate a total of 300 daily trips. The 75 vehicles utilizing the parking spaces were assumed to make one inbound and one outbound trip per day for a total of 150 daily trips. Therefore, the Retreat/Events Center is anticipated to generate a total of 450 trips per day.

As for the Sugar Loaf Fine Arts Center the operational program would prohibit arrivals and departures outside the commute hour and it would likely take a two-hour period for participants to arrive/depart. As such, this facility is anticipated to generate a total of 225 trips per two-hour period (75 from parked vehicles and 150 from additional patrons) or 113 trips per hour.

**Boy Scout Hill.** Boy Scout Hill is to have a capacity of 360 people and a total of 75 parking spaces. Assuming an auto-occupancy of two patrons per vehicle, a total of 180 vehicles would be required to transport all of the attendees. Assuming that 75 vehicles remained on site, the additional 105 vehicles would be for drop off and pick ups only as no additional parking spaces would exist. If the

scouts did not spent the night, the 105 vehicles transporting the scouts would generate a total of 420 daily trips while the 75 vehicles parked in the parking spaces would generate a total of 150 daily trips for a total of 570 daily trips. As for the other two facilities, events would be scheduled out side the peak commute hours and were assumed to occur over a two-hour period. As such, a total of 285 trips were be generated during the two hour period (210 trips from drop offs and 75 trips from those utilizing the parking spaces) or about 143 trips per hour.

**Trips Generated.** Table 7 presents the trip generation associated with the expansion of the Sly Park Recreation Area. As shown, the three new facilities are not anticipated to generate a total of 1,310 daily trips with 406 trips occurring during a one-hour period.

<b>TABLE 7 TRIP GENERATION</b>			
<b>Land Use</b>	<b>Daily Vehicles</b>	<b>Daily Trips</b>	<b>Trips per drop off/pick up hour</b>
Sugar Load Fine Arts Center	150	300	150
Retreat and Events Center	150	450	113
Boy Scout Hill	180	560	143
<b>Total</b>	<b>480</b>	<b>1,310</b>	<b>406</b>

### **Impacts of Sly Park Recreation Area Expansion**

While development of these three sites is anticipated to generate daily traffic, as previously discussed, the hours of operation are to be limited so as to avoid the peak commute hour of the adjacent street. As such, these three sites will not add to peak hour traffic volumes to the commute hour. Therefore, no change in peak hour intersection operations will occur.

While the expansion of the Sly Park would not generate traffic during the peak hour commutes, the project is anticipated to generate about 406 new trips during peak drop off/pick up times. This equates to a total of 263 new trips during the one hour drop off/pick up hour on Mormon Emigrant Trail and 143 new trips during the one hour drop off/pick up hour on Lake Drive. As it is anticipated that the origins and destinations for patrons to these facilities would be via US 50, a total of 406 new trips during the one-hour drop off/pick up time are anticipated on Sly Park Road.

As the project has committed to scheduling arrivals and departures outside the peak commute hours, the expansion would not generate any traffic during this time. As the expansion would not result in the addition of traffic at study intersections during the peak commute hours, intersection operations during this time would not be effected.

### **Roadway Segment Level of Service.**

Table 8 displays the peak one-hour traffic volumes during the July 4<sup>th</sup> weekend that occur out of the peak “commute hours” for each of the study roadways that is effected by the project expansion. In addition this table also displays the peak one-hour trip generation of the project and the resulting peak hour roadway volumes for each of the study roadways.

As shown, on Mormon Emigrant Trail the highest traffic volumes, which were observed on Monday July 5, 2004, reached about 255 vehicles during the peak one hour period. With the additional 263 new trips generated by the expansion, a total of about 515 trips are anticipated on Mormon Immigrant Trail.

On Lake Drive, highest traffic volumes were for the two study sections ranged from about 90 to 200 vph. The addition of the 143 new trips generated by the expansion equates to one-hour traffic volumes ranging between about 230 to 345 vph.

#	Road	From	To	Existing	Expansion	Ex + Expansion
1	Mormon Emigrant Trail	Sly Park Road	Group Camp	254	263	517
4	Sly Park Road	US 50	Park Access	515	406	921
5		Park Access	Mormon Emigrant Trail	418	406	824
3	Lake Drive	Sly Park Road	Mooring Access Rd	88	143	231
8		Mooring Access Rd	Day Use	201	143	344

On Sly Park Road the one-hour traffic volumes without the expansion are already approaching the LOS “C/D” threshold (680 vph). With traffic generated from all three facilities, this roadway is anticipated to operate at LOS “D”. While traffic generated by the expansion is anticipated to worsen traffic conditions, operations do not fall below the LOS “E” identified under the 2015 CIP in the GPU. In order to maintain LOS “C” operations only a portion of the expansion would be able to occur during these one-hour intervals. In other words, the arrival and departures would have to be staggered and segregated in order to maintain acceptable operations. However, the 2015 CIP lists the LOS of this facility at LOS “E” operations. Therefore, LOS “E” operations could be maintained even with the simultaneous operations at all three facilities.

It should also be noted that the 515 vph that were observed on Sly Park Road occurred on a Sunday non-peak commute hour. However, the peak hour commute period on Monday was only slightly less (13 vehicles) than the 515 vph that were observed on the Sunday. Therefore, allowing operations during the commute hours would be comparable to non-peak commute hour segment operations on Sunday.

## **FUTURE BACKGROUND TRAFFIC CONDITIONS**

The extent to which traffic conditions on Sly Park Road may change in the future has been evaluated.

The GPU EIR presents weekday peak hour traffic volume forecasts for various General Plan alternatives. On Sly Park Road these forecasts range from 450 to 470 vph on the segment from Mormon Emigrant Trail to Park Creek Road and from 590 to 610 vph on the segment from Park Creek Road to US 50.

The peak hour typically occurs during the evening or morning commute. However, the uses envisioned by the expansion of Sly Park will not have hours of operation that occur during the commute peak hour. Therefore, a comparison between evening commute hour and the next highest afternoon or evening hour was made from daily counts that were obtained over the July 4<sup>th</sup> weekend. This comparison revealed that the one-hour peak that occurred outside of the typical commute hour during the weekday ranged from 98% to 108% of those volumes that were observed during the commute hour. An 8% increase (which occurred on a Friday) results in the one-hour volumes on Sly Park Road result in range from about 485 to 510 vph on the segment from Mormon Emigrant Trail to Park Creek Road and from 635 to 660 vph on the segment from Park Creek Road to US 50. While these off-peak hours are anticipated to operate at LOS "C" operations, the addition of trips generated by the expansion of the Sly Park Recreation Center would result in LOS "D" operations on both Sly Park Road study segments. As such operations with the expansion would worsen but not below the LOS "E" operations that were identified in the GPU for the 2015 CIP.

The GPU EIR suggests that the portion of Mormon Emigrant Trail from Sly Park Road to the 2<sup>nd</sup> Dam carries a weekday peak hour volume of 280 to 330 vph. Comparison of the peak commute hour to the non peak commute hour reveals that the non-peak commute hour on Mormon Emigrant Trail indicates that the non-commute hour carries between about 11 to 37 more traffic than the commute hour. Increasing peak hour traffic projections by 37% (which occurred on a Friday) results in Mormon Emigrant Trail carrying one-hour traffic volumes between 385 and 450 vph. The addition of the 263 trips generated from the expansion results in traffic volumes ranging from about 645 to 715 vph. This would be indicative of LOS "C" operations at the LOS "C/D" threshold for this facility is 790 vph.

With expansion of the Sly Park Master Plan, it was noted that additional daily trips will be generated, but no new peak hour trips during the typical commute are anticipated. As no peak hour trips will be generated, no change in peak commute hour trips is anticipated and thus the expansion will not impact peak commute hour operations at the study intersections.

## **EVALUATION OF KEY ISSUES**

Based on discussions with EID staff, field review and observation of traffic and parking conditions over the July 4<sup>th</sup> weekend, the following list of key issues need to be considered in developing the Sly Park Master Plan.

### **Traffic Issues**

**Peak Conditions at the Park Entrance.** The entrance lacks the capacity to accommodate peak demands on heavy weekends. This lack of capacity manifests itself in queue's that occasionally reach Sly Park Road and interfere with traffic at the intersection.

While two inbound lanes are available, it is only possible to process new arrivals from the inside lane. And while staff has used manual traffic controls to temporarily allow entering traffic to use one of the two exit lanes, these measures have not kept queues from becoming a potential safety problem.

The problems at the entrance relate to the amount of time it takes to physically process a new arrival. Methods to decrease the service flow rate or to concurrently handle more than one customer could be explored, however, we understand that the current process is beneficial from the standpoint of cash accounting.

**Improvements to Sly Park Road / Park Access Intersection.** The access problem noted above contributes to the need for a left turn lane on Sly Park Road to provide storage for waiting vehicles and/or deceleration space. However, the right of way available to widen Sly Park Road in this area is very limited, and the presence of the convenience market on the other side of the street will require that both northbound and southbound lanes be created if a project is pursued.

A minor improvement that would be beneficial is creation of an acceleration taper on northbound Sly Park Road leaving the park. This would make it easier for vehicles towing boats to merge with Sly Park Road traffic.

**Standards for Collector Roads.** As noted in the report, the width of the collector road system varies through the park. A minimum standard needs to be identified which reflects an acceptable compromise between the needs of passing vehicles and the rural character of the park.

The minimum standards should consider the effect of on-street parking and horizontal alignment. There are locations where on-street parking is permitted but reduces the effective width to the point that opposing vehicles cannot pass. There are other locations where tight curves mandate pavement with that exceeds the typical minimum standard.

Once a minimum standard is identified, improvements to deliver the standard can be explored. In many locations, it would be possible to increase the available width by paving the area of drainage ditches. This treatment has already been used in some locations to effectively widen the road by 1-2 feet and should be pursued.

**Standards for Campground Roads.** Currently most campground roads are paved to a width of 9-12 feet. There are some locations where trees limit the travel way to as little as 9 feet. This width is not sufficient to permit opposing vehicles to pass easily without leaving the pavement. In urban settings this constraint would normally be addressed by making these streets one-way. However, because traffic volumes through campgrounds are light using unpaved shoulders to pass does not regularly interfere with the flow of traffic. Two-way traffic is also needed to allow motorists to access some campsites that would not be accessible from a particular direction.

However, if it is determined that requiring vehicles to leave the roadway to pass has an impact on the adjoining environment, then the development of one-way loops may be in order.

**Access to Hilltop Camp.** The entrance to the camp occurs at an area that is difficult to differentiate from Lake Drive. A large median area with trees also exists. Redesign of this area using a traffic circle or roundabout should be considered to lessen confusion.

**Access To Sierra Camp.** The west access to Sierra camp is also difficult to identify. Modifications should be pursued.

**US 50 / Sly Park Road interchange.** This intersection currently meets peak hour warrants for signalization. While the project is not anticipated to add traffic during the peak hours of operation, traffic from Sly Park will travel through this intersection on a daily basis. The County is already aware of the existing need to signalize this intersection.

**Operational Schedule.** The project has committed to scheduling operations outside the commute peak hours.

### **Parking Issues**

**Day Use Parking.** The parking supplies that are available near popular day use areas are well used. If it is determined that these areas can handle additional patronage, then measures to increase the parking supply would need to be considered.

In the major day use area north of the main entrance, the available parking area is very wide and alternatives parking layouts could be considered. For example, creating diagonal parking in lieu of parallel parking would increase the number of spaces that are available in this area. However, while the existing layout permits guests to easily leave by making a u-turn from their parking space, this may not be possible if the area was re-striped.

Day use parking at Sierra Point and near Hazel Creek is neither paved nor readily identifiable. Thus, day users regularly encroach into adjoining campsites. If the Master Plan determined that additional day users are to be accommodated in these areas, then measures to pave and/or better designate the day users parking supply should be considered.

**Campsite Parking.** While EWID staff have an idea of the number of vehicles that can be accommodated at each site, it is difficult to identify the locations where parking is to occur. Most campgrounds also lack overflow space for visitors who are not included in the parking allocation for each site. Development of common overflow parking spaces for each campground would be helpful.

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Appendix C  
Air Quality – URBEMIS Screening Data

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This appendix contains URBEMIS (version 8.7) air quality emission results for three operational screening checks for the Sly Park Recreation Area Master Plan projects.

The first two URBEMIS models are used to show the accuracy of the screening check methodology and Table 5.2 contained in the El Dorado County Air Quality Management District's Guide to Air Quality Assessment. Two types of land uses, industrial park and elementary school, are used. The third model (elementary school, year 2008) utilizes inputs that more accurately reflect the expected SPRA projects. The methodology and results of the URBEMIS calculations are discussed in Air Quality section of the DEIR.

El Dorado County AQMD screening check, INDUSTRIAL PARK

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URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\El Dorado County AQMD operational screening guide, industrial park.urb  
 Project Name: El Dorado County AQMD screening guide, industrial park  
 Project Location: Mountain Counties and Rural Counties  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT  
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	5.09	0.81	1.46	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	44.86	53.52	553.58	0.47	36.87

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	49.95	54.33	555.03	0.47	36.87

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URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\El Dorado County AQMD operational screening guide, industrial park.urb  
 Project Name: El Dorado County AQMD screening guide, industrial park  
 Project Location: Mountain Counties and Rural Counties  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT  
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	4.96	0.81	0.68	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	49.32	83.09	599.87	0.43	36.87

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	54.28	83.90	600.55	0.43	36.87

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URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\El Dorado County AQMD operational screening guide, industrial park.urb  
 Project Name: El Dorado County AQMD screening guide, industrial park  
 Project Location: Mountain Counties and Rural Counties  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

El Dorado County AQMD screening check, INDUSTRIAL PARK

DETAIL REPORT  
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.06	0.81	0.68	0	0.00
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	4.91	-	-	-	-
TOTALS(lbs/day,unmitigated)	4.96	0.81	0.68	0.00	0.00

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Industrial park	49.32	83.09	599.87	0.43	36.87
TOTAL EMISSIONS (lbs/day)	49.32	83.09	599.87	0.43	36.87

Does not include correction for passby trips.  
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2002 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Industrial park		6.96 trips/1000 sq. ft.	350.00	2,436.00
			Sum of Total Trips	2,436.00
			Total Vehicle Miles Traveled	24,266.21

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.40	3.40	95.90	0.70
Light Truck < 3,750 lbs	15.10	6.00	90.70	3.30
Light Truck 3,751- 5,750	15.50	3.20	95.50	1.30
Med Truck 5,751- 8,500	6.70	2.90	94.10	3.00
Lite-Heavy 8,501-10,000	1.00	10.00	80.00	10.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	88.20	11.80	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Industrial park	41.5	20.8	37.8
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El Dorado County AQMD screening check, INDUSTRIAL PARK

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Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2002.  
The operational winter selection item changed from 2 to 1.  
The operational summer temperature changed from 60 to 85.  
The operational summer selection item changed from 4 to 6.

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URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\El Dorado County  
AQMD operational screening guide, industrial park.urb  
Project Name: El Dorado County AQMD screening guide, industrial park  
Project Location: Mountain Counties and Rural Counties  
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT  
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.06	0.81	0.68	0	0.00
Hearth - No summer emissions					
Landscaping	0.12	0.00	0.78	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	4.91	-	-	-	-
TOTALS(lbs/day,unmitigated)	5.09	0.81	1.46	0.00	0.00

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Industrial park	44.86	53.52	553.58	0.47	36.87
TOTAL EMISSIONS (lbs/day)	44.86	53.52	553.58	0.47	36.87

Does not include correction for passby trips.  
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2002 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreege	Trip Rate	No. Units	Total Trips
Industrial park		6.96 trips/1000 sq. ft.	350.00	2,436.00
Sum of Total Trips				2,436.00
Total Vehicle Miles Traveled				24,266.21

El Dorado County AQMD screening check, INDUSTRIAL PARK

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.40	3.40	95.90	0.70
Light Truck < 3,750 lbs	15.10	6.00	90.70	3.30
Light Truck 3,751- 5,750	15.50	3.20	95.50	1.30
Med Truck 5,751- 8,500	6.70	2.90	94.10	3.00
Lite-Heavy 8,501-10,000	1.00	10.00	80.00	10.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	88.20	11.80	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Industrial park				41.5	20.8	37.8

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Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2002.  
The operational winter selection item changed from 2 to 1.  
The operational summer temperature changed from 60 to 85.  
The operational summer selection item changed from 4 to 6.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\El Dorado County AQMD screening guide, ELEMENTARY SCHOOL.urb  
 Project Name: El Dorado County AQMD screening guide, ELEMENTARY SCHOOL  
 Project Location: Mountain Counties and Rural Counties  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT  
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	2.32	1.45	1.99	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	71.45	49.76	509.79	0.43	33.83

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	73.77	51.20	511.78	0.43	33.84

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\El Dorado County AQMD screening guide, ELEMENTARY SCHOOL.urb  
 Project Name: El Dorado County AQMD screening guide, ELEMENTARY SCHOOL  
 Project Location: Mountain Counties and Rural Counties  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT  
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	2.19	1.44	1.21	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	46.32	77.08	565.97	0.39	33.83

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	48.52	78.52	567.18	0.39	33.84

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\El Dorado County AQMD screening guide, ELEMENTARY SCHOOL.urb  
 Project Name: El Dorado County AQMD screening guide, ELEMENTARY SCHOOL  
 Project Location: Mountain Counties and Rural Counties  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

El Dorado County AQMD screening guide, ELEMENTARY SCHOOL

DETAIL REPORT  
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.10	1.44	1.21	0	0.00
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.09	-	-	-	-
TOTALS (lbs/day, unmitigated)	2.19	1.44	1.21	0.00	0.00

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Elementary school	46.32	77.08	565.97	0.39	33.83
TOTAL EMISSIONS (lbs/day)	46.32	77.08	565.97	0.39	33.83

Does not include correction for passby trips.  
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2002 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Elementary school		1.29 trips/students	2,100.00	2,709.00
			Sum of Total Trips	2,709.00
			Total Vehicle Miles Traveled	22,267.98

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.40	3.40	95.90	0.70
Light Truck < 3,750 lbs	15.10	6.00	90.70	3.30
Light Truck 3,751- 5,750	15.50	3.20	95.50	1.30
Med Truck 5,751- 8,500	6.70	2.90	94.10	3.00
Lite-Heavy 8,501-10,000	1.00	10.00	80.00	10.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	88.20	11.80	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Elementary school	20.0	10.0	70.0
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Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2002.  
The operational winter selection item changed from 2 to 1.  
The operational summer temperature changed from 60 to 85.  
The operational summer selection item changed from 4 to 6.

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URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\El Dorado County AQMD screening guide, ELEMENTARY SCHOOL.urb  
Project Name: El Dorado County AQMD screening guide, ELEMENTARY SCHOOL  
Project Location: Mountain Counties and Rural Counties  
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT  
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.10	1.44	1.21	0	0.00
Hearth - No summer emissions					
Landscaping	0.12	0.00	0.78	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	2.09	-	-	-	-
TOTALS(lbs/day,unmitigated)	2.32	1.45	1.99	0.00	0.01

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Elementary school	71.45	49.76	509.79	0.43	33.83
TOTAL EMISSIONS (lbs/day)	71.45	49.76	509.79	0.43	33.83

Does not include correction for passby trips.  
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2002 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Elementary school		1.29 trips/students	2,100.00	2,709.00
Sum of Total Trips				2,709.00
Total Vehicle Miles Traveled				22,267.98

El Dorado County AQMD screening guide, ELEMENTARY SCHOOL

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.40	3.40	95.90	0.70
Light Truck < 3,750 lbs	15.10	6.00	90.70	3.30
Light Truck 3,751- 5,750	15.50	3.20	95.50	1.30
Med Truck 5,751- 8,500	6.70	2.90	94.10	3.00
Lite-Heavy 8,501-10,000	1.00	10.00	80.00	10.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	88.20	11.80	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0

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Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2002.  
The operational winter selection item changed from 2 to 1.  
The operational summer temperature changed from 60 to 85.  
The operational summer selection item changed from 4 to 6.

URBEMIS 2002 For Windows 8.7.0

File Name: <Not Saved>  
 Project Name: El Dorado County AQMD screening check (ELEMENTARY SCHOOL, 2008)  
 Project Location: Mountain Counties and Rural Counties  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT  
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	1.13	0.66	1.33	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	22.35	15.43	148.61	0.09	16.35

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	23.48	16.09	149.95	0.09	16.35

URBEMIS 2002 For Windows 8.7.0

File Name: <Not Saved>  
 Project Name: El Dorado County AQMD screening check (ELEMENTARY SCHOOL, 2008)  
 Project Location: Mountain Counties and Rural Counties  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT  
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	1.00	0.66	0.55	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	13.34	23.30	162.39	0.09	16.35

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	14.34	23.96	162.94	0.09	16.35

URBEMIS 2002 For Windows 8.7.0

File Name: <Not Saved>  
 Project Name: El Dorado County AQMD screening check (ELEMENTARY SCHOOL, 2008)  
 Project Location: Mountain Counties and Rural Counties  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT  
(Pounds/Day - Winter)

El Dorado County AQMD screening guide, ELEMENTARY SCHOOL, 2008

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.05	0.66	0.55	0	0.00
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.96	-	-	-	-
TOTALS(lbs/day,unmitigated)	1.00	0.66	0.55	0.00	0.00

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Elementary school	13.34	23.30	162.39	0.09	16.35
TOTAL EMISSIONS (lbs/day)	13.34	23.30	162.39	0.09	16.35

Does not include correction for passby trips.  
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Elementary school		1.37 trips/students	960.00	1,310.40
			Sum of Total Trips	1,310.40
			Total Vehicle Miles Traveled	10,771.49

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0

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Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2008.  
 The operational winter selection item changed from 2 to 1.  
 The operational summer temperature changed from 60 to 85.  
 The operational summer selection item changed from 4 to 6.

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URBEMIS 2002 For Windows 8.7.0

File Name: <Not Saved>  
 Project Name: El Dorado County AQMD screening check (ELEMENTARY SCHOOL, 2008)  
 Project Location: Mountain Counties and Rural Counties  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT  
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.05	0.66	0.55	0	0.00
Hearth - No summer emissions					
Landscaping	0.12	0.00	0.78	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.96	-	-	-	-
TOTALS (lbs/day, unmitigated)	1.13	0.66	1.33	0.00	0.00

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Elementary school	22.35	15.43	148.61	0.09	16.35
TOTAL EMISSIONS (lbs/day)	22.35	15.43	148.61	0.09	16.35

Does not include correction for passby trips.  
 Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreeage	Trip Rate	No. Units	Total Trips
Elementary school		1.37 trips/students	960.00	1,310.40
		Sum of Total Trips		1,310.40
		Total Vehicle Miles Traveled		10,771.49

Vehicle Assumptions:

Fleet Mix:

El Dorado County AQMD screening guide, ELEMENTARY SCHOOL, 2008

Vehicle Type	Percent	Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00		1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00		2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20		1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20		1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10		0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40		0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00		0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90		0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00		0.00	0.00	100.00
Urban Bus	0.20		0.00	50.00	50.00
Motorcycle	1.70		76.50	23.50	0.00
School Bus	0.10		0.00	0.00	100.00
Motor Home	1.20		8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0

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Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2008.  
The operational winter selection item changed from 2 to 1.  
The operational summer temperature changed from 60 to 85.  
The operational summer selection item changed from 4 to 6.

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Appendix D  
Environmental Noise Conditions  
Background Report

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## INTRODUCTION

This report summarizes Bollard & Brennan, Inc.' initial assessment of issues, opportunities and constraints related to noise at Sly Park. This information is based on noise level data and observations conducted by Bollard & Brennan, Inc. staff, and on discussions with Sly Park staff and nearby neighbors.

## BACKGROUND ON NOISE AND ACOUSTICAL TERMINOLOGY

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

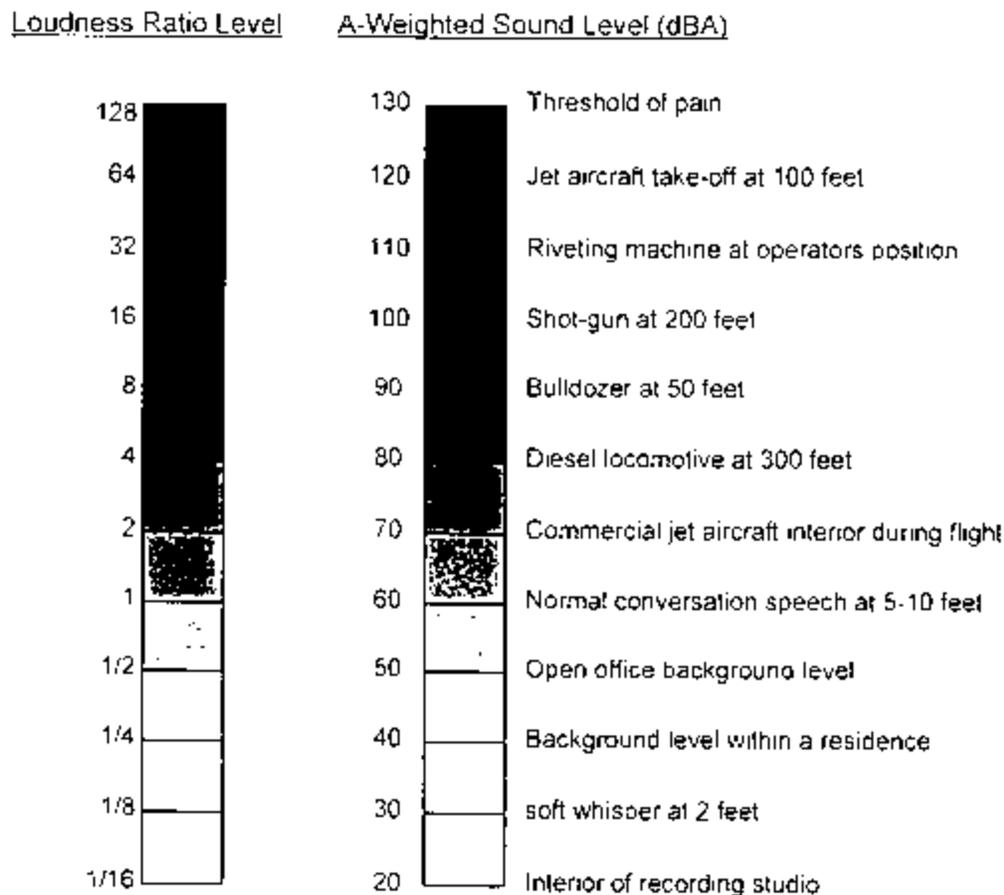
Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. Figure 1 illustrates common noise levels associated with various sources.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq). The Leq is the foundation of the day/night average noise descriptor, Ldn, and shows very good correlation with community response to noise.

The Day-night Average Level (Ldn) is based upon the average noise level over a 24-hour day, with a -10 decibel weighting applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Figure 1  
Typical A-Weighted Sound Levels of Common Noise Sources



## CRITERIA FOR ACCEPTABLE NOISE EXPOSURE

### El Dorado County Noise Element Standards:

The existing El Dorado County General Plan Noise Element, adopted July 19, 2004, establishes separate noise level criteria for transportation-related noise sources and non-transportation noise sources. Transportation noise sources are defined as "traffic on public roadways, railroad line operations and aircraft in flight". The noise element goes on to state that, non-transportation noise sources may include outdoor recreation facilities, so it is assumed that Activities at Sly Park would fall under the non-transportation noise standards.

The non-transportation noise sources associated with the Sly Park Recreation Area include all outdoor activities such as camping, boating, group picnic activities, etc. The transportation noise source associated with this project would include traffic on Sly Park Road and traffic within the park. The transportation noise standard applied by the County to Residential Uses is 60 dB L<sub>dn</sub>. Table 1 shows the County's non-transportation noise standards.

**Table 1**  
**Noise Level Performance Standards**  
**For Noise Sensitive Land Uses Affected by Non-Transportation Noise Sources**

Noise Level Descriptor	7 a.m. - 7 p.m.		7 p.m. - 10 p.m.		10 p.m. - 7 a.m.	
	Community	Rural	Community	Rural	Community	Rural
Hourly L <sub>eq</sub> , dB	55	50	50	45	45	40
L <sub>dn</sub> , dB	70	60	60	55	55	50

1. Each of the noise levels specified above shall be lowered by five dB for simple noises, noises consisting primarily of speech or music, or for recurring impulsive noises.
2. The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.
3. In Community areas the exterior noise level standard shall be applied to the property line of the receiving property. In Rural areas the exterior noise level shall be applied at a point 100 feet away from the residence.

Because there are subdivisions, commercial uses, and intensive activity at the Sly Park Recreation Area, the acoustic character of the area is commensurate with a community setting, despite the physical setting being more rural in nature.

## **ASSESSMENT OF EXISTING AMBIENT NOISE LEVELS**

The primary noise sources in the immediate vicinity of the Sly Park Recreation Area consist of traffic on Sly Park Road, boat noise on Jenkinson Lake, and camp activities.

As a means of quantifying background noise levels, Bollard & Brennan, Inc. conducted continuous 24-hour noise level measurements at 4 locations in and surrounding the Sly Park Recreation Area during the weekend of July 24-25, 2004. Park usage was maximum capacity this weekend and boating activity was heavy. The noise measurement sites are shown on Figure 2.

Equipment used for the noise measurements included Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters. The meters were calibrated before and after use with an LDL CAL200 acoustical calibrator to ensure the accuracy of the measurements. The measurement system meets all pertinent specifications of the American National Standards Institute (ANSI S1.4) for precision sound level measurement equipment.

A graphical depiction of the continuous noise level measurement results is provided in Figures 3-10. Table 2 shows the noise level measurement summaries, and Appendix A contains the detailed noise level measurement results.

**Table 2**  
**Ambient Noise Monitoring Results**  
**Sly Park Recreation Area and Vicinity - July 25-25, 2004**

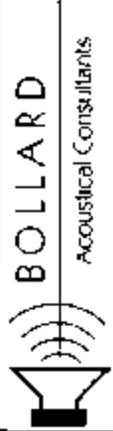
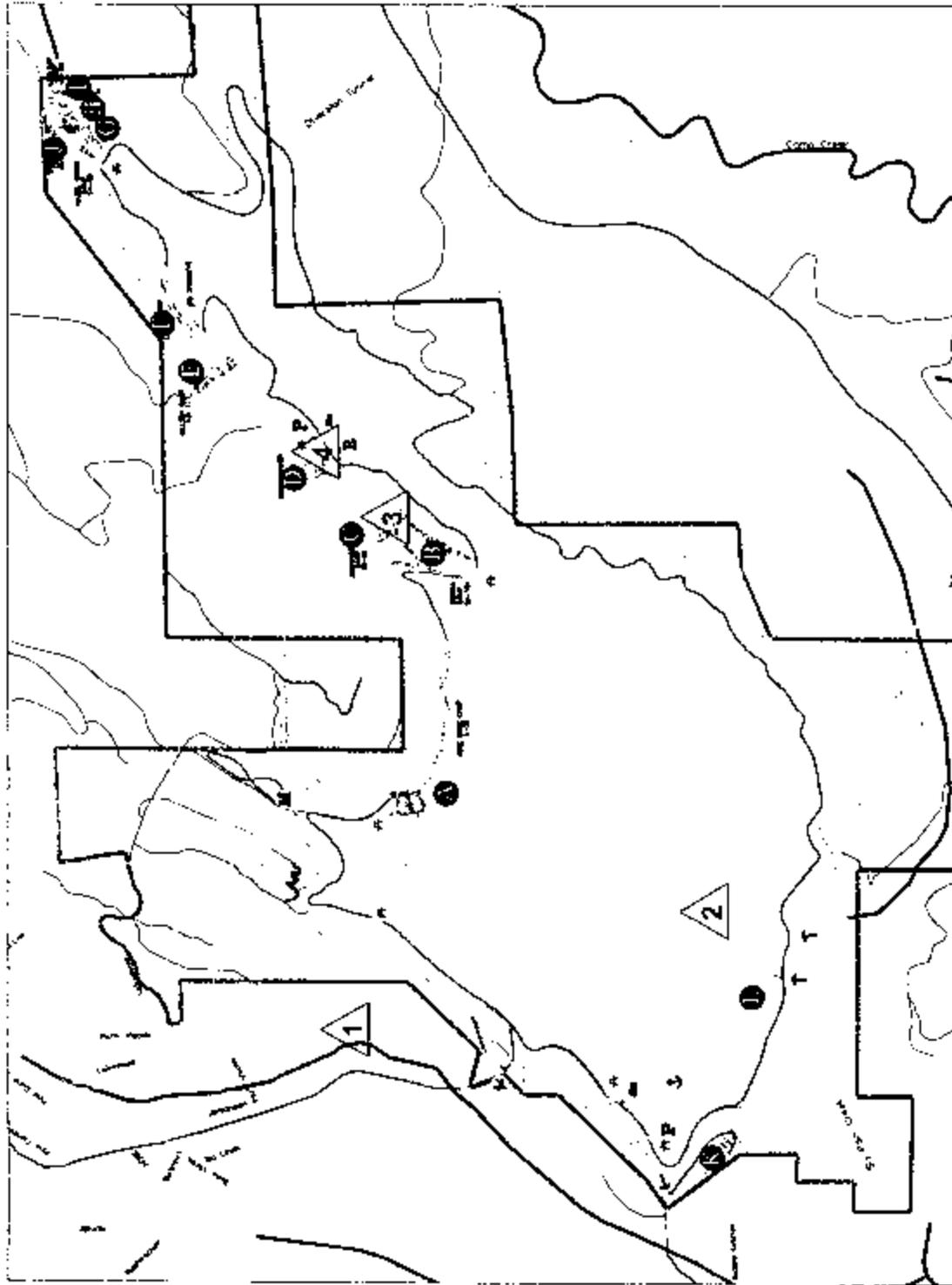
		Measured Sound Levels, dBA				
		Average (Leq)		Maximum (Lmax)		
Site	Location	Daytime	Nighttime	Daytime	Nighttime	L <sub>dn</sub>
1	4699 Jenkenson Circle	50	45	53-77	44-80	53
2	Near Group Area 5	48-50	34	45-88	38-59	47-49
3	At Camp Host Camp Area	48-50	35-39	58-78	35-67	47-49
4	Near Boathouse	46-51	37-38	46-80	40-55	46-50

Source: Bollard & Brennan, Inc.

The ambient noise survey results indicate that the measured daytime ambient noise levels at the project site are fairly typical of recreation areas affected by intensive day usage, particularly boating in this case. Although Table 2 shows the maximum noise levels exceeded 70 dB at times, examination of Figures 3-10 indicate that the elevated maximums were intermittent, and not constant.

# Sly Park Master Plan

## Noise Measurement Locations



# : Noise Measurement Locations

Figure 3  
 Continuously Measured Hourly Noise Levels  
 Sly Park Master Plan - 4699 Jenkinson Circle  
 Saturday July 24, 2004

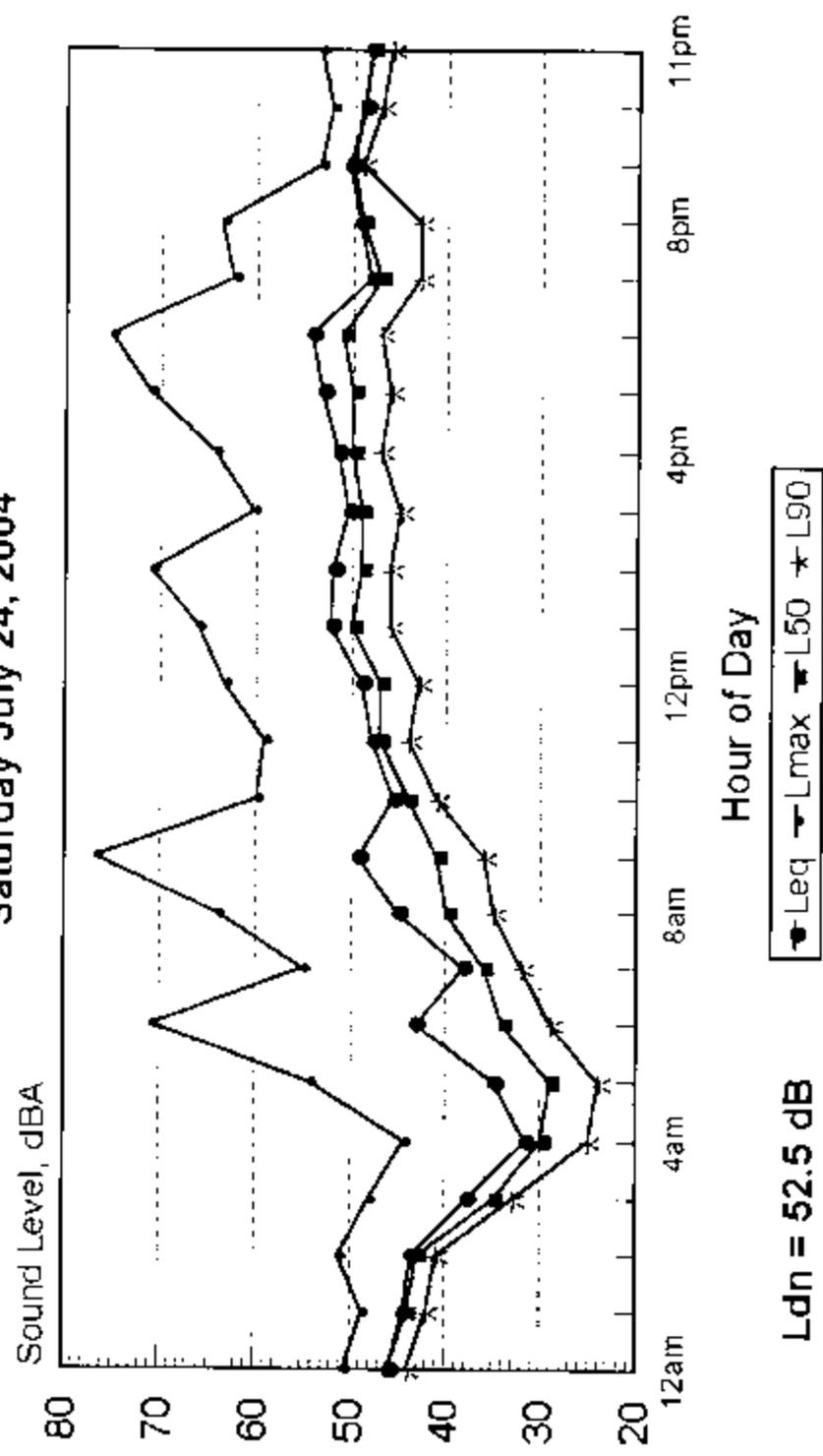


Figure 4  
 Continuously Measured Hourly Noise Levels  
 Sly Park Master Plan - 4699 Jenkinson Circle  
 Sunday July 25, 2004

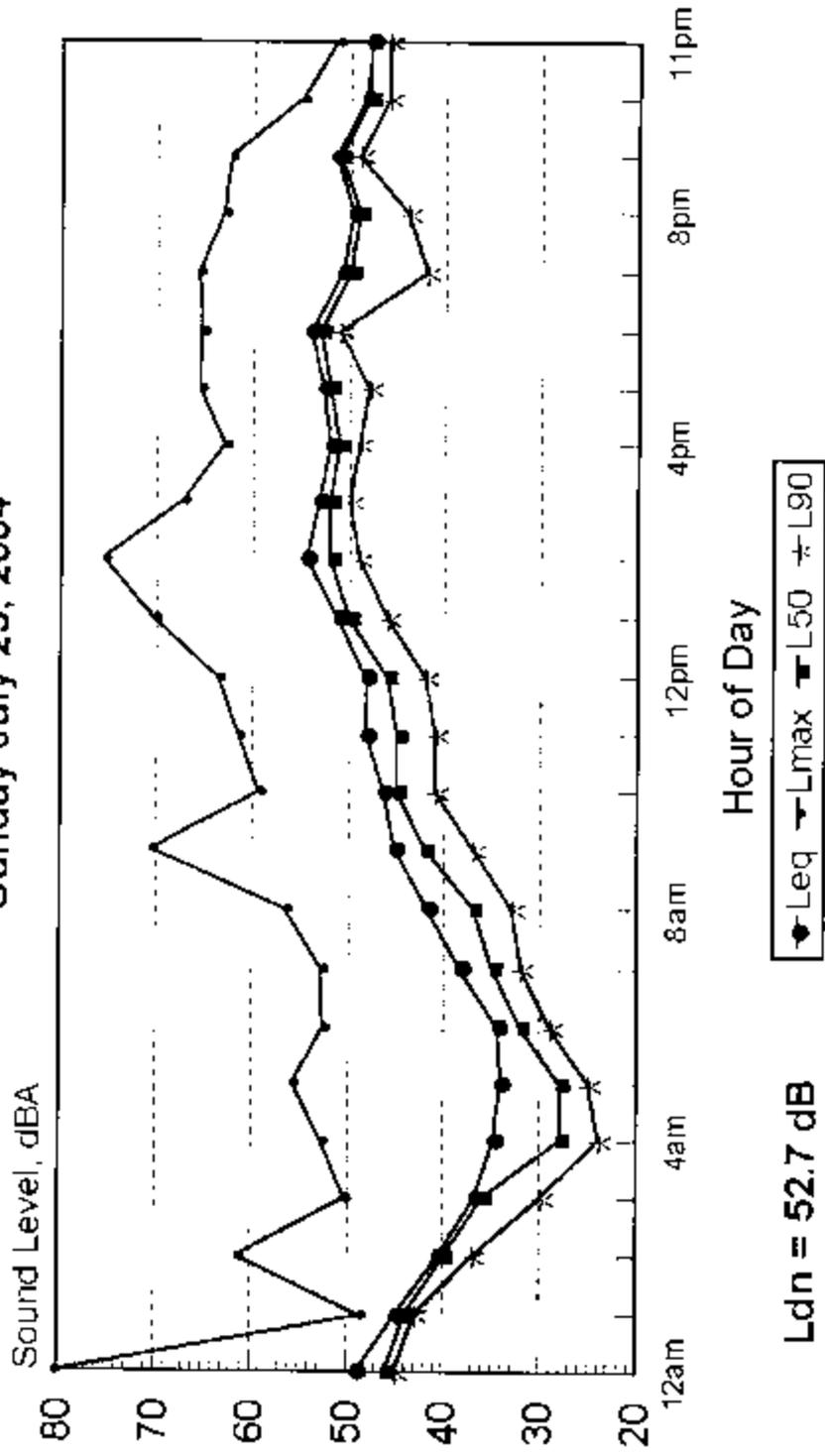


Figure 5  
 Continuously Measured Hourly Noise Levels  
 Sly Park Master Plan - Unused Bldg. (Near Group Area 5)  
 Saturday July 24, 2004

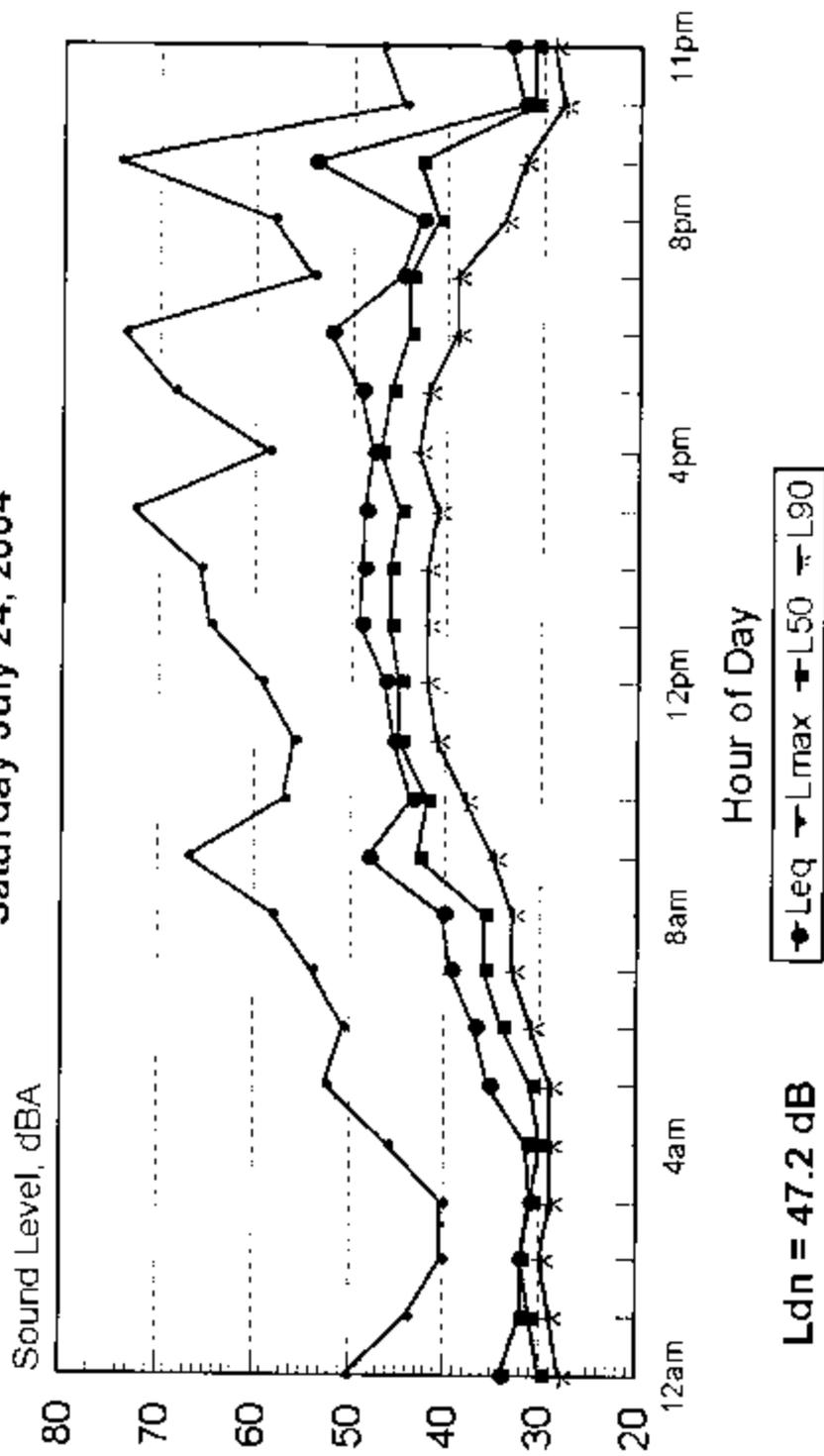


Figure 6  
 Continuously Measured Hourly Noise Levels  
 Sly Park Master Plan - Unused Bldg. (Near Group Area 5)  
 Sunday July 25, 2004

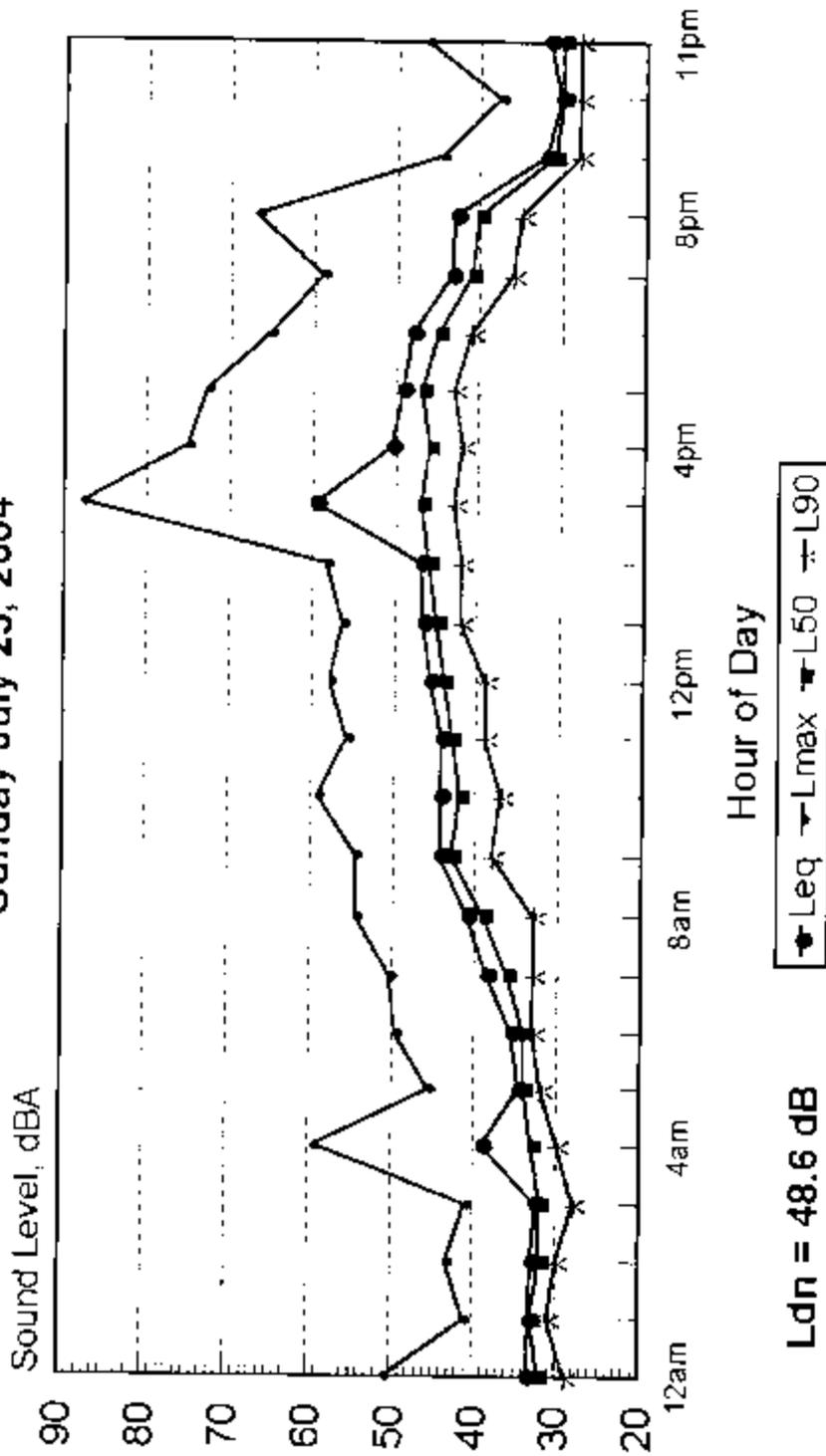
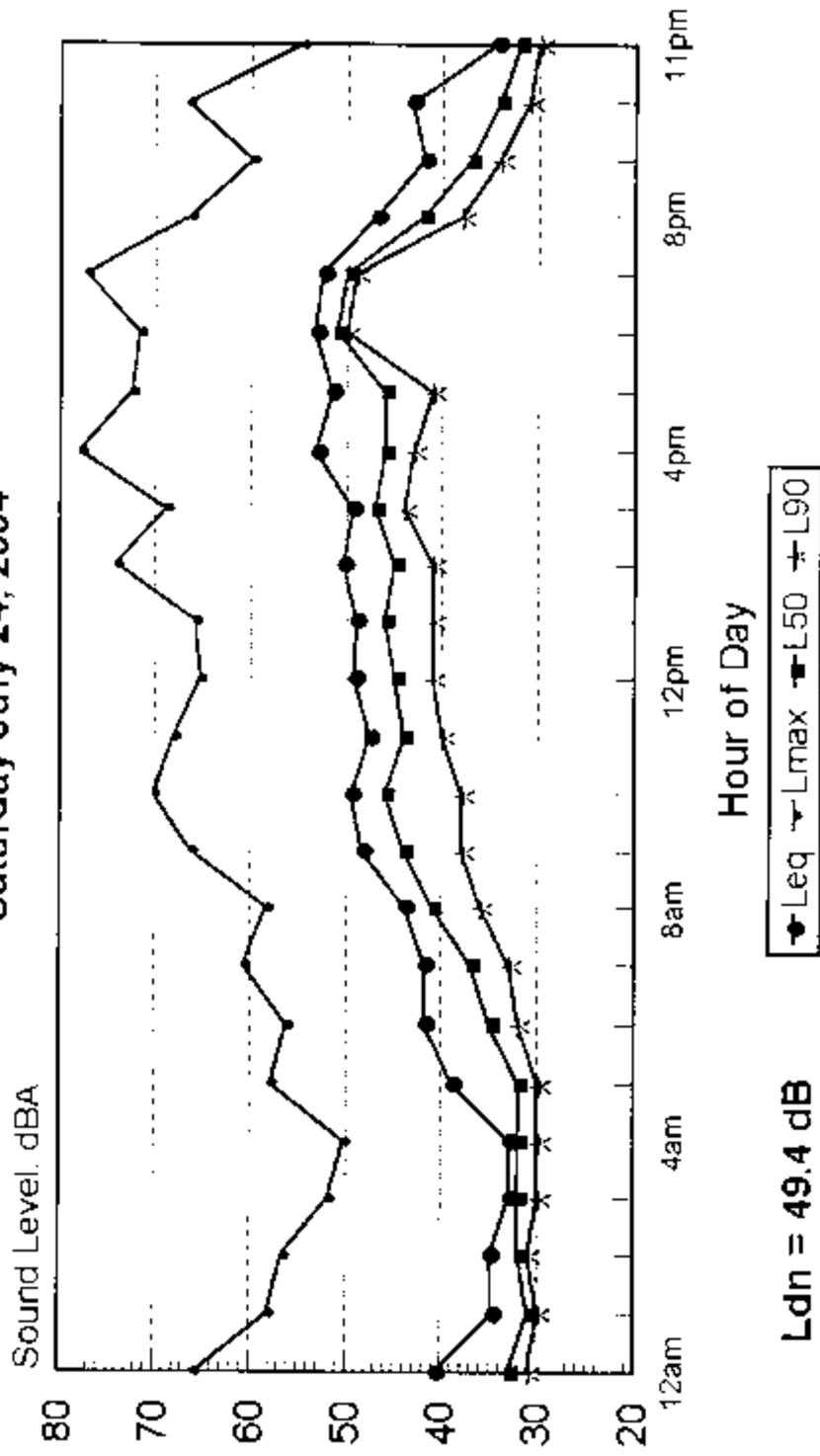


Figure 7  
 Continuously Measured Hourly Noise Levels  
 Sly Park Master Plan - Camp Host  
 Saturday July 24, 2004



Ldn = 49.4 dB

**Figure 8**  
**Continuously Measured Hourly Noise Levels**  
**Sly Park Master Plan - Camp Host**  
**Sunday July 25, 2004**

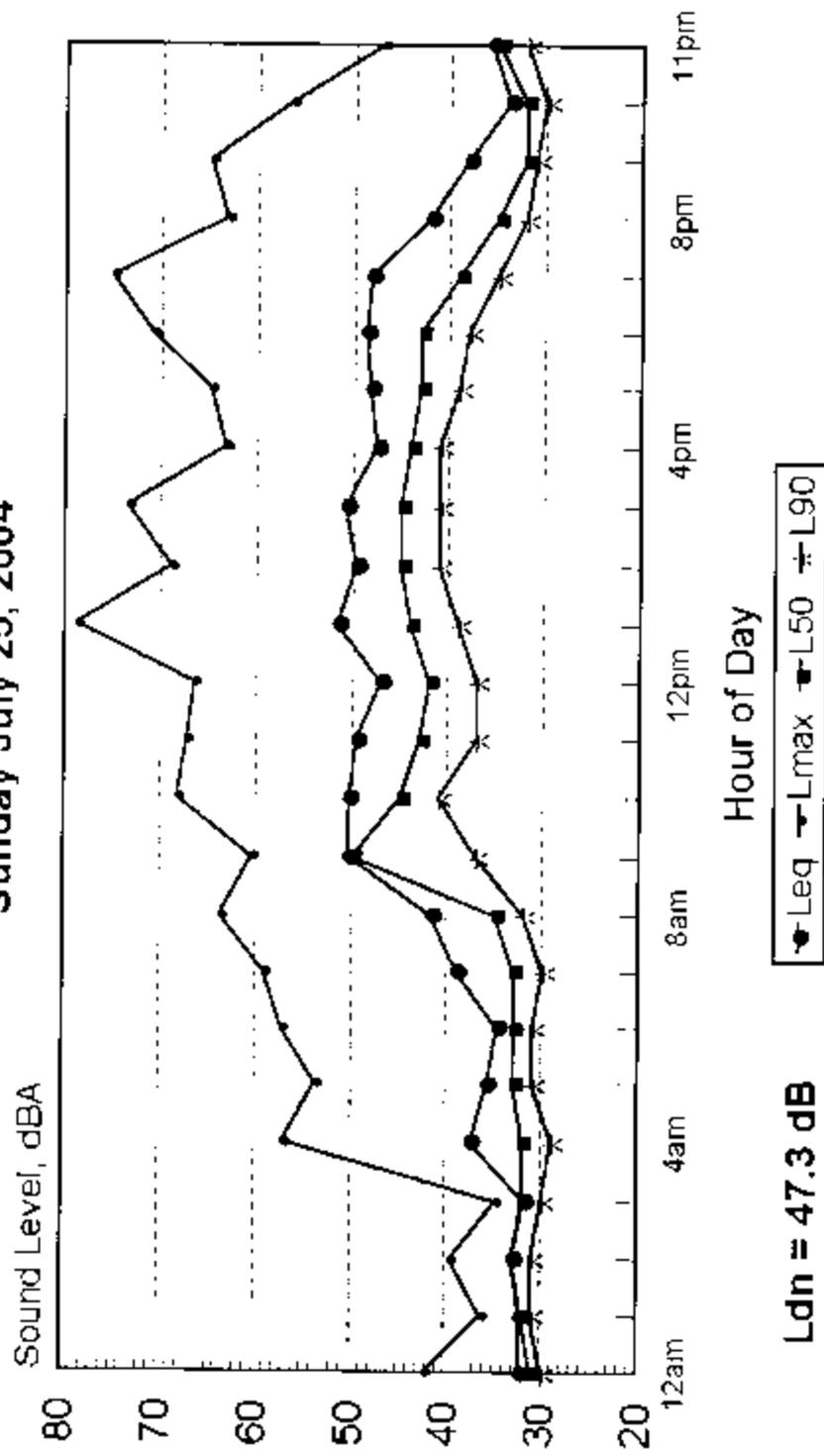
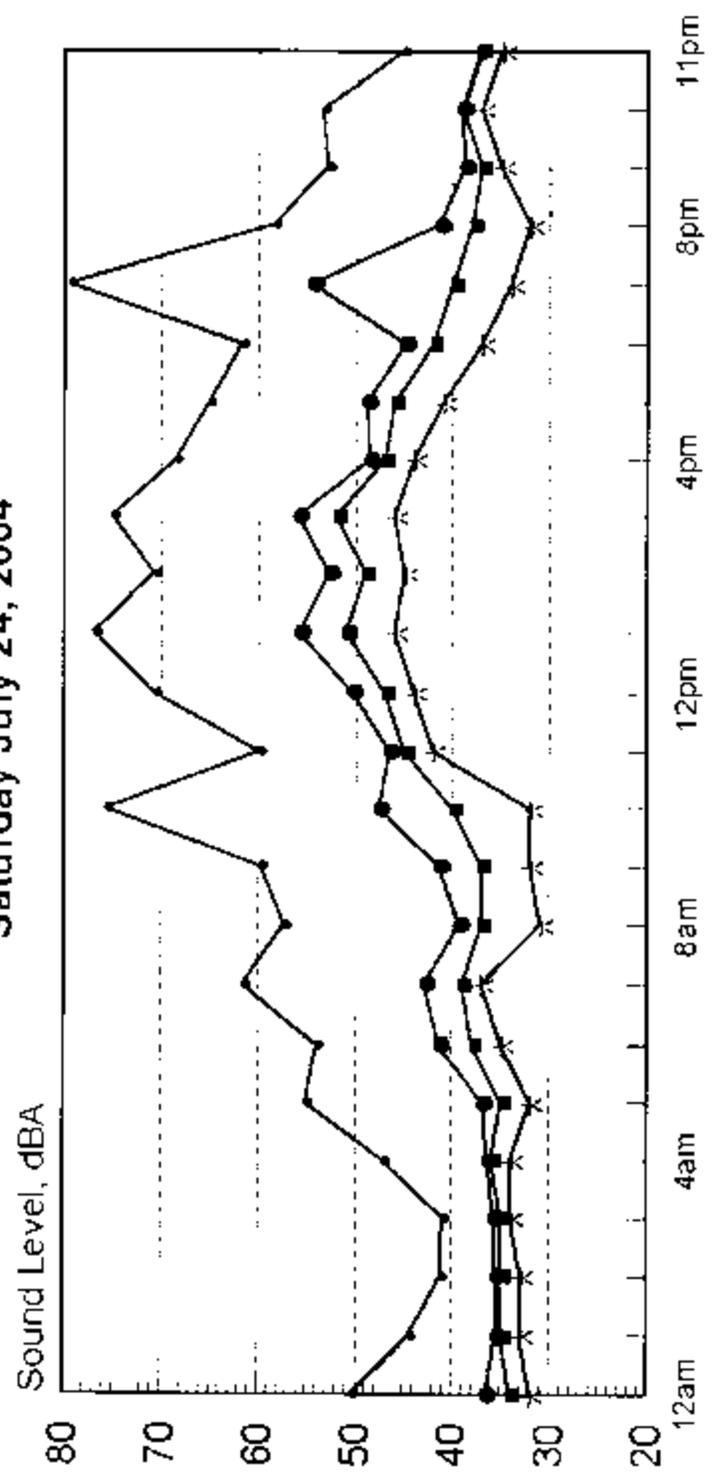


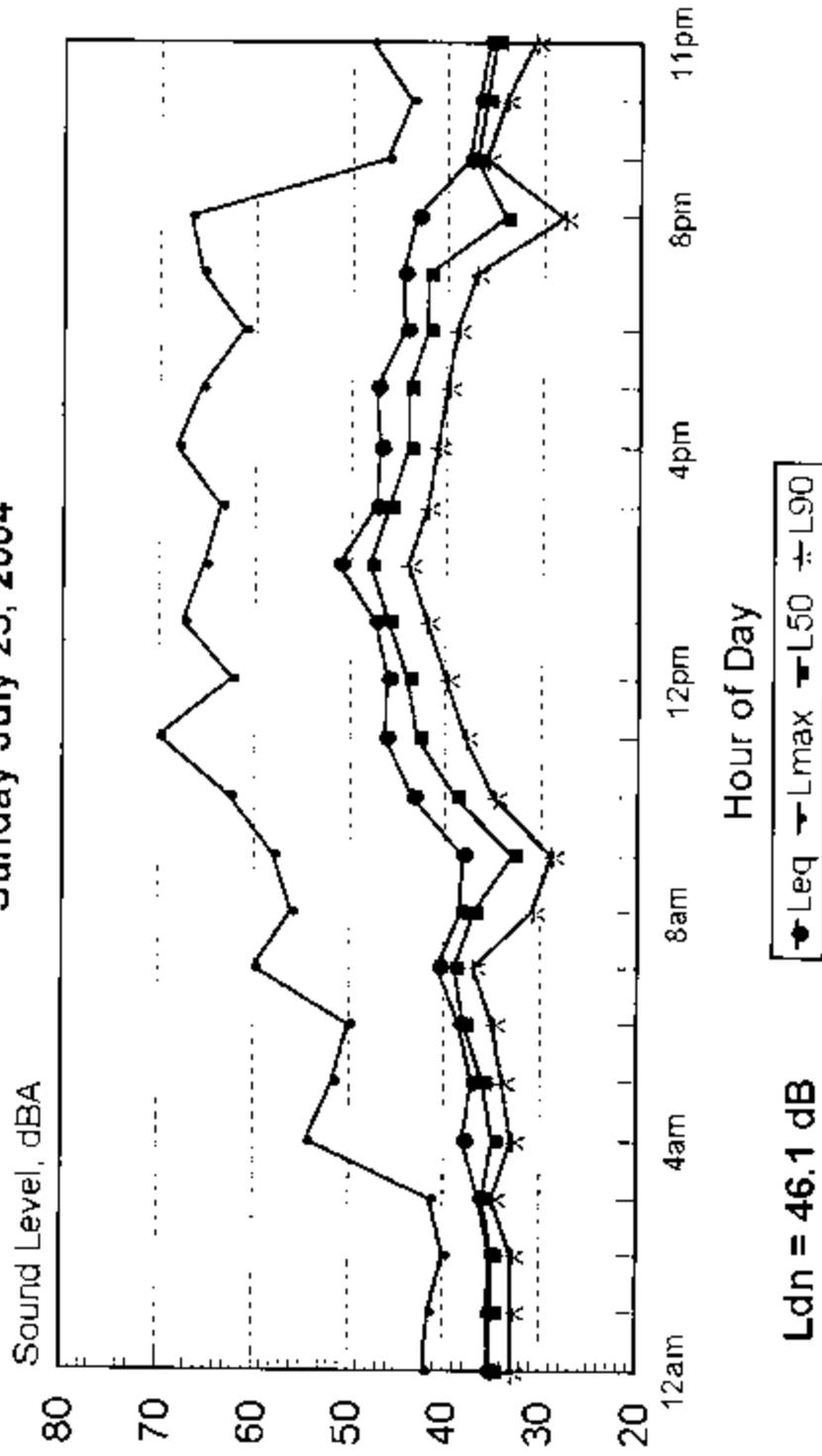
Figure 9  
 Continuously Measured Hourly Noise Levels  
 Sly Park Master Plan - Boat Rentals  
 Saturday July 24, 2004



Legend:  
 ● Lmax  
 ■ L50  
 ✕ L90

Ldn = 49.6 dB

Figure 10  
 Continuously Measured Hourly Noise Levels  
 Sly Park Master Plan - Boat Rentals  
 Sunday July 25, 2004



Ldn = 46.1 dB

Appendix A-1  
**Sly Park Master Plan**  
**Continuous 24hr Monitoring - 4699 Jenkinson Circle**  
**Saturday July 24, 2004**

Hour	Leq	Lmax	L50	L90
0	45.9	50.6	46	44
1	44.4	48.7	44	42
2	43.6	51.2	43	41
3	37.9	48.1	35	33
4	31.6	44.4	30	25
5	34.9	54.3	29	24
6	43.2	70.8	34	29
7	38.2	55.0	36	32
8	45.1	63.9	40	35
9	49.3	76.7	41	36
10	45.6	59.9	44	41
11	47.9	59.1	47	44
12	49.0	63.3	47	43
13	52.2	66.0	50	46
14	52.0	70.9	49	46
15	50.4	60.2	49	45
16	51.5	64.3	50	47
17	53.2	71.1	50	46
18	54.3	75.2	51	47
19	48.1	62.4	47	43
20	49.3	63.7	49	43
21	50.4	53.4	50	49
22	48.7	52.2	49	47
23	48.2	53.4	48	46

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	54.3	38.2	50.3	48.7	31.6	44.6
Lmax (Maximum)	76.7	53.4	64.3	70.8	44.4	52.6
L50 (Median)	50.5	35.9	46.7	48.6	29.5	39.7
L90 (Background)	49.1	32.2	42.9	47.4	24.4	37.1

Computed Ldn, dB	52.5
% Daytime Energy	86%
% Nighttime Energy	14%

Appendix A-2  
 Sly Park Master Plan  
 Continuous 24hr Monitoring - 4699 Jenkinson Circle  
 Sunday July 25, 2004

Hour	Leq	Lmax	L50	L90
0	49.0	80.4	46	45
1	45.0	48.7	44	43
2	40.6	61.4	40	37
3	36.8	50.3	36	30
4	34.8	52.8	28	24
5	34.1	55.7	28	25
6	34.4	52.6	32	29
7	38.4	52.8	35	32
8	41.8	56.6	37	33
9	45.2	70.5	42	37
10	46.4	59.3	45	41
11	48.2	61.4	45	41
12	48.3	63.5	46	42
13	51.2	70.3	50	46
14	54.4	75.5	52	49
15	53.1	67.2	52	50
16	52.0	62.9	51	49
17	52.7	65.5	52	48
18	54.0	65.3	53	51
19	50.6	65.6	50	42
20	49.7	63.0	49	44
21	51.4	62.3	51	49
22	48.4	56.0	48	46
23	47.8	51.4	48	46

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	54.4	38.4	50.8	49.0	34.1	44.7
Lmax (Maximum)	75.5	52.8	64.1	60.4	48.7	56.5
L50 (Median)	53.2	35.4	47.4	48.2	27.8	39.0
L90 (Background)	51.3	31.7	43.6	46.4	23.9	36.1

Computed Ldn, dB	52.7
% Daytime Energy	87%
% Nighttime Energy	13%

Appendix A-3  
 Sly Park Master Plan  
 Continuous 24hr Monitoring - Unused Bldg. (Near Group Area 5)  
 Saturday July 24, 2004

Hour	Leq	Lmax	L50	L90
0	34.1	50.4	30	28
1	32.0	44.0	31	29
2	32.1	40.4	32	30
3	31.1	40.4	31	29
4	31.4	46.1	30	29
5	35.5	52.6	31	29
6	36.9	50.7	34	31
7	39.5	54.1	36	33
8	40.4	58.1	36	33
9	48.3	66.9	43	35
10	43.7	57.0	42	38
11	45.6	55.9	45	41
12	46.5	59.3	45	42
13	49.2	64.7	46	42
14	48.9	65.7	46	42
15	48.7	72.7	45	41
16	47.8	58.6	47	43
17	49.2	68.6	46	42
18	52.3	73.8	44	39
19	45.0	54.2	44	39
20	42.8	58.3	41	34
21	54.0	74.3	43	32
22	32.1	44.7	31	28
23	33.6	47.1	31	29

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	54.0	39.5	48.4	36.9	31.1	33.6
Lmax (Maximum)	74.3	54.1	62.8	52.6	40.4	46.3
L50 (Median)	46.6	36.1	43.2	34.4	29.8	31.1
L90 (Background)	43.2	31.6	38.5	31.4	27.5	29.1

Computed Ldn, dB	47.2
% Daytime Energy	98%
% Nighttime Energy	2%

Appendix A-4  
 Sly Park Master Plan  
 Continuous 24hr Monitoring - Unused Bldg. (Near Group Area 5)  
 Sunday July 25, 2004

Hour	Leq	Lmax	L50	L90
0	33.5	50.8	32	29
1	33.1	41.1	33	31
2	33.0	43.3	32	30
3	32.5	41.0	32	28
4	39.0	59.4	33	30
5	34.6	45.6	34	32
6	35.5	49.7	34	33
7	38.5	50.4	36	33
8	41.0	54.6	39	33
9	44.4	54.6	43	38
10	44.3	59.2	42	37
11	44.3	55.8	43	39
12	45.7	57.9	44	39
13	46.7	56.4	45	42
14	46.9	58.4	46	42
15	59.7	87.7	47	43
16	50.6	75.1	46	42
17	49.3	72.8	47	43
18	48.2	65.2	45	41
19	43.5	58.9	41	36
20	43.0	67.0	40	35
21	32.1	44.7	31	28
22	30.3	37.5	30	28
23	31.7	46.5	30	28

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	59.7	32.1	49.9	39.0	30.3	34.4
Lmax (Maximum)	87.7	44.7	61.2	59.4	37.5	46.1
L50 (Median)	46.7	30.6	42.2	34.5	29.6	32.0
L90 (Background)	43.1	28.3	38.2	32.6	27.6	29.9

Computed Ldn, dB	48.6
% Daytime Energy	98%
% Nighttime Energy	2%

Appendix A-5  
 Sly Park Master Plan  
 Continuous 24hr Monitoring - Camp Host  
 Saturday July 24, 2004

Hour	Leq	Lmax	L50	L90
0	40.6	65.7	33	31
1	34.7	58.1	31	30
2	34.9	56.6	32	31
3	33.0	51.8	32	30
4	32.9	50.2	32	30
5	38.9	57.8	32	30
6	41.8	56.2	35	32
7	41.8	60.7	37	33
8	43.9	58.3	41	36
9	48.4	66.2	44	38
10	49.5	70.1	46	38
11	47.6	68.0	44	40
12	49.2	65.2	45	41
13	49.0	65.7	46	41
14	50.3	74.0	45	41
15	49.4	68.8	47	44
16	53.2	77.9	46	43
17	51.5	72.4	46	41
18	53.3	71.6	51	50
19	52.5	77.2	50	49
20	46.9	66.3	42	38
21	41.9	59.8	37	34
22	43.2	66.6	34	31
23	34.4	54.7	32	30

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)		Nighttime (10 p.m. - 7 a.m.)		Average	
	High	Low	High	Low	High	Average
Leq (Average)	53.3	41.8	43.2	32.9	49.8	38.8
Lmax (Maximum)	77.9	58.3	66.6	50.2	68.1	57.5
L50 (Median)	51.5	36.8	34.9	31.4	44.4	32.3
L90 (Background)	50.1	33.4	31.8	29.9	40.5	30.6

Computed Ldn, dB	49.4
% Daytime Energy	95%
% Nighttime Energy	5%

Appendix A-6  
 Sly Park Master Plan  
 Continuous 24hr Monitoring - Camp Host  
 Sunday July 25, 2004

Hour	Leq	Lmax	L50	L90
0	32.1	42.2	31	30
1	32.2	36.3	32	31
2	33.0	39.5	33	31
3	31.8	34.8	32	30
4	37.4	57.0	32	29
5	35.7	53.7	33	31
6	34.7	57.2	33	31
7	39.0	59.1	33	30
8	41.7	63.7	35	32
9	50.3	60.4	50	37
10	50.3	68.2	45	41
11	49.6	67.2	43	37
12	47.1	66.4	42	37
13	51.6	78.7	44	39
14	49.7	68.9	45	41
15	50.8	73.4	45	41
16	47.6	63.3	44	41
17	48.3	64.8	43	39
18	48.7	70.9	43	38
19	48.2	75.1	39	35
20	42.1	63.2	35	32
21	38.1	64.9	32	31
22	33.7	56.5	32	30
23	35.8	47.0	35	32

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	51.6	38.1	48.3	37.4	31.8	34.5
Lmax (Maximum)	78.7	59.1	67.2	57.2	34.8	47.1
L50 (Median)	50.4	32.1	41.2	35.4	31.3	32.6
L90 (Background)	41.3	30.4	36.7	31.7	29.0	30.7

Computed Ldn, dB	47.3
% Daytime Energy	98%
% Nighttime Energy	2%

Appendix A-7  
 Sly Park Master Plan  
 Continuous 24hr Monitoring - Boat Rentals  
 Saturday July 24, 2004

Hour	Leq	Lmax	L50	L90
0	36.5	50.4	34	32
1	35.5	44.5	35	33
2	35.5	41.2	35	33
3	35.7	41.0	35	34
4	36.4	47.2	36	34
5	36.9	55.1	35	32
6	41.4	54.0	38	35
7	42.9	61.6	39	37
8	39.3	57.3	37	31
9	41.4	59.7	37	32
10	47.6	75.6	40	32
11	46.5	59.9	45	42
12	50.3	70.7	47	44
13	55.8	76.9	51	46
14	52.7	70.7	49	45
15	55.9	75.0	52	46
16	48.6	68.5	47	44
17	48.9	65.1	46	41
18	44.9	61.7	42	37
19	54.5	79.5	40	34
20	41.4	58.4	36	32
21	38.8	52.9	37	35
22	39.1	53.4	39	37
23	37.2	45.2	37	35

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	55.9	38.8	50.5	41.4	35.5	37.6
Lmax (Maximum)	79.5	52.9	66.2	55.1	41.0	48.0
L50 (Median)	51.6	36.9	43.1	38.7	34.2	36.0
L90 (Background)	46.2	31.5	38.7	37.4	32.0	34.0

Computed Ldn, dB	49.6
% Daytime Energy	97%
% Nighttime Energy	3%

Appendix A-8  
 Sly Park Master Plan  
 Continuous 24hr Monitoring - Boat Rentals  
 Sunday July 25, 2004

Hour	Leq	Lmax	L50	L90
0	35.3	42.1	35	33
1	35.5	41.6	35	33
2	35.2	40.1	35	33
3	36.4	41.5	36	35
4	38.1	54.4	35	33
5	37.2	51.7	36	34
6	38.5	50.1	38	35
7	40.8	60.0	39	37
8	38.4	56.1	37	31
9	38.2	58.0	33	29
10	43.5	62.6	39	35
11	46.4	70.0	43	38
12	46.1	62.3	44	40
13	47.4	67.5	46	42
14	51.3	65.3	48	44
15	47.4	63.6	46	42
16	47.0	68.2	44	41
17	47.4	65.6	44	40
18	44.4	61.2	42	39
19	44.7	65.6	42	37
20	43.3	66.8	34	28
21	37.8	46.4	37	36
22	36.8	43.8	36	34
23	35.7	48.0	35	31

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	51.3	37.8	45.8	38.5	35.2	36.7
Lmax (Maximum)	70.0	46.4	62.6	54.4	40.1	45.9
L50 (Median)	48.3	32.9	41.2	37.6	35.1	35.8
L90 (Background)	43.5	28.3	37.4	35.5	31.3	33.6

Computed Ldn, dB	46.1
% Daytime Energy	93%
% Nighttime Energy	7%

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Appendix E  
Biological Resources Assessment

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# **Biological Resources Assessment**

Sly Park Recreation Area Master Plan  
El Dorado County, California

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Prepared for: El Dorado Irrigation District

November 15, 2005

Submitted by:



**FOOTHILL ASSOCIATES**

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## 1.0 EXECUTIVE SUMMARY

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Foothill Associates biologists conducted a biological resources assessment on June 14, June 26, June 27, June 28, July 4, July 11, July 12, and July 18, 2004 on the approximately 2,000-acre Sly Park Recreation Area (SPRA) that occurs within El Dorado County, California. The biological resource assessment was prepared in support of preparation of the SPRA Master Plan. The purpose of this document is to summarize the general biological resources within the SPRA, to assess the suitability of the site to support special-status species and sensitive habitat types, and to provide recommendations for regulatory permitting or further analysis that may be required prior to implementation of the SPRA Master Plan project.

The site is used for recreational purposes and consists of approximately 2,000 acres of mixed hardwood and coniferous forest habitat and an approximately 640-acre Sly Park Reservoir (Jenkinson Lake). Surrounding land uses include primarily natural resources; low-density residential development; and undeveloped and forested lands. Lands surrounding the SPRA are composed of federal and private timberlands and currently support commercial timber harvesting operations as well as grazing practices. Known or potential biological constraints within the SPRA include the following:

- Foraging and potential nesting habitat for the state and federally listed bald eagle;
- Foraging and potential nesting habitat for U.S. Forest Service sensitive raptor species, including northern goshawk and California spotted owl, as well as other raptor species;
- Potential California red-legged frog habitat and proposed critical habitat;
- Potential habitat for foothill yellow-legged frog;
- Potential habitat for special-status plants species;
- Potential western pond turtle habitat;
- Potential habitat for federally sensitive invertebrate species;
- Potential bat roost habitat; and
- Sensitive habitats (potential waters of the U.S., riparian habitat, protected trees and woodland resources).

## **2.0 INTRODUCTION**

---

This report summarizes the findings of a biological resources assessment completed for the ±2,000-acre SPRA Master Plan site, located within El Dorado County, California. This document addresses onsite physical features, as well as plant communities present and the common plant and wildlife species occurring or potentially occurring onsite as well as biological features that provide recreational, educational, or habitat enhancement opportunities for SPRA. Furthermore, the suitability of habitats to support special-status species and sensitive habitats are analyzed and recommendations are made for any regulatory permitting or further analysis that may be required prior to development activities occurring onsite.

## **3.0 REGULATORY FRAMEWORK**

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The following describes federal, state, and local environmental laws and policies that are relevant to the California Environmental Quality Act (CEQA) review process. The CEQA significance criteria are also included in this section.

### **3.1 Federal Endangered Species Act**

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. The FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

The FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3)(19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harassment is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

FESA and the Clean Water Act (CWA) Section 404 guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered or threatened species or results in the destruction or adverse modification of habitat of such species. The U.S. Army Corps of Engineers (Corps) must consult with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) when threatened or endangered species under their jurisdiction may be affected by a proposed project. In the context of the proposed project, FESA would be initiated if development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

### **3.2 Migratory Bird Treaty Act**

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of

Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

### **3.3 Bald and Golden Eagle Protection Act**

This 1940 Act prohibits the taking of bald or golden eagles or their nests or eggs. Under this Act, "take" is defined as "to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

### **3.4 California Endangered Species Act**

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the FESA but pertains to state-listed endangered and threatened species. CESA requires state agencies to consult with the California Department of Fish and Game (CDFG) when preparing CEQA documents. The purpose is to ensure that the state lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). The CESA directs agencies to consult with CDFG on projects or actions that could affect listed species, directs CDFG to determine whether jeopardy would occur and allows CDFG to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFG to authorize exceptions to the state's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

### **3.5 CDFG Species of Concern**

In addition to formal listing under the FESA and the CESA, species receive additional consideration by CDFG and local lead agencies during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFG. It tracks species in California whose numbers, reproductive success, or habitat may be threatened.

### **3.6 California Native Plant Society**

The California Native Plant Society (CNPS) maintains a list of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS 2001). Potential impacts to populations of CNPS-listed plants receive consideration

under CEQA review. The following identifies the definitions of the CNPS listings:

- List 1A: Plants presumed Extinct in California
- List 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- List 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere
- List 3: Plants about which we need more information – A Review List
- List 4: Plants of limited distribution – A Watch List

### **3.7 Jurisdictional Waters of the United States**

#### **3.7.1 Federal Jurisdiction**

The Corps regulates discharge of dredged or fill material into “waters of the United States” under Section 404 of the CWA. “Discharges of fill material” is defined as the addition of fill material into “waters of the U.S.”, including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a Federal license or permit to conduct any activity that may result in a discharge of a pollutant into “waters of the U.S.” to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

“Waters of the U.S.” include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of waters is present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the “normal circumstances” for the site.

- The lateral extent of non-tidal waters is determined by delineating the ordinary high-water mark (OHWM) [33 C.F.R. §328.4(c)(1)]. The OHWM is defined by the Corps as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 C.F.R. §328.3(e)].

### **3.7.2 State Jurisdiction**

The CDFG is a trustee agency that has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code. Under Section 1602, a private party must notify the CDFG if a proposed project will “substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds...except when the department has been notified pursuant to Section 1601.” If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFG may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the party, they may enter into an agreement with the CDFG identifying the approved activities and associated mitigation measures.

### **3.8 CEQA Significance Criteria**

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh,

vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional or state habitat conservation plan; and

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

### **3.9 Local Policies**

In addition to federal and state regulations, the El Dorado County General Plan (El Dorado County 2004) identifies goals, objectives, and policies to provide further protection to biological resources within the County. Pertinent objectives and policies provided in the Conservation and Open Space Element of the General Plan are related to protection of wetlands (Objective 7.3.3), protection of rare, threatened, and endangered species (Objective 7.4.1), identification and protection of sensitive habitats (Objective 7.4.2), coordination with appropriate agencies (Objective 7.4.3), protection of forest and oak woodland resources (Objective 7.4.4), and protection of native vegetation and landmark trees (Objective 7.4.5). EID is the lead CEQA agency under the Sly Park Recreation Master Plan and therefore sets its own thresholds for considering and mitigating environmental impacts. However, a County General Plan is intended to be comprehensive, and to address the local jurisdiction's entire planning area, including a broad range of issues associated with the county's development (Government Code §65300). Therefore, the Sly Park Recreation Master Plan should be generally consistent with the General Plan policies and objectives. Furthermore, any project implemented under the Sly Park Master Recreation Plan requiring

discretionary approval from El Dorado County, such as an encroachment permit, will require compliance with County ordinances.

## 4.0 METHODS

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Available information pertaining to the natural resources of the region was reviewed. All references for this assessment are listed in Section 6.0, References. Site-specific information was reviewed including the following:

- California Department of Fish and Game (CDFG). 2005. *California Natural Diversity Database* (CNDDDB: Slate Mountain, Pollock Pines, Riverton, Camino, Sly Park, Stump Springs, Aukum, Omo Ranch, Caldor topographic quadrangles), Sacramento, CA;
- USDA, Natural Resources Conservation Service (NRCS). 1974. *Soil Survey of El Dorado Area, California*. U.S Department of Agriculture;
- USDA, Natural Resources Conservation Service (NRCS). 1992. *Hydric Soils List of El Dorado Area, California*. Sacramento Field Office;
- U.S. Fish and Wildlife Service (USFWS). 2005a. Federal Endangered and Threatened Species that may be affected by projects in the Sly Park 7.5-minute series topographic quadrangle. Sacramento, CA;
- U.S. Geological Survey (USGS). 1952 (Photo-revised 1973). *Sly Park, California. 7.5-Series Topographic Quadrangle*. United States Department of the Interior.

Foothill Associates biologists conducted field surveys within the SPRA on June 14, June 26, June 27, June 28, July 4, July 11, July 12, and July 18, 2004. Aerial photography of the site was examined, and selected areas were systematically walked to distinguish vegetation communities, habitat types, and to identify areas that warranted more focused surveys.

Areas representative of each major habitat type were walked and general plant and wildlife observations were made to characterize the habitat. Plant and wildlife species identified during these surveys were recorded, and dominant plant species in each habitat type were noted. These habitats were then mapped in the field onto a 1-inch:1,420-foot scale aerial photograph and later digitized into Geographical Information System (GIS) software. Geographic Positioning Systems (GPS) were not used to map habitat types within the SPRA due to interference with satellite signals from the closed forest canopy, thereby resulting in inaccurate GPS data.

Existing species records from local resource databases and information regarding the range and habitat characteristics of special-status species were used to determine which special-status species have the potential to occur within the SPRA. Directed surveys for Pleasant Valley mariposa lily

*(Calochortus clavatus var. avius)* were performed within areas exhibiting suitable habitat (open areas on forest floor) characteristics on June 14 and July 4, 2004. Transects through appropriate habitat were slowly walked to provide 100 percent visual coverage of these areas. Additionally, trees were examined for raptor nests while walking through the site, and any raptor nests observed were marked on a topographic map or aerial photograph.

## 5.0 RESULTS

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### 5.1 Site Location and Description

The approximate 2,000-acre SPRA is located within El Dorado County, approximately three miles south of the community of Pollock Pines and approximately 14 miles east of Placerville. The SPRA occurs at elevations from approximately 3,500 feet to 3,800 feet above mean sea level (MSL). The SPRA is located within Township 10 North, Range 13 East, within portions of Sections 8, 9, 10, 16, 17, and 18 (**Figure 1**).

### 5.2 Land Use

Sly Park Reservoir (Jenkinson Lake) was constructed by the Bureau of Reclamation (BOR) in 1955 for the purposes of irrigation and domestic, municipal and industrial water supply, and the operation and maintenance of the reservoir was subsequently transferred to El Dorado Irrigation District (EID) through a contractual agreement. Recently, the actual land ownership was transferred from BOR to EID, necessitating preparation of the SPRA Master Plan and EIR.

The land use designation of the SPRA is currently 'Natural Resources' (NR) (El Dorado County 2004). The site is currently used for recreational purposes including boating, fishing, mountain biking, hiking, picnicking, and camping. Expansion of existing recreational facilities and the construction of new recreational and educational facilities is anticipated with completion of the SPRA Master Plan.

### 5.3 Physical Features

#### 5.3.1 Topography and Drainage

Jenkinson Lake, approximately 640 acres in size, occupies an area that was historically a meadow that probably formed when a channel to the Tertiary American River was re-cut by heavy rainfall after being blocked by volcanic debris. The meadow gradually formed with sloping sides bisected by Sly Park Creek. The Sly Park dam has since been constructed to create the reservoir, which receives inflow from Sly Park Creek and Hazel Creek. The natural inflow is augmented by water diversion from Camp Creek, which is diverted through the Camp Creek Tunnel that cuts across El Dorado National Forest lands.

#### 5.3.2 Soils

The Natural Resources Conservation Service (NRCS) has mapped ten soil units within the SPRA (**Figure 2**). These include Daiken Cobbly Loam, 3 to 30 percent slopes; Cohasset Loam, 9 to 15 percent slopes; Cohasset Loam,

15 to 30 percent slopes; Cohasset Cobbly Loam, 15 to 50 percent slopes; Crozier Cobbly Loam, 9 to 50 percent slopes; Iron Mountain Very Rock Sandy Loam, 3 to 50 percent slopes; Mariposa Very Rocky Silt Loam, 3 to 50 percent slopes; Mariposa-Josephine Very Rocky Loams, 15 to 50 percent; McCarthy Cobbly Loam, 9 to 50 percent slopes, and Mixed Alluvial Land.

Most of the soil types on the site are well-drained soils underlain by andesitic conglomerate or tilted schists and slate, primarily supporting coniferous forest and associated hardwoods. Iron Mountain soils are excessively drained soils underlain by hard volcanic rock at a depth of 5 to 20 inches. Vegetation in Iron Mountain soil is mainly stunted conifers, hardwoods, shrubs, and annual grasses. Iron Mountain soils are present north of Jenkinson Lake, and drier, sparser, shrubby and grassy vegetation is more common in areas where this soil type is present. Mixed alluvial land present along Hazel Creek, is moderately well-drained alluvial soil subject to frequent winter flooding.

## **5.4 Biological Communities**

Vegetation within the SPRA was classified using a combination of *CDFG's California Wildlife Habitat Relationship (CWHR)* system (Mayer and Laudenslayer 1988) and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995), as described below. Ten biological communities were identified within the SPRA (**Figure 4**). These communities provide habitat for a number of common wildlife species and provide potentially suitable habitat for special-status species. Each biological community is described below.

### **5.4.1 Ponderosa Pine Series**

The ponderosa pine series is characterized by ponderosa pine (*Pinus ponderosa*) as the sole, dominating tree species within the tree canopy as well as black oak (*Quercus kelloggii*) or incense cedar (*Calocedrus decurrens*) (Sawyer and Keeler-Wolf 1995). Ponderosa pine is a habitat type described in the CWHR system as consisting of stands of mixed coniferous species in which at least 50 percent of the canopy is ponderosa pine (Laudenslayer and Mayer 1988).

Ponderosa pine habitat is found throughout the SPRA, but primarily on south-facing slopes, north of Jenkinson Lake (**Figure 4**). This habitat type is dominated by ponderosa pine and other associated tree species such as black oak and incense cedar. Associated shrubs in the ponderosa pine series habitat include deerbrush (*Ceanothus integerrimus*), Sierra gooseberry (*Ribes roeslii*), and mountain misery (*Chamaebatia foliolosa*). Shrub cover in this habitat is generally 10 percent to 30 percent, although in many areas mountain misery forms a dense, low-growing carpet of 100 percent

understory cover. The ponderosa pine series habitat has approximately 5 to 10 percent herbaceous cover consisting of grasses and forbs such as fragrant bedstraw (*Galium triflorum*), bracken fern (*Pteridium aquilinum*), self-heal (*Prunella vulgaris*), and lupines (*Lupinus* sp.).

The ponderosa pine series habitat provides transitional or migratory habitat for deer, and can be important to deer nutrition in migration holding areas. A mixture of early- and late-successional vegetation stages provide favorable wildlife habitat conditions (Mayer and Laudenslayer 1988). Some of the common wildlife species observed in this habitat during 2004 spring and summer field surveys include Stellar's jay (*Cyanositta stelari*), American robin (*Turdus migratorius*), mountain chickadee (*Poecile gambeli*), Oregon junco (*Junco hyemalis*), and western wood peewee (*Contopus virens*). Some of the mammals present in this habitat type include western gray squirrel (*Sciurus griseus*), Douglas squirrel (*Tamasciurus douglasii*), raccoon (*Procyon lotor*), and black-tailed deer (*Odocoileus hemionus*).

#### **5.4.2 Mixed Conifer Series**

The mixed conifer series consists of three or more equally important coniferous tree species dominant in the canopy (Sawyer and Keeler-Wolf 1995). This habitat type corresponds to Sierran mixed conifer habitat and is described in the CWHR system as an assemblage of conifer and hardwood species within a multi-layered forest (Mayer and Laudenslayer 1998).

Sierran mixed conifer habitat within the SPRA consists of approximately 30 percent ponderosa pine, 30 percent incense cedar, and 30 percent Douglas fir (*Pseudotsuga menziesii* var. *menziesii*). This habitat type generally occurs throughout the northern and southern portions of the SPRA. It also includes some white fir (*Abies concolor*), sugar pine (*Pinus lambertiana*), and black oak. The understory consists of shrubs such as deerbrush, white-leaf manzanita (*Arctostaphylos viscida*), Sierra gooseberry, wood rose (*Rosa* sp.), and various herbaceous species.

The diversity of plant species in Sierran mixed conifer habitat, as described by CWHR, provides shelter and forage for many wildlife species. Many of the wildlife species described above for the ponderosa pine series are also associated with Sierran mixed conifer habitat.

#### **5.4.3 Douglas Fir Series**

The Douglas fir series is dominated by Douglas fir and other associated coniferous species (Sawyer and Keeler-Wolf 1995). Within the SPRA, the Douglas fir series consists of approximately 50 percent Douglas fir with an association of incense cedar, ponderosa pine, sugar pine, and white fir. This

habitat has a substantial understory dominated by mountain dogwood (*Cornus nuttallii*), deerbrush, and other shrubs species. This vegetation type is found on the SPRA primarily on north-facing slopes and within canyons (**Figure 4**). Commonly associated wildlife species for the Douglas fir series are similar to those described for the mixed conifer series as discussed above.

#### **5.4.4 Montane Hardwood-Conifer**

Montane hardwood conifer habitat is described as consisting of conifers and hardwoods such as oaks (*Quercus* sp.) often with closed canopy (Mayer and Laudenslayer 1998). To be classified as mixed hardwood-conifer habitat, at least one-third of the tree species must be conifer and at least one-third must be broad-leaved tree species (Laudenslayer and Mayer 1988).

Montane hardwood conifer habitat within the SPRA occurs in localized areas north of Jenkinson Lake (**Figure 4**). Commonly associated wildlife species found within this habitat are black oak and ponderosa pine. Mature montane-hardwood conifer habitat is valuable to cavity-nesting birds. Some of the wildlife species found in this habitat during the field surveys include mountain chickadee, Oregon junco, American robin, white-breasted nuthatch (*Sitta carolinensis*), mountain quail (*Oreortyx pica*), spotted towhee (*Pipilo maculatus*), and red-breasted sapsucker (*Sphyrapicus varius*). Canopy cover and understory are highly variable in this habitat type so vegetation structure is not generally a strong indicator for the presence of any particular wildlife species (Laudenslayer and Mayer 1988).

#### **5.4.5 Wedgeleaf Ceanothus Series/Grassland**

The wedgeleaf ceanothus series is described as consisting of wedgeleaf ceanothus (*Ceanothus cuneatus*) as the sole or dominant shrub within the canopy (Sawyer and Keeler-Wolf 1995). Within the SRPA, this biotic community is found north of Jenkinson Lake primarily on dry, south-facing slopes with thin soils, and is interspersed with patches of open grassland (**Figure 4**). This habitat type may also be classified as chaparral, as it is dominated by hard-leaved and woody vegetation.

#### **5.4.6 Deerbrush Series**

The deerbrush series is described as consisting of deerbrush as the sole or dominant shrub in the tree canopy (Sawyer and Keeler-Wolf 1995). This biotic community is found north of Jenkinson Lake primarily on south-facing slopes but in areas with moister, deeper, or further developed soils, than the wedgeleaf ceanothus series (**Figure 4**). Other species found within the deerbrush series include white-leaf manzanita, wedgeleaf ceanothus, and Klamath plum (*Prunus subcordata*), with an herbaceous layer of various

species including mustang mint (*Monardella lanceolata*) and various species of perennial bunchgrasses. This habitat type may also be classified as chaparral, as it is dominated by hard-leaved vegetation.

#### **5.4.7 Montane Riparian**

Montane riparian habitat is defined under the CWHR system as usually occurring as a narrow and often dense grove of broad-leaved, winter-deciduous trees up to 30 meters high with a sparse understory (Mayer and Laudenslayer 1998). At high mountain elevations, montane riparian habitat is usually less than 15 meters high with more shrubs within the understory.

The montane riparian habitat at the SPRA occurs primarily along perennial creeks, including Sly Park Creek and Hazel Creek (**Figure 4**). Montane riparian habitat describes the woody species at the edge of these streams, while the streams themselves are classified as riverine, as described below; this habitat type occurs in scattered locations throughout the SPRA. The montane riparian habitat within the SPRA is dominated by several tree species including willows (*Salix* sp.), white-leaf alder (*Alnus rhombifolia*), bigleaf maple (*Acer macrophyllum*), and black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), with an understory of mountain dogwood, hazelnut (*Corylus cornuta* var. *californica*), and other herbaceous species. Montane riparian habitat has an exceptionally high value for many wildlife species, by providing a source of water, thermal cover, and nesting and feeding opportunities (Laudenslayer and Mayer 1988).

#### **5.4.8 Riverine**

Riverine habitat is defined in the CWHR system as intermittent or continually running water (Mayer and Laudenslayer 1998). Various unnamed drainages are classified as riverine habitat within Figure 4. Riverine habitat provides a water source for wildlife species and food source for various waterfowl and shorebird species including belted kingfisher (*Megaceryle alcyon*) and American dipper (*Cinclus mexicanus*).

#### **5.4.9 Lacustrine**

Lacustrine habitat is defined in the CWHR system as inland depressions or dammed riverine channels containing standing water (Mayer and Laudenslayer 1998). Jenkison Lake constitutes lacustrine habitat (**Figure 4**). Bald eagles (*Haliaeetus leucocephalus*) and ospreys (*Pandion haliaetus*) feed on fish and other aquatic species that inhabit the reservoir. Belted kingfisher was also observed foraging over the lake during the 2004 field surveys. Other wildlife species associated with lacustrine habitat within the SPRA include mallard (*Anas platyrhynchos*), Canada goose (*Branta canadensis*), and common merganser (*Mergus merganser*). Small, wooded

islands in the middle of Jenkinson Lake provide refuge and nesting habitat for the Canada geese and other wildlife species using the lake.

#### **5.4.10 Other Mesic Habitat**

In addition to Montane Riparian, Riverine, and Lacustrine habitats within the SPRA, there are scattered, isolated mesic areas that are not shown on Figure 4. Portions of these drainages have springs or seeps dominated by herbaceous vegetation indicative of wetlands. However, these areas are too small to be identified at the scale of mapping used for the SPRA Master Plan. Common species found in these mesic areas include columbine (*Aquilia formosa*), water plantain (*Alisma plantago-aquatum*), miner's lettuce (*Monta perfoliata*), wild ginger (*Asorum hartwegi*), lady fern (*Athyrium filix-femens*), and horsetail (*Equisetum laguiatum*). A large colony of leopard lilies (*Lilium pardilinum*) is present in mesic habitat along a drainage north of the lake.

### **5.5 Special-Status Species**

Special-status species are plant and wildlife species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Listed and special-status species discussed within this EIR are defined as:

- Listed or proposed for listing under CESA and/or FESA;
- Protected under other regulations (e.g. Migratory Bird Treaty Act, MBTA);
- Listed by CDFG as a Species of Special Concern;
- Listed by the USFWS as a Species of Concern;
- Listed by the U.S. Forest Service (USFS) as Sensitive;
- Listed by CNPS as being rare (a ranking of 1A, 1B, or 2); or
- Any other species that would receive consideration according to CEQA Guidelines.

Special-status species considered for this analysis are based on queries of the California Natural Diversity Database (CNDDB) and the online versions of the USFWS and CNPS species occurrence lists for the USGS 7.5-minute *Sly Park* topographic quadrangle and eight surrounding quadrangles.

Additionally, the USFS was consulted in consideration of potentially occurring special-status species. Table 1 includes the common name and scientific name for each species, regulatory status, habitat descriptions, and potential for occurrence within the SPRA. Figure 3 depicts the approximate locations of special-status species recorded in the CNDDB within a five mile radius of

the SPRA. The following set of criteria has been used to determine the potential for occurrence of each species within the SPRA:

- **Present:** Species known to occur onsite, based on CNDDDB records, and/or was observed onsite during the field survey(s).
- **Likely:** Species is known to occur on or near the site or within the site (based on CNDDDB records within five miles, and/or based on professional expertise specific to the site or species) and there is suitable habitat onsite.
- **Low:** Species is known to occur in the vicinity of the site and there is marginal habitat onsite.**-OR-**Species is not known to occur in the vicinity of the site; however there is suitable habitat onsite.
- **No:** Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species onsite.**-OR-**Species was surveyed for during the appropriate season with negative results for the species occurrence onsite.

Only those species that are known to be present, are likely to occur, or have a low potential for occurrence will be discussed further following Table 1. Species that are state or federally listed as threatened or endangered have a greater level of legal protection than other species-status species. Therefore, listed species are discussed separately in the text below Table 1.

**TABLE 1**  
**LISTED AND SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING ON THE SITE OR IN THE VICINITY**

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
<b>Plants</b>			
Broad-nerved hump-moss <i>Meesia uliginosa</i>	--;--;2	Meadows and seeps, upper montane coniferous forest, damp soil, 3,900 to 7,500 feet. Known to occur in Fresno, Siskiyou, Tulare counties and possibly Mariposa County. Scattered occurrences throughout California primarily in Sierra Nevada and southern Cascade Range.	<b>No;</b> This species typically occurs at higher elevations at an average elevation of 4,200 feet. There is no suitable meadow habitat within the SPRA and there are no CNNDDB records within five miles of the SPRA.
Clustered lady's-slipper <i>Cypripedium</i>	FSC;--;4	Lower montane coniferous forest.	<b>No;</b> appropriate soils not

<sup>1</sup> For plants, CNPS 2001

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
<i>fasciculatum</i>		Typically north coast coniferous forest, usually serpentinite soils along seeps and streambanks at elevations from 300 to 7,300 feet. Known from several counties in northern California and elsewhere outside of California. Not known from El Dorado County. Widely scattered and most occurrences are small and localized.	present onsite and species was not observed during field surveys. Site is not located within known elevation range of this species.
Dissected-leaved toothwort <i>Cardamine pachystigma</i> var. <i>dissectifolia</i>	USFS Watchlist; --;--;3	Chaparral, lower montane coniferous forest, usually serpentine, rocky 765 to 6,300 feet elevation. Known to occur within Butte, Glenn, Mendocino, Placer, Sonoma, and Tehama counties.	<b>No;</b> appropriate soils not present onsite and species not observed during field surveys. Site is not located within known elevation range.
El Dorado bedstraw <i>Galium californicum</i> <i>sierrae</i>	FE,CR,--;1B	Chaparral, oak woodland, lower montane coniferous forest / gabbroic soils; occurs from 300 to 1,800 feet elevation. Known only from El Dorado County.	<b>No;</b> appropriate soils not present onsite and project site is not located within known elevation range.
Felt-leaved violet <i>Viola tomentosa</i>	--;SLC;--;4	Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest, gravelly soils at elevations from 4,300 to 6,000 feet. Known from El Dorado, Nevada, Placer, Plumas, and Sierra counties. Threatened by road building, vehicles, logging, and proposed reservoir construction.	<b>No;</b> the SPRA is not located within the elevation range of this species and no CNDDDB records occur for this species within the SPRA project vicinity.
Humboldt lily <i>Lillium humboldtii</i> ssp. <i>humboldtii</i>	USFS Watchlist; --;--;4	Chaparral, cismontane woodland, lower montane coniferous forest, openings from 270 to 3,300 feet elevation. Known from Amador, Butte, Calaveras, El Dorado, Fresno, Madera, Mariposa, Nevada, Placer, Tehama, Tuolumne, and Yuba counties.	<b>Low.</b>
Layne's butterweed <i>Senecio layneae</i>	FT;CR;--;1B	Chaparral, cismontane woodland / serpentine or gabbroic, 600 to 3,000 feet elevation. Known from El Dorado, Tuolumne, and Yuba counties.	<b>No;</b> appropriate soils not present onsite and site is not located within typical elevation range.
Marsh skullcap <i>Scutellaria galericulata</i>	USFS Watchlist; --;--;2	Lower montane coniferous forest, meadows and seeps (mesic), marshes and swamps, 0 to 6,300 feet elevation. Known from El Dorado, Lassen, Modoc,	<b>Likely.</b>

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
		Nevada, Placer, Plumas, Shasta, San Joaquin and possibly Siskiyou counties and elsewhere outside of California.	
Nissenan manzanita <i>Arctostaphylos nissenana</i>	--;--;--;1B	Closed-cone coniferous forest, chaparral / rocky; 1,350 to 3,300 feet elevation. Known from El Dorado and Tuolumne counties.	<b>Low.</b>
Parry's horkelia <i>Horkelia parryi</i>	--;--;--;1B	Open chaparral, foothill woodlands, especially lone formation; 240 to 3,100 feet elevation. Known from Amador, Calaveras, El Dorado and Mariposa counties.	<b>No;</b> the SPRA is not located within elevation range of this plant species and no CNDDDB records occur within the SPRA project area.
Pine Hill ceanothus <i>Ceanothus roderickii</i>	FE,CR,--;1B	Chaparral, cismontane woodland/serpentine or gabbroic; 780 to 1,890 feet.	<b>No;</b> appropriate soils not present onsite. Site is not located within known elevation range.
Pine Hill flannelbush <i>Fremontodendron californicum</i> ssp. <i>decumbens</i>	FE,CR,--;1B	Chaparral, cismontane woodland/serpentine or gabbroic, rocky from 1,200 to 2,280 feet elevation. Known to occur in El Dorado and Nevada counties.	<b>No;</b> appropriate soils not present onsite. Site is not located within known elevation range.
Pleasant Valley mariposa lily <i>Calochortus clavatus</i> var. <i>avius</i>	--;--;--;1B	Lower montane coniferous forest (Josephine silt loam and volcanic); 915 to 5,400 feet. Known from Amador, El Dorado and possibly Mariposa counties.	<b>Likely.</b>
Red Hills soaproot <i>Chlorogalum grandiflorum</i>	--;--;--;1B	Chaparral, cismontane woodland, lower montane coniferous forest on serpentinite or gabbroic soils at elevations of 735 to 3,000 feet elevation. Known from Amador, El Dorado, Placer, and Tuolumne counties.	<b>No;</b> appropriate soils not present onsite. Species not observed. Site is not located within typical elevation range.
Sanborn's onion <i>Allium sanbornii</i> var. <i>sanbornii</i>	USFS Watchlist; --;--;--;4	Chaparral, cismontane woodland, serpentine soils from 900 to 2,100 feet elevation. Known from Butte, Calaveras, El Dorado, Nevada, Placer, Shasta, Tehama, Yuba counties and elsewhere outside of California.	<b>No;</b> appropriate soils not present onsite and site is not located within known elevation range.
Saw-toothed lewisia <i>Lewisia serrata</i>	--;--;--;1B	North-facing, mostly shaded, moss-covered and metamorphic rock cliffs and ledges in steep gorges; 2,700 to 4,300	<b>Low.</b>

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
		feet elevation. Known from El Dorado and Placer counties.	
Slender-leaved pondweed <i>Potamogeton filiformis</i>	USFS Watchlist; --;--;2	Marshes and swamps (assorted shallow freshwater); 15 to 3,900 feet elevation. Known from Contra Costa, Lassen, Merced, Mono, Sierra counties, possibly Santa Clara County and elsewhere outside California.	<b>Low.</b>
Stebbins' morning-glory <i>Calystegia stebbinsii</i>	FE;CE;--;1B	Chaparral (openings), cismontane woodland/serpentine or gabbroic from 550 to 2,200 feet elevation. Known from western El Dorado and western Nevada counties. Localized range from Salmon Falls on the South fork of the American River south to Cameron Park on Highway 50.	<b>No;</b> appropriate soils not present onsite and site is not located within known elevation range.
Stebbins' phacelia <i>Phacelia stebbinsii</i>	--;--;--;1B	Cismontane woodland, lower montane coniferous forest, metamorphic soils, especially northern exposure slopes; 1,800 to 6,000 feet elevation. Known from El Dorado, Placer, and Nevada counties.	<b>Low.</b>
Three-ranked hump-moss <i>Meesia triquetra</i>	--;--;--;2	Bogs and fens, meadows and seeps, upper montane coniferous forest (mesic); 3,900 to 7,500 feet elevation. Known from Butte, El Dorado, Fresno, Humboldt, Plumas, Siskiyou and Tulare counties and elsewhere outside California. Infrequently encountered in California.	<b>Low.</b>
Tripod buckwheat <i>Eriogonum tripodum</i>	--;--;--;4	Chaparral, cismontane woodland, often serpentine from 600 to 4,800 feet elevation. Known to occur in Amador, Colusa, El Dorado, Lake Mairposa, Napa, Placer, Tehama, and Tuolumne counties.	<b>Low.</b>
Upswept moonwort <i>Botrychium ascendens</i>	--;--;--;2	Lower montane coniferous forest and grassy fields near streams (mesic) from 4,500 to 5,500 feet elevation. Known from Butte, El Dorado, Tehama counties and elsewhere outside California. Maintained shade, soil moisture, and	<b>No;</b> SPRA is not located within the known elevation range for this species.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
		organic material and disturbance avoidance from defoliation and root mycorrhizal disruption are required habitat elements.	
Yellow burr navarretia <i>Navarretia prolifera lutea</i>	--;--;--;4	Chaparral, cismontane woodland from 2,700 to 4,200 feet elevation. Known from El Dorado and Placer counties.	<b>Low.</b>
<b>Invertebrates</b>			
Button's Sierra sideband snail <i>Monadenia mormonum buttoni</i>	FSC;--;--;--	Moist wooded areas in foothills of the Sierra Nevada.	<b>Likely.</b>
Gold rush hanging scorpionfly <i>Orobittacus obscurus</i>	FSC;--;--;--	Known only from a small section of western slopes of central Sierra Nevada. Occurs in darkly shaded areas with high humidity along stream, often under tree roots in overhanging banks with rock outcrops.	<b>Likely.</b>
South Forks ground beetle <i>Nebria darlingtoni</i>	FSC;--;--;--	Little research or available information on species habitat requirements. Prefers rocky margins along cool streams.	<b>Likely.</b>
Spiny rhyacophilan caddisfly <i>Rhyacophila spinata</i>	FSC;--;--;--	Mid- to high-elevation streams and rivers.	<b>Likely.</b>
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT;--;--;--	Elderberry shrubs, typically in riparian habitat	<b>No;</b> appropriate habitat not detected onsite. No elderberry shrubs were identified onsite.
<b>Amphibians/Reptiles</b>			
California horned lizard <i>Phrynosoma coronatum frontale</i>	FSC;CSC;--;--	Found in open oak and conifer woodlands, grasslands, and riparian areas. Most often found in areas with sandy soil types and often observed with rocky areas or outcroppings. Can occur from sea level to 6,500 feet elevation	<b>Low.</b>
California red-legged frog <i>Rana aurara draytoni</i>	FT;CSC;--;--	Typically requires a permanent water source and is typically found along quiet, slow-moving streams, ponds, or marsh communities with emergent vegetation.	<b>Likely.</b>

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
Foothill yellow-legged frog <i>Rana boylei</i>	FSC;CSC;--;--	Shallow, flowing, small- to medium-sized streams with cobble substrate.	<b>Present.</b>
Mount Lyell salamander <i>Hydromantes platycephalus</i>	FSC;CSC;--;--	Restricted to alpine and subalpine biotic communities. Also prefers habitats with scattered boulders and rock outcrops. Standing water such as permanent stream, creek, seep or melting snow runoff almost always present within few meters of occurrences. Known range extends from Smith Lake in El Dorado County to Franklin Pass area in Tulare County. Known elevation range from 3,800 to 10,900 feet.	<b>No;</b> Site is located at the lowest elevation this species typically occurs in. The site is located at too low an elevation for this primarily upper montane, subalpine salamander species. This species was not detected during 2004 field surveys. There are no CNDDDB records for this species within five miles of the SPRA.
Mountain yellow-legged frog <i>Rana muscosa</i>	FE;CSC;--;--	Prefers sunny riverbanks, meadow streams, isolated pools, and lake borders in high Sierra Nevada. Prefers sloping banks with rocks or vegetation to waters edge. Seldom found more than few feet from water. Also occurs in ponds and low gradient streams with deep pools and undercut banks, generally above 4,500 to 12,000 feet elevation.	<b>No;</b> the SPRA is not located within the elevation range of this species and no CNDDDB records occur within the immediate SPRA vicinity.
Western pond turtle <i>Clemmys marmorata</i>	FSC;CSC;--;--	Still or slow-moving water with basking sites and suitable upland habitat for nesting.	<b>Present.</b>
Western spadefoot <i>Spea hammondi</i>	FSC;CSC;--;--	Open foothill grasslands, pine oak woodlands and chaparral. Requires vernal pools or seasonal wetlands for breeding which occurs during winter and spring months. Primarily a species of lowlands, frequenting washes, floodplains of rivers, alluvial fans, and alkali flats. In Central Valley, occurs along foothills mostly below 3,000 feet elevation.	<b>No;</b> Site is not located within known elevation range of this species and no CNDDDB records occur in immediate area.
<b>Fish</b>			
Central Valley steelhead <i>Oncorhynchus mykiss</i>	FT;--; --;--	Sacramento River and perennial tributaries.	<b>No;</b> the site does not contain any tributaries to the Sacramento River.
Central Valley fall/late fall-	FC;CSC;--;--	Sacramento River and tributaries below	<b>No;</b> the site does not contain

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
run chinook salmon <i>Oncorhynchus tshawytscha</i>		Keswick Dam.	any tributaries to the Sacramento River.
Central Valley spring-run chinook salmon <i>Oncorhynchus tshawytscha</i>	FT;CT;--;	Sacramento River and tributaries below Keswick Dam.	<b>No;</b> the site does not contain any tributaries to the Sacramento River.
Central Valley winter-run chinook salmon <i>Oncorhynchus tshawytscha</i>	FE;CE;--;	Sacramento River and tributaries below Keswick Dam.	<b>No;</b> the site does not contain any tributaries to the Sacramento River.
Delta smelt <i>Hypomesus transpacificus</i>	FT;CT;--;	Concentrated in Sacramento River channel between Collinsville and Rio Vista.	<b>No;</b> the site does not contain any tributaries to the Sacramento River.
Hardhead <i>Mylopharodon conocephalus</i>	--;CSC;--;	Deep pools with sand and gravel or boulder substrates in large streams at middle and high elevations, in undisturbed areas. Has been found within low elevation reservoirs.	<b>Low.</b>
Longfin smelt <i>Spirinchus thaleichthys</i>	FSC;CSC;--;	Concentrated in Suisun, San Pablo, and North San Francisco bays, lower reaches of Sacramento and San Joaquin rivers, and Delta region.	<b>No;</b> the site does not contain any tributaries to the Sacramento River.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	FSC;--;	Sacramento and San Joaquin Rivers and their tributaries.	<b>No;</b> the site does not contain any tributaries to the Sacramento River.
<b>Birds</b>			
American peregrine falcon <i>Falco peregrinus anatum</i>	FD(FSC),USFS Sensitive; CE;--;	Nests in a wide variety of habitats including woodlands, dense coniferous forest, and coastal habitats near wetlands, lakes, or rivers on high cliffs, banks, dunes or mounds.	<b>No;</b> This species has not been recorded within the SPRA before. There are no CNDDDB records for this species within five miles of the site; site also lacks cliff-nesting habitat.
American dipper <i>Cinclus mexicanus</i>	--;--;SLC;--	Occurs as a year-round resident in California along higher elevation, fast-flowing mountain streams.	<b>Low.</b>
Bald Eagle <i>Haliaeetus</i>	FT,FPD;CFP,C	Large trees close to lakes and large	<b>Present.</b>

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
<i>leucocephalus</i>	E; --;--	rivers.	
Bank swallow <i>Riparia riparia</i>	--;CT;--;--	Banks or bluffs near streams or other wetlands	<b>Low.</b>
Bell's sage sparrow <i>Amphispiza belli belli</i>	FSC;--;--;--	Localized, resident breeder in dry, open chaparral and coastal sage scrub along coastal lowlands and inland valleys.	<b>No;</b> Site does not contain suitable habitat and located at too high elevation for this species to nest.
Black swift <i>Cypseloides niger</i>	FSC;CSC;--;--	Nests within cliff ledges behind water falls associated with perennial water ways or damp coastal cliffs.	<b>No;</b> Site does not contain waterfall or cliff ledges that are required for this species to nest.
California spotted owl <i>Strix occidentalis occidentalis</i>	FSC,USFS Sensitive; CSC;--; --	Old-growth forest associated with multi-layered canopies; associated with mixed coniferous forest, redwood, and Douglas fir forest habitats.	<b>Present.</b>
California thrasher <i>Toxostoma redivivum</i>	FSC;--;--;--	Found in dense chaparral or thickets in riparian corridors.	<b>No;</b> Site does not contain suitable and located at too high elevation for this species to occur for nesting.
Cooper's hawk <i>Accipiter cooperii</i>	--;CSC;--;-- (nesting)	Nests in riparian corridors. Forages in woodlands and riparian areas.	<b>Likely.</b>
Flammulated owl <i>Otus flammeolus</i>	FSC; --; --; -- (nesting)	Nests in oak woodlands. Roosts during day in cavities of trees. Occurs in montane regions from 6,000 to 10,000 feet elevation and prefers low to intermediate canopy closure.	<b>Low.</b>
Lawrence's goldfinch <i>Carduelis lawrencei</i>	FSC;--;--;--	Nests in open oak or other arid woodland and chaparral habitats near water.	<b>Low.</b>
Lewis' woodpecker <i>Melanerpes lewis</i>	FSC;--;--;-- (nesting)	Breeds in Sierra Nevada and other local mountains within coniferous forests and oak woodlands. May occur in eruptive patterns in lower valley elevations following winter storms. Most commonly observed in the Central Valley during winter months.	<b>Low.</b>

<b>Special-Status Species</b>	<b>Regulatory Status (Federal; State; Local; CNPS)</b>	<b>Habitat Requirements<sup>1</sup></b>	<b>Potential for Occurrence</b>
Little willow flycatcher <i>Empidonax traillii brewsteri</i>	FSC;--;--	Nests in dense riparian vegetation such as willows and alders.	<b>Low.</b>
Loggerhead Shrike <i>Lanius ludovicianus</i>	FSC;CSC;--;-- (nesting)	Nests in desert, savanna, and open-canopied hardwood, hardwood-conifer, and riparian habitats. Often observed in open grassland or agricultural areas with perch sites available for hunting.	<b>No;</b> Site does not contain suitable open grassland habitat and does not provide suitable perch sites for foraging.
Long-billed curlew <i>Numenius americanus</i>	FSC;CSC;--;-- (nesting)	Mudflats and shallow marsh areas.	<b>No;</b> Site does not contain suitable habitat for this species.
Northern goshawk <i>Accipiter gentilis</i>	FSC,USFS Sensitive; CSC;--;--	Mixed coniferous and deciduous forests with dense canopy.	<b>Present.</b>
Nuttall's woodpecker <i>Picoides nuttallii</i>	--;--;SLC;--	Permanent resident of low-elevation riparian deciduous and oak habitats.	<b>Low.</b>
Oak titmouse <i>Baeolophus inornatus</i>	FSC;--;-- (nesting)	Oak savannah and oak woodlands.	<b>Low.</b>
Osprey <i>Pandion haliaetus</i>	--;CSC;--;-- (nesting)	Nests on cliffs, large snags, and man-made structures near large bodies of water.	<b>Present.</b>
Rufous hummingbird <i>Selasphorus rufus</i>	FSC;--;-- (nesting)	Nests in a wide variety of habitat; including hardwood, hardwood-conifer, meadow, riparian, meadow and chaparral; occur in the Trinity Mountains of Trinity and Humboldt counties.	<b>No;</b> Site is not located within known breeding range of this species.
Sharp-shinned hawk <i>Accipiter striatus</i>	--;CSC;--;-- (nesting)	Nests in riparian corridors. Forages in woodlands and riparian areas.	<b>Present.</b>
Tricolored blackbird <i>Agelaius tricolor</i>	FSC;CSC;--;--	Nests in dense blackberry, cattail, tules, willow, or wild rose within emergent wetlands throughout the Central Valley and foothills.	<b>No;</b> Site does not contain suitable habitat for this species.
Western burrowing owl <i>Athene cunicularia hypugaea</i>	FSC;CSC;--;-- (burrow sites)	Nests in burrows in the ground, often in old ground squirrel or badger burrows, within open dry grassland and desert	<b>No;</b> Site does not contain suitable habitat for this species.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
		habitat.	
White-headed woodpecker <i>Picoides albolarvatus</i>	FSC;--;SLC;--	Nests in mature coniferous woods.	<b>Low.</b>
Other Raptors (Hawks, Owls and Vultures)	MBTA and §3503.5 Department of Fish and Game Code	Nests in a variety of communities including cismontane woodland, mixed coniferous forest, chaparral, montane meadow, riparian, and urban communities.	<b>Present.</b>
<b>Mammals</b>			
California wolverine <i>Gulo gulo luteus</i>	USFS Sensitive; CT;--;--	Primarily a sub-alpine species, believed to be extirpated throughout much of historic range in Sierra Nevada. This species is known to occur based on sightings from a variety of habitats in the elevation range from 1,600 to 14,200 feet with over 150 sightings at the mean elevation of 8,000 feet. Occurs in coniferous forests at higher elevations, generally with open areas at or above timber line. Habitat typically consists of open terrain above the timber line and generally include remote forested and alpine areas. Elevations within the northern Sierra Nevada range from 4,300 to 7,300 feet in red fir, mixed conifer, lodgepole, subalpine, conifer and probably montane meadow, chaparral and pine habitats.	<b>No;</b> SPRA is not located within known elevation range of this species; no suitable old-growth forest habitat is present. No CNDDDB records within five miles of site.
Fringed myotis <i>Myotis thysanodes</i>	FSC;--;--;--	Found in a variety of habitats in California except in the Central Valley and desert areas. Roosts in caves, buildings, and rock crevices.	<b>Low.</b>
Greater western mastiff bat <i>Eumops perotis californicus</i>	FSC;CSC;--;--	Roosts on cliff faces, trees, buildings, and rock outcrops. Forages in a variety of habitats.	<b>Low.</b>
Long-eared myotis <i>Myotis evotis</i>	FSC;--;--;--	Found throughout California except for the Central Valley and desert areas. Roosts in buildings, snags, and rock crevices.	<b>Low.</b>
Long-legged myotis bat <i>Myotis volans</i>	FSC;--;--;--	Woodland and forest communities above	<b>Low.</b>

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
		approximately 4,000 feet elevation. Roosts in rock crevices, buildings, under tree bark, in snags, mines, and caves.	
Pacific fisher <i>Martes pennati pacifica</i>	USFS Sensitive; CSC;--;--	Occurs in old-growth forests and once range from British Columbia through northern California and the Sierra Nevada. Species dens in rotting logs, hollow trees, and rock crevices in old-growth forests. This species occurs in dense, closed canopy coniferous forest and riparian habitats in the Sierra Nevada, Cascade Range, and Klamath Mountains. Only two native populations are known to occur today, one around the western California/Oregon border and the other, a southern Sierra Nevada population.	<b>No;</b> SPRA is not located within a known current population and old-growth forest habitat is not present within the site. No CNDDDB records occur within five miles of site for this species.
Pallid bat <i>Antrozous pallidus</i>	USFS Sensitive; CSC;--;--	A wide variety of low-elevation habitats such as grasslands, shrublands, and woodlands.	<b>Low.</b>
Pine marten <i>Martes americana</i>	FSC,USFS Sensitive;--;--	Occurs in dense coniferous forests or mixed conifer-hardwood forests, and deciduous trees including spruce, hemlock, birch, maple, white pine, and fir.	<b>Low.</b>
Townsend's big-eared bat <i>Plecotus townsendii townsendii</i>	USFS Sensitive; CSC;--;--	Variety of habitats throughout California, including coniferous forests. Requires caves, mines, tunnels, or other manmade structures.	<b>Low.</b>
Sierra Nevada red fox <i>Vulpes vulpes necator</i>	USFS Sensitive; CT;--;--	Coniferous forests above 7,000 feet elevation with open meadows. Prefers meadow complexes interspersed with a variety of forest types for optimum hunting and foraging opportunities. The availability of prey items such as rabbits and rodents limit populations. Fire exclusion is thought to have resulted in dense forests adjacent to meadows.	<b>No;</b> SPRA is not located within known elevation range of this species and suitable open, meadow intermixed with forested habitat is not present. No CNDDDB records within five miles of site.
Sierra Nevada snowshoe hare <i>Lepus americanus tahoensis</i>	--;CSC;--;--	Known from mid-elevation of Sierra Nevada from the vicinity of Mount Lassen southward to Mono and Tulare counties. Known from Nevada only in	<b>No;</b> SPRA does not contain suitable habitat and is not located within known elevation range. No CNDDDB records for

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements <sup>1</sup>	Potential for Occurrence
		the vicinity of Lake Tahoe. They occupy altitudes above 4,800 feet and typically below 8,000 feet. Prefers riparian forest in the Sierra Nevada with willows and alder. May also occupy immature mixed conifer, subalpine conifer, red fir, Jeffrey pine, lodgepole pine, aspen forests, and often use habitats characterized with dense understory growth along forest edges in close proximity to meadows.	this species within five miles of the site.
Small-footed myotis <i>Myotis ciliolabrum</i>	FSC;--;--	Roosts in a wide variety of habitats (i.e., riparian scrub, woodland), in abandoned buildings, and bridges.	Low.
Spotted bat <i>Euderma maculatum</i>	FSC;CSC;--;--	Roosts in rock crevices and occasional buildings of foothills and desert areas.	Low.
Yuma myotis <i>Myotis yumanensis</i>	FSC;--;--	Reside in open forests and woodland habitats with sources of water over which to feed. Roost in buildings, mines, caves, and crevices.	Low.
<b>Federally Listed Species:</b>		<b>California State Listed Species:</b>	<b>CNPS List Categories:</b>
FE = federal endangered	FC = candidate	CE = California state endangered	1A = plants presumed extinct in California
FT = federal threatened	PT = proposed threatened	CT = California state threatened	1B = plants rare, threatened, or endangered in California and elsewhere
FSC = federal species of concern	FPD = proposed for delisting	CR = California state rare	2 = plants rare, threatened, or endangered in California, but common elsewhere
CFP = California fully protected	FD = delisted	CSC = California Species of Special Concern	3 = plants about which we need more information
USFS Sensitive = US Forest Service Sensitive			4 = plants of limited distribution
			<b>Other Special-status Listing:</b>
Source: Foothill Associates			SLC = species of local or regional concern or conservation significance

### 5.5.1 Listed Plant Species

Based on field observations and literature review specific to the special-status plant species listed in Table 1, there are no state or federally listed

plant species with a potential to occur within the SPRA. Federally listed plant species occur in El Dorado County within the Pine Hills Preserve area, but appropriate soils (Gabbro soil) and habitat conditions are not present within the SPRA.

### **5.5.2 Other Special-status Plant Species**

Based on observations made during field surveys, species range information and habitat requirements, potential habitat for the following special-status plant species occurs within the SPRA: Humboldt lilly (*Lillium humboldtii* ssp. *humboldtii*), marsh skullcap (*Scutellaria galericulata*), Nissenan manzanita (*Arctostaphylos nissenana*), Pleasant Valley mariposa lilly (*Calochortus clavatus* var. *avius*), Saw-toothed lewisia (*Lewisia serrata*), slender-leaved pondweed (*Potamogeton filiformis*), Stebbins' phacelia (*Phacelia stebbinsii*), three-ranked hump moss (*Meesia triquetra*), tripod buckwheat (*Eriogonum tripodum*), and yellow burr navarretia (*Navarretia prolifera lutea*).

#### *Special-status Plant Species Likely to Occur*

### **Marsh Skullcap**

Marsh skullcap is a CNPS 1B plant species and is a USFS Watch-list plant species. Marsh skullcap is a member of the mint family. This perennial herb grows upright and is 1 to 3 feet tall. It produces a blue flower and blooms generally from June through September. It occurs within meadows and swamps of lower montane coniferous forests as well as along stream courses at moderate elevations.

There are no CNDDDB records for this species within five miles of the SRPA and this species was not observed during field surveys. Field surveys were conducted during June and July and therefore, did not cover the complete blooming period of this species. Coniferous forest, hardwood forest and riparian woodland habitat provide potential habitat for this species. Therefore, this species is likely to occur within the SPRA.

### **Pleasant Valley Mariposa Lily**

Pleasant Valley mariposa lily is a CNPS 1B plant species. This species tends to occur in rocky, cobbly soils. Most locations where this species is found show evidence of recent and repeated, low-intensity fires. The species is found in open stands of mixed conifer forest, scrubby areas on lava caps, and mixed oak/pine communities, between 3,000 and 5,000 feet on south-facing slopes. Pleasant Valley mariposa lily is often found in semi-open, pine forests with an understory of mountain misery (Urie and Van Zuuk 2000).

Pleasant Valley mariposa lily blooms during July which is later than other *Calochortus* species (Urie and Van Zuuk 2000). This species has a

conspicuous yellow flower that is quite evident when the plant is blooming. However, in a given year about 85 percent of the plants in a population produce nothing more than a single, inconspicuous leaf with no flower. The single leaf is typically visible from March through June; after the leaf dries, it spends the remaining summer and fall months as a dormant bulb.

Appropriate habitat for Pleasant Valley mariposa lily is present within the SPRA, primarily north of Jenkinson Lake on dry, south-facing slopes as well as the open forest and brushy areas north of the lake, especially areas with an understory of mountain misery understory. Directed surveys for Pleasant Valley mariposa lily were performed within areas exhibiting suitable habitat (open areas on forest floor) characteristics on June 14 and July 4, 2004. Transects through appropriate habitat were slowly walked to provide 100 percent visual coverage of these areas. Although Pleasant Valley mariposa lily was not observed during directed surveys, this species may not have been evident during the 2004 surveys due to its inconspicuous nature as described above. Because there are 13 CNDDDB records for this species occurring within five miles of the SPRA (CNDDDB 2005) (**Figure 3**), and the presence of suitable habitat, this species is likely to occur within the SPRA.

#### *Special-status Plant Species with a Low Potential to Occur*

### **Humboldt Lily**

The Humboldt lily is a CNPS 4 plant species and a USFS Watchlist plant species. Its blooming period occurs from May through July. This Humboldt lily is a tall (up to 8 feet), stout-stemmed, perennial that grows from a large, underground bulb. This lily prefers shaded wooded areas often near seasonal moist places within chaparral, oak woodland, and yellow pine forests up to 5,500 feet elevation. This species is associated with riparian corridors in lower montane coniferous forest and coastal chaparral. It typically occurs on lower stream benches but can also occur on shaded, dry slopes beneath a dense coniferous canopy and cismontane woodland. Humboldt lily is threatened mostly from collection by recreational hikers.

There are no CNDDDB records for this species within five miles of the site and this species was not observed during field surveys. Field surveys were conducted during the blooming period of this species. However, the onsite coniferous forests, hardwood forests and riparian woodland habitat provide potential habitat for this species. Therefore, Humboldt lily has a low potential to occur within the SPRA.

### **Nissenan Manzanita**

Nissenan manzanita is a federal species of concern and is a CNPS 1B plant species. This is a California endemic species known from only two counties,

El Dorado and Tuolumne counties, specifically the North and South Forks of the American River watershed, Upper Tuolumne and Upper Cosumnes River watersheds. There are less than 10 known occurrences (NatureServe 2005). This species occurs at elevations ranging from 1,400 to 3,600 feet above mean sea level. Development poses the largest threat to this species as well as trail use, roads, and timber harvest.

There are no records within the CNDDDB within five miles of the SPRA and this species was not observed during field surveys. However, the field surveys were not performed during the blooming period of this evergreen shrub. Nissenan manzanita occurs on open, rocky ridges in coniferous forest and chaparral, and is most likely to occur within the SPRA on dry, open slopes north of Jenkinson Lake. The coniferous forests onsite provide potential habitat for this species, although the SPRA is located above the typical elevation range of this species. Therefore, this species has a low potential to occur within the SPRA.

### **Saw-toothed Lewisia**

Saw-toothed lewisia is a perennial, succulent herb that blooms from May through June. It is endemic to California and is only known from approximately ten occurrences in El Dorado and Placer counties. It is confined to shady, mossy cliffs within steep gorges of rivers draining from the Sierra Nevada, specifically the American River watershed. Several scattered locations occur within Tahoe National Forest between the North and Middle Forks of the American River. Also, there are four locations within the El Dorado National Forest between the South and Middle Forks of the American River. There may be additional occurrences within the rugged canyons of the American and Rubicon River drainages (USFWS International Affairs 2005). Habitat for this species is further described as steep, metasedimentary bedrock outcrops with northerly aspects and elevations ranging from 1,850 to 5,000 feet. Plants are typically found on the inner gorges of perennial streams, although a few occurrences occur along intermittent streams. Of the four El Dorado National Forest populations, one has been believed extirpated while the other three populations consist of approximately 3,800 individuals (USFWS International Affairs 2005). The four populations within Tahoe National Forest are presumed extant. Potential threats to this species are believed to be over-collection for horticultural purposes, road construction, and hydroelectric power development (USFWS International Affairs 2005). Generally, habitat consists of broad-leaved upland forest, lower montane coniferous forest, riparian forest, and shaded north-facing cliffs on metamorphic rock.

Appropriate habitat for saw-toothed lewisia occurs within the SPRA although it is localized within the gorges along Sly Park Creek at the far eastern and

western ends of the SPRA. This species was not observed during field surveys and there are no CNDDDB records within five miles of the SPRA. Because the site is located south of the South Fork of the American River and therefore, south of the expected El Dorado National Forest populations, lack of CNDDDB records within five miles of the SPRA, and lack of findings during fields surveys that were performed during its blooming period, this species has a low potential to occur within the SPRA.

### **Slender-leaved Pondweed**

This CNPS plant species is a submerged, aquatic-growing plant. It has long, narrow underwater leaves and no floating leaves. This species occurs in shallow areas of hard-water lakes, marshes, swamps, and other assorted shallow freshwater habitats from approximately 15 to 4,000 feet elevation. Generally, this species occurs in lakes and rivers with depths of up to at least a meter. The species apparently fruits best in shallow water over sandy soils (Ohio Department of Natural Resources 1983). This species blooms from May through July.

There are no CNDDDB records for this species within five miles of the site and it was not observed during field surveys. Field surveys were performed during the blooming period of this species. However, suitable habitat does occur for this species along the shallow margins of Jenkinson Lake where other emergent vegetation grows. Because this species was not been observed along the lake margins during previous field surveys and potential habitat is present, this species has a low potential to occur within the SPRA.

### **Stebbin's Phacelia**

Stebbins phacelia is an annual herb and is a CNPS 1B plant species. This California endemic is known from the North and South Fork of the American River watershed as well as the Upper Yuba watershed. This annual herb blooms from March through June. It typically occurs in openings in cismontane woodlands and lower montane coniferous forests.

There are no CNDDDB records within five miles of the site and this species was not observed during field surveys. Field surveys were conducted within the blooming period of this species. Within the site, Stebbins phacelia is most likely to occur in areas with northern exposure slopes, such as woodlands south of the Jenkinson Lake. Because there are no CNDDDB records within the vicinity of the SPRA, but suitable coniferous forest habitat is present, this species has a low potential to occur within the SPRA.

### **Three-ranked Hump Moss**

This CNPS 2 moss grows in permanently wet habitats. This moss seems to prefer acidic meadows with sundew (*Drosera* sp.) and huckleberry

(*Vaccinium* sp.). Specifically, cold, spring-fed portions of meadows are preferred (Urie and Van Zuuk 2000). Occurrences are known from Sierra, Sequoia, and Tahoe National Forests as well as Sequoia National Park. A required habitat element is permanent saturated meadows; it does not occur in meadows that dry out. It is associated with bog and fen, meadow and seep habitat. The trend of this moss appears to be declining as it is sensitive to even mild alterations of meadow hydrology (Urie and Van Zuuk 2000). Threats from management activities that may alter meadow hydrology include trampling from livestock, road construction and maintenance, timber harvest, fuel reduction activities, and recreation use.

There are no CNDDDB records for this species within five miles of the site and this moss was not observed during field surveys. However, limited potential habitat occurs within the site associated with riparian habitats along Hazel and Sly Creeks at the western and eastern portions of the SPRA. Due to lack of suitable meadow habitat occurring within the site, lack of CNDDDB records, and lack of finding during field surveys, this species has a low potential to occur within the SPRA.

### **Tripod Buckwheat**

This low-spreading perennial herb occurs in widely scattered locations on the inner Coast Range of California and along the Sierra Nevada foothills. It typically blooms from May through July. Tripod buckwheat occurs often on serpentinite flats, slopes, and outcrops, mainly in grassland communities as well as oak and conifer woodlands (University of Maryland 2002)

There are no CNDDDB records for this species within five miles of the site and this species was not observed during field surveys; field surveys were performed during the blooming period of this species. Because the SPRA site does not contain serpentinite soils, lack of CNDDDB records and lack of field observations, this species has a low potential to occur within the SPRA.

### **Yellow Burr Navarretia**

Yellow-burr navarretia is a CNPS 4 plant species that occurs in dry, open areas within chaparral and woodlands habitats. Yellow burr navarretia generally occurs from 2,700 to 4,200 feet elevation. This species is threatened by urbanization and to a lesser extent, timber harvest, because this species responds well to disturbance. It blooms from May through July.

There are no CNDDDB records for this species within five miles of the SPRA and this species was not observed during field surveys; field surveys were performed during the complete blooming period of this species. However, this species could potentially occur in dry, open disturbed areas of chaparral, deerbrush, and woodland habitats within the SPRA. Because potential

habitat occurs onsite, lack of CNDDDB records within five miles of the site and lack of field observations, this species has a low potential to occur within the SPRA.

### **5.5.3 Listed Wildlife**

Based on field observations and literature review specific to listed wildlife species listed in Table 1, federally and/or state listed wildlife species were determined to have a potential to occur within the SPRA based on the presence of potential habitat. These species include bald eagle (*Haliaeetus leucocephalus*), bank swallow (*Riparia riparia*), and California red-legged frog (*Rana aurora draytonii*). Only bald eagle has been observed onsite and therefore, determined present. California red-legged frog is likely to occur within the SPRA and the SPRA includes proposed critical habitat for this species. Bank swallow has a low potential to occur within the SPRA. All the aforementioned species are discussed below.

#### *Listed Wildlife Species Determined Present*

### **Bald Eagle**

The bald eagle was down-listed from federally endangered to threatened throughout the lower 48 states in 1995. A proposed rule to federally de-list the species was published in 1999, but a final decision has not been made regarding the de-listing. Critical habitat has not been designated for this federally listed species. The bald eagle is listed as endangered under the California Endangered Species Act and designated as a California fully protected species. This species is also protected under the Migratory Bird Treaty Act and the Bald Eagle Protection Act.

The bald eagle is an opportunistic predator and scavenger adapted to aquatic ecosystems such as estuaries, lakes, reservoirs, major rivers, and some coastal habitats. Bald eagles feed on fish (either alive or as carrion), waterfowl, mammalian carrion, small birds and small mammals. These raptors are highly maneuverable in flight and often hunt from perches. They forage diurnally using perch sites which often consist of the highest perch sites available with a view of the surrounding area (USFWS 1999). Suitable foraging habitat typically consists of large bodies of water or rivers with abundant fish and adjacent snags or other perches (Zeiner *et al.* 1990).

The bald eagle breeding season generally lasts from February to July, but courtship, pair bonding, and territory establishment can begin as early as January. Fledglings may not begin to disperse from the immediate nest site until the end of August (Zeiner *et al.* 1990). Stick platform nests are built 50 to 200 feet above the ground, usually below the tree crown (Zeiner *et al.* 1990). Nesting territories are normally associated within 2 miles from water

bodies that support an adequate food supply (Lehman 1979). Most nests in California are located in ponderosa pine and mixed-conifer stands and nest trees are most often in mature ponderosa pines (Jurek 1988). Snags and trees with exposed lateral limbs or trees with dead tops are often present in nesting territories and are used for perching and as points of access to and from the nest (Jurek 1988).

Human interface, such as recreational activity, has been shown to disrupt foraging behavior of bald eagles. Effects of human disturbance include decreased feeding and energy intake (Stalmaster and Newman 1978). However, bald eagles can become habituated to routine human activities, and are less likely to be negatively affected by such activities in areas where eagles regularly occur (Stalmaster and Newman 1978).

Bald eagles are known to winter at Sly Park. Eagles were observed during a study conducted on the SPRA in 1995, and wintering bald eagles had been observed by Mike Reeves, Park Ranger for the SPRA, during ten consecutive winters previous to the 1995 study (Merriam Green Associates 1995). Wintering bald eagles were also observed by Reeves and typically arrive in late-October or early-November and remain until early-March (Merriam Green Associates 1995).

A study on bald eagles at SPRA was conducted from January to March 1995, to address eagle use of the area and potential effects resulting from a proposed marina expansion (Merriam Green Associates 1995). Ten surveys were conducted during the study period. Bald eagles were observed during seven consecutive surveys from January 16 to February 15. No eagles were observed during the subsequent three surveys, although other observers noted presence of eagles on February 25 and April 2 and April 16. Two adults were present during each of four Merriam Green Associates surveys, and a single adult was observed during each of three surveys. During these winter observations, perching was observed on the island in the middle of Jenkinson Lake. No courtship or nesting behavior was observed, and courtship behavior should have been observable during January and February if birds were nesting at the SPRA (Merriam Green Associates 1995). The 1995 eagle study also involved soliciting personal observations from EID staff, Sly Park Recreation Staff, and USFS staff. Other park personnel have noted that bald eagles winter at SRPA (Starns and Goss 2001); they indicate that bald eagles probably do not nest at SPRA, but rather visit this site during the summer from a nearby breeding site in Union Valley (Starns and Goss 2001). However, the USFS has a record of eagles nesting on USFS property in the vicinity, south of Jenkinson Lake, during the spring and summer of 2004 (USDA, USFS, pers. comm., Susan Ysuda, 2004).

During winter observations, bald eagles were found to perch most frequently on the islands in the southwestern portion of Jenkinson Lake. Eagles were also observed perched along the south shore of the lake near the second dam; in a tree at the eastern end of the lake; in trees across from the marina site on Mormon Emigrant Trail; in a dead cedar in Miwok Cove; and in trees on the south side of Jenkinson Lake across from Sierra Point and Stonebraker launch. A bald eagle was observed foraging over Jenkinson Lake on two occasions during the field surveys (June 14 and 28, 2004). No active nesting activity was observed during field surveys. Bald eagle is present with the SPRA.

*Listed Wildlife Species Likely to Occur*

**California Red-legged Frog**

The California red-legged frog was federally listed as threatened in 1996 (USFWS 1996). The USFWS approved a recovery plan for this species on May 28, 2002 (USFWS 2002). Critical habitat for the California red-legged frog was formally designated on March 13, 2001 (USFWS 2001), and the SPRA was within critical habitat Unit 1 (Sierra Nevada Foothills and Central Valley). However, in light of a recent court decision, most of the critical habitat units designated for this species was subsequently dismissed, including the proposed SPRA project area. The USFWS subsequently published a proposed rule to re-establish critical habitat in El Dorado County (Critical Habitat Unit 3) and other areas where critical habitat was originally designated. Based on a revised proposal for critical habitat designation, the USFWS has proposed to designate Spivey Pond (ELD-1) as critical habitat, one of the five remaining extant California red-legged frog populations in the Sierra Nevada foothills (USFWS November 2005b).

The California red-legged frog occurs from sea level to approximately 5,200 feet elevation. Habitat for the California red-legged frog consists of aquatic breeding areas within a matrix of riparian and upland dispersal habitat. Breeding habitat for the species includes pools and backwaters within streams and creeks, ponds, marshes, springs, lagoons, and artificially impounded stock ponds (USFWS 2002). California red-legged frogs are known to aestivate in upland habitat in rodent burrows, under rocks and logs, and in leaf litter in areas adjacent to aquatic habitat. California red-legged frogs are seldom found far from aquatic habitat during dry periods, but some individuals may disperse through upland habitats after the first rains in fall. Dispersal distances are believed to be dependent upon habitat availability and environmental conditions, but radio-tagged frogs in coastal areas have been documented to move approximately one mile over upland habitat during the wet season (USFWS 2002).

The USFWS has identified primary constituent elements are physical and biological elements that are essential to the conservation of the California red-legged frog; these elements include aquatic breeding habitat, non-breeding aquatic habitat, upland habitat, and dispersal habitat. Adult red-legged frogs can survive in moist upland habitat after aquatic habitats have dried, and can live several years to make new breeding attempts. Therefore, aquatic breeding habitat need not be present every year, but it must hold water often enough to support a red-legged frog population. Aquatic habitat is essential for providing space, food, and cover requirements necessary to sustain all life stages of red-legged frog. No-breeding aquatic habitat includes all aquatic breeding habitat types identified above as well as intermittent creeks, seeps, and springs; red-legged frogs can use cracks in the bottom of dried ponds as refugia to maintain moisture and avoid heat exposure. The associated upland and riparian habitat provide food and shelter sites for red-legged frog and assist in maintaining the integrity of aquatic sites by protecting them from disturbance and supporting the normal functions aquatic habitat. Upland habitat is described as natural areas within 200 feet of the edge of riparian vegetation or no further than the watershed boundary. Red-legged frogs often disperse from their breeding habitat in search of upland habitat if aquatic habitat is not available. Dispersal habitat provides connectivity between California red-legged frog breeding habitat. Dispersal habitat can be of several habitat types, but must be free of barriers that would prevent frog dispersal. Dispersal habitat is defined as habitat connecting two or more patches of breeding habitat within 0.7-mile of one another. Barriers include heavily traveled roads without bridges or culverts and urban developments; agricultural fields such as row crops, vineyards, and orchard do not constitute barriers to red-legged frog dispersal (USFWS 2005b).

California red-legged frogs breed from November through April. Eggs hatch in 6 to 14 days depending on water temperature, and larvae typically metamorphose between July and September, 3 ½ to 7 months after eggs hatch (USFWS 2002). Males can reach sexual maturity in 2 years, while females reach sexual maturity in 3 years (USFWS 2002).

Although the perennial creeks within the SPRA may provide marginally suitable habitat for California red-legged frog, these streams are expected to be too shallow and fast-moving to support California red-legged frog tadpoles. This species has not been detected on the project site or in the Cosumnes River basin. There is one CNDDDB record for this species within five miles of the site (CNDDDB 2005); California red-legged frogs are known to occur at Spivey Pond on the north fork of Weber Creek, approximately 2.2 miles northwest of Jenkinson Lake based on a 2002 CNDDDB record (CNDDDB

2005) (**Figure 4**). The Spivey Pond population is one of five known extant breeding populations of red-legged frog in the Sierra Nevada foothills. In July 2004, a management plan was written for red-legged frog within Spivey Pond; the Spivey Pond Management Plan consists of six management objectives specifically for the conservation of red-legged frog including bullfrog and predatory fish control, water quality monitoring, and habitat creation (USFWS November 2005). This population is one of five remaining populations known from the Sierra Nevada mountain range. This species could potentially occur within SPRA, within the perennial creeks, although habitat is not highly suitable to support a viable breeding population. Based on review of the Sly Park USGS topographic quadrangle map, there does not appear to be hydrologic connectivity of the North Fork of Weber Creek to Sly Park Creek or Jenkinson Lake. However, given the proximity of the site to the known Spivey Pond population, this species is likely to occur within the SPRA.

#### *Listed Wildlife Species with a Low Potential to Occur*

##### **Bank Swallow**

The bank swallow was state listed as a state threatened species in March 1989. This species is a colonial breeder, nesting in burrows of steep, sandy riverbanks and in the sides of man-made excavations near rivers and streams, up to 7,000 feet in elevation (Fix and Beezner 2000).

There are no current CNDDDB records for this species within five miles of the site and this species was not observed during field surveys. Suitable nesting habitat for this species is present west of Jenkinson Lake and the first dam at the old quarry site. Swallows were observed nesting in burrows on the steep banks of this quarry on July 12 and July 18, 2004. However, these were identified as rough-winged swallows (*Stelgidopteryz serripennis*).

Additionally, this species has not been recorded as occurring within the SPRA (El Dorado Irrigation District 1991). Because potential habitat occurs immediately west of Jenkinson Lake, lack of CNDDDB records within five miles of the site, and lack of field observations, this species has a low potential to occur within the SPRA. Projects proposed under the SPRA Master Plan are not anticipated to occur within the area of the old quarry site and therefore, impacts would not occur to potentially nesting bank swallows. No mitigation is expected to be necessary.

##### **5.6 Other Special-status Wildlife Species**

Based on literature review, field observations, species range information, and species habitat requirements, other special-status wildlife species have a potential to occur onsite due to the presence of suitable habitat occurring within the site including American dipper (*Cinclus mexicanus*), Button's

Sierra sideband (*Monadenia mormonum buttoni*), California horned lizard (*Phrynosoma coronatum frontale*), California spotted owl (*Strix occidentalis occidentalis*), Cooper's hawk (*Accipiter cooperi*), flammulated owl (*Otus flammeolus*), foothill yellow-legged frog (*Rana boylei*), gold rush hanging scorpionfly (*Orobittacus obscurus*), hardhead (*Mylopharadon conocephalus*), Lawrence's goldfinch (*Carduelis lawrencei*), Lewis' woodpecker (*Melanerpes lewis*), little willow flycatcher (*Empidonax traillii brewsteri*), northern goshawk (*Accipiter gentilis*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), osprey (*Pandion haliaetus*), pine marten (*Martes americana*), sharp-shinned hawk (*Accipiter striatus*), South Fork's ground beetle (*Nebria darlingtoni*), spiny rhyacophilan caddisfly (*Rhyacophila spinata*), western pond turtle (*Clemmys marmorata*), white-headed woodpecker (*Picoides albolarvatus*), other raptor species as well as special-status bat species.

#### *Other Special-status Wildlife Species Determined Present*

### **California Spotted Owl**

The California spotted owl is a CDFG Species of Special Concern. The breeding range of this species extends from west of the Cascade Range through the north Coast Range, the Sierra Nevada, and in localized portions of the Transverse and Peninsular ranges. California spotted owls may move down-slope during winter, along the eastern and western slopes of the Sierra Nevada.

This species resides in dense, often mature, multi-layered mixed conifer, redwood, and Douglas-fir habitats, from sea level to approximately 7,600 feet in elevation. The preference of spotted owls for multi-layered forest is attributed to a need for temperature gradients for roosting. Spotted owls are intolerant of high temperatures, and therefore they roost in areas with dense overhead canopy on north-facing slopes during summer months. Also, multi-layered habitat supports suitable prey species for spotted owl such as wood rats (*Neotoma* sp.). Spotted owls usually nest in tree or snag cavities, in broken tops of large trees, or sometimes abandoned raptor nests.

Appropriate nesting and foraging habitat for California spotted owl is present in the densely forested areas on most of the slopes south of Jenkinson Lake. There are no CNDDDB records for this species within five miles of the site; however this species was detected during 2004 field surveys. A California spotted owl protected activity center is identified by the USFS in the southeastern corner of the SPRA (USDA, USFS, pers. comm, Susan Yasuda, 2004). One California spotted owl was heard onsite, south of Jenkinson Lake on July 11, 2004. Also on this day, a spotted owl was observed south of the

SPRA, near the property boundary, on adjacent USFS land. Therefore, this species is present within the SPRA.

### **Foothill Yellow-legged Frog**

Foothill yellow-legged frog is a CDFG Species of Special Concern and is a USFS sensitive species. This species occurs along the western slope of the Sierra Nevada at elevations of up to 6,000 feet. Foothill yellow-legged frogs occur predominantly along cobble or gravelly perennial streams with shallow riffles, but also in backwater pools with slow-moving water and mud substrate. Foothill yellow-legged frogs were not found during 2004 field surveys within the SPRA which also included night surveys along Sly Park Creek using a spotlight; however, there is one reported CNDDDB occurrence of this species within five miles of the project site.

There are four CNDDDB records occurring within five miles of the SPRA for this species. One record is from 1997 within Camp Creek approximately 1.5 miles southeast of Jenkinson Lake; two records from 1994 occur from the Middle Fork and North Fork of the Cosumnes River; and a 2002 record from the South Fork of the American River, just downstream from Blackbird campground within El Dorado National Forest (CNDDDB 2005). Additionally, foothill yellow-legged frogs have been observed within the SPRA as well as in the project vicinity on USFS lands. Therefore, this species is present within the SPRA.

### **Northern Goshawk**

The northern goshawk is a CDFG Species of Special Concern and is a USFS sensitive species. Northern goshawk is a year-round resident in Eldorado National Forest. The northern goshawk preys on small birds and mammals and tends to inhabit mature forest stands. Suitable nesting habitat for northern goshawk is present in forested areas south of Jenkinson Lake and within the SPRA.

No goshawks were observed within the SPRA during the 2004 surveys. However, goshawks are known to occur on USFS land in the project vicinity (USDA, USFS, pers. comm., Susan Ysuda, 2004). Goshawks have been sighted on the SPRA in the past (Starns and Goss 2001) and are included in the 1991 bird list for the SPRA (EID 1991). Therefore, goshawks are present within the SPRA.

### **Osprey**

Ospreys occur around open water that harbor fish. Osprey breed in California from the Cascade Range south to Lake Tahoe, along the coast south to Marin County. There are known breeding locations within Shasta Lake, Eagle Lake and many inland lakes, reservoirs, and river systems. This

raptor requires open water for foraging and uses large trees, snags, and dead-topped trees in open forest habitats for nesting and cover. Nests are made of a platform of sticks at the tops of large snags, cliffs, or human-made platform structures. In California, this species occurs mostly as a breeding raptor during spring and summer months and during migration as it migrates south to Central and South America along the coast and slopes of the Sierra Nevada. Ospreys arrive on nesting grounds around mid-March to early-April.

There are no CNDDDB records for this species; however an osprey was observed foraging over Jenkinson Lake and an active nest is known on adjacent USFS land south of the lake. Therefore, this species is present within the SPRA

### **Sharp-shinned hawk**

Sharp-shinned hawk is the smallest hawk of the genus *Accipiter* with a relatively small head and short tail. Accipiters hunt from perches and fly low through woodland canopies for prey. It often hunts around houses, birdfeeders, and hedgerows for small bird prey. It most commonly prefers to nest within pine forests, riparian mixed conifer forests and to a lesser extent, deciduous forests. Sharp-shinned hawks are commonly observed within foothill woodlands in the Sierra Nevada foothills. There are no CNDDDB records for this species within five miles of the site; however this species was observed foraging onsite during 2004 field surveys. Additionally, this species is included in the 1991 bird list for the Sly Park Recreation Area (EID 1991). Therefore, this species is present within the SPRA.

### **Western Pond Turtle**

The western pond turtle is currently divided into two subspecies, the northwestern pond turtle which occurs from the vicinity of the American River in California northward to the lower Columbia River in Oregon and Washington and the southwestern pond turtle which occurs in coastal drainages from the vicinity of Monterey, California south to northwestern Baja California, Mexico. There is an intergraded zone of both subspecies south of the American River and north of Monterey (Stebbins 1985).

Western pond turtles are habitat generalists and occur in a wide variety of permanent or nearly permanent aquatic habitats, normally ponds, lakes, streams and irrigation ditches, with basking sites. Basking sites are typically submerged logs, rocks, mats of floating vegetation, or open mud banks (Zeiner *et. al* 1990). Western pond turtle typically leave aquatic sites to reproduce, aestivate, and over-winter in upland habitats such as annual grasslands and oak woodlands. Breeding occurs in late-April or early-May, and eggs may

be laid from April through August (Stebbins 1985). Nests are typically dug in a substrate with a high clay or silt content and located on an unshaded slope. Females lay between 3 and 11 eggs and may lay additional clutches during a year. Because hatchling turtles have almost never been observed in aquatic sites during the fall, it is thought that hatchling turtles hatch and over-winter in the nest. Western pond turtles are can be seen from February through mid-November in the north and all year in the south. As an omnivorous species, this species feeds on aquatic plant material and a variety of aquatic invertebrates (Stebbins 1985).

There is one CNDDDB record for this species within five miles of the SPRA and this species was observed at the mouth of Sly Park Creek during 2004 field surveys (CNDDDB 2005). Therefore, this species is present within the SPRA.

### **Other Raptor Species**

Raptor nests are protected under the MBTA and Section 3503.5 of the California Fish and Game Code, which makes it illegal to destroy any active raptor nest. Other raptor species forage and nest in forested habitats in El Dorado County and could potentially nest on the SPRA. Inactive stick nests were observed in trees at several locations on the SPRA. A pair of osprey was observed foraging over the lake in June and July, 2004, and osprey nest immediately south of the SPRA on USFS property. A sharp-shinned hawk (*Accipter striatus*) was observed on the project site near the quarry in July, 2004, although no nest was observed. No active raptor nests were observed, but ample suitable raptor nesting and foraging habitat occurs onsite. Large trees onsite and in the vicinity of the SPRA may provide potential nesting habitat for raptor species. Consequently, raptors are present within the SPRA.

### *Other Special-status Wildlife Species Likely to Occur*

#### **Cooper's Hawk**

Cooper's hawks are usually found in riparian woodlands near stream courses. The breeding season for this species is typically between March and August (Zeiner *et. al.* 1990). Nests are typically built in woodlands or riparian areas and consist of a platform of sticks. Cooper's hawk will also sometimes uses abandoned corvid nests (Ehrlich *et. al.* 1988). Cooper's hawk feed primarily on small birds and mammals. There are no CNDDDB records for this species within five miles of the SPRA and this species was not observed during field surveys. SPRA provides moderate nesting and foraging habitat for this species although this species typically prefers an open canopy. Additionally,

this species is included on the 1991 bird list for the Sly Park Recreation Area (EID 1991). Therefore, this species is likely to occur within the SPRA.

### **Freshwater Invertebrates**

Special-status freshwater invertebrate species have a potential to occur within the perennial creeks including Button's Sierra sideband, gold rush hanging scorpionfly, South Forks ground beetle, and spiny rhyacophilan caddisfly. All four of these invertebrates are federal species of concern. Little research has been performed or is available on habitat requirements and distribution. Button's Sierra sideband is a terrestrial snail that generally occurs in moist wooded areas in the foothills of the Sierra Nevada. Gold rush hanging scorpionfly is known from only a small section of the western slopes of the central Sierra Nevada within shaded canyons with high humidity, overhanging tree roots, and rock outcrops. South Forks ground beetle prefers rocky margins along cool streams and spiny rhyacophilan caddisfly is thought to occur in mid- to high-elevation streams and rivers. Spiny rhyacophilan caddisfly is known from Placer, Sierra, and El Dorado counties and from the Upper Yuba and North Fork American River watersheds. Typical habitat for this caddisfly genus is cool running-water, clear, creeks or rivers and sometimes transient streams.

Gold rush hanging scorpionfly, Button's Sierra sideband, and South Forks ground beetle each have one CNDDDB record occurring within five miles of the SPRA. Gold rush hanging scorpionfly was recorded in 1979 from the American River, 11.7 miles west of Kyburz and Shirttail Creek near the community Foresthill within Tahoe National Forest; Button's Sierra sideband was recorded at an unknown date from Riverton; and South Forks ground beetle was recorded in 1979 from China Flat campground, approximately two miles south of Kyburz (CNDDDB 2005). Because suitable habitat occurs within the SPRA mostly with the perennial creeks associated with Jenkinson Lake, known CNDDDB records within the immediate SPRA vicinity, these freshwater invertebrates are likely to occur within the SPRA.

#### *Other Special-status Wildlife Species with a Low Potential to Occur*

### **American Dipper**

The American dipper is a species of local concern. This species nests in clear, fast-flowing river and stream habitats in montane regions. Nests are typically located on a raised site overlooking water such as on rocks in streams and rivers, behind waterfalls, or in stumps or logs in banks. No occurrences of this species are recorded in the CNDDDB within five miles of the SPRA and this species is not included on the 1991 bird list for the Sly Park Recreation Area (EID 1991). Hazel and Sly Park Creeks most likely do not support fast-moving waters preferred by this species. Therefore, this

species has a low potential to occur within the SPRA. Any project-related impacts would not likely significantly impact the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

### **California Horned Lizard**

California horned lizard is a federal and state species of concern. This California endemic species historically occurred in a spotty range from Lake Shasta southward along the Sacramento Valley into the South Coast Range, San Joaquin Valley and Sierra Nevada foothills to northern Los Angeles, Santa Barbara and Ventura counties. This species current range includes the Sierra Nevada foothills from Butte County south to Tulare County below 4,000 feet elevation. There is one isolated population in Siskiyou County, California. California horned lizard is known to occur in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper, and annual grassland habitats.

There are no CNDDDB records for this species within five miles of the SPRA and this species was not observed during field surveys. However, potential habitat areas with loose, friable soils and occasional rock outcrops occur within the wooded and chaparral habitats. Therefore, California horned lizard has a low potential to occur within the SPRA. Any project-related impacts would not likely significantly impact the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

### **Flammulated Owl**

The flammulated owl is one of the smallest North American owls. It is a federal species of concern. Because it is almost completely insectivorous, the northern population must migrate at least partially out of its breeding range to meet seasonal food requirements. Flammulated owls winter in Mexico and South America. In California, this owl occurs as a migrating and breeding raptor and may be observed during spring and fall months during migration from summer breeding grounds. This owl is found in forested, mountain environments, especially ponderosa pine forests with low-growing shrubs. This owl species roosts during the day in cavities and actively forages for insects at night, therefore making it difficult to observe. Flammulated owls prefer old-growth forests and are secondary-cavity nester meaning it depends on abandoned woodpecker cavities or excavated, dead limbs for nesting. There are no CNDDDB records for this species within five miles of the site and this species was not detected during 2004 field surveys. However, because suitable woodland habitat occurs within the SPRA, this species has a low potential to occur and could potentially be impacted by recreation development activities within the SPRA.

## **Hardhead**

Hardhead are large members of the minnow family typically found in larger mid- and low-elevation streams. Other common names include Sacramento blackfish and Sacramento squawfish (Singer 2005). Hardhead are a warm-water fish native to the Sacramento and San Joaquin River and Russian River watersheds. These fish prefer deep pools with sand, gravel, or boulder substrates where they feed on small invertebrates or aquatic plants in quiet waters. While hardhead are typically found in riverine habitats, they have become established in some low-elevation reservoirs. Hardhead may spawn in granite riffles. Hardhead are found in less disturbed streams with few predatory fish such as bass (*Micropterus* sp.) and competitors such as carp (*Cyprinus carpio*).

This species has not been recorded from Jenkinson Lake and there are no CNDDDB records within five miles of the SPRA. Given the presence of predatory fish such as various trout species, smallmouth bass, and bluegill, this species has a low potential to occur within the reservoir. Any project-related impacts are not expected to impact this species and no further mitigation is expected to be necessary.

## **Lawrence's Goldfinch**

Lawrence's goldfinch is a federal species of concern. It is endemic to the arid woodlands of California and northern Baja, California. This species typically shows erratic breeding patterns from season to season and often exhibits an eruptive pattern. The breeding range is restricted to the Central Valley and coastal foothills of California and northern Baja; however breeding territories characteristically vary from year to year in their location given this species sporadic nature. Lawrence's goldfinch typically nest in arid, open woodland environments near chaparral, weedy fields, or near bodies of water, with a strong preference for fiddlenecks (*Amsinckia* sp.) for feeding on seeds. Breeding typically takes place from mid-April through mid-July. There are no CNDDDB records for this species and this species was not observed during field surveys. This species is not included on the 1991 bird list for the SPRA (EID 1991). Because potential woodland habitat is present within the SPRA and this species has not been known to occur in the project vicinity, this species has a low potential to occur. Any project-related impacts would not likely significantly impact the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

## **Lewis' Woodpecker**

Lewis's woodpeckers are associated with open canopied, pine forests and riparian woodlands dominated by cottonwoods. In the Central Valley, they can be found within oak-pine woodlands in the foothills throughout the year

although most commonly in the winter. Habitats are typically open woodlands or recently burned forests. They breed in the Sierra Nevada and migrate to lower foothill and valley elevations during winter months; they often appear in eruptive patterns as they are flushed from higher elevations to lower valleys after winter snow storms. They winter in the Central Valley and Transverse Range in southern California; they are known to breed along the eastern slopes of the Coast Range, Sierra Nevada, Klamath Mountains and Cascade Range. There are no CNDDDB records for this species and this species was not detected during 2004 field surveys. This species is not included on the 1991 bird list for the SPRA (EID 1991). Because potential woodland habitat is present within the SPRA and this species has not been known to occur in the project vicinity, this species has a low potential to occur. Any project-related impacts would not likely significantly impact the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

### **Little Willow Flycatcher**

The little willow flycatcher is similar in appearance to many of the species of the *Empidonax* species. Positive identification of this species in the field is often made by vocalizations. Willow flycatchers winter in Mexico and Central America. This subspecies breeds throughout the western slope of the Sierra Nevada and Cascade ranges. This species typically returns to breeding grounds in May and June. Breeding habitat for this species includes montane riparian and willow scrub habitat. This species is known to breed in the foothills and Sierra Nevada range from approximately 2,000 feet to 8,000 feet elevation (Zeiner *et. al.* 1990). Nests are typically built in the fork of willow shrubs or other suitable riparian or wet meadow vegetation. Flycatchers forage primarily on insects but will also eat some seeds and berries. There are no CNDDDB records for this species and this species was not detected during 2004 field surveys. This species is not included on the 1991 bird list for the Sly Park Recreation Area (EID 1991). Hazel and Sly Park creeks do not support dense riparian willow thickets required for this species to nest. Therefore, this species has a low potential to occur within the SPRA. Any project-related impacts would not likely significantly impact the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

### **Nuttall's Woodpecker**

The Nuttall's woodpecker is a species of local concern and is a year-round resident in oak woodlands and riparian woodlands throughout the Central Valley, Coast Range, and lower elevations of the Sierra Nevada and Cascade Range. Nuttall's woodpeckers can be found in a variety of habitats including urban environments and riparian areas but are most often associated with

oak woodlands. Nuttall's woodpecker is a cavity nester in snags or dead limbs of willow, cottonwood (*Populus* sp.), alder and sycamore (*Platanus* sp.) trees, but rarely oak trees. Breeding typically occurs between March and July (Zeiner *et. al.* 1990).

There are no CNDDDB records for this species occurring within five miles of the site and this species was not recorded during field surveys. However, Nuttall's woodpecker is a commonly observed woodpecker species within the Sierra Nevada foothill region and suitable nesting habitat is present within the SPRA. This species has a low potential to occur within the SPRA given the presence of potential habitat and fairly widespread distribution of this species. Any project-related impacts would not likely significantly impact the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

### **Oak Titmouse**

Formerly the plain titmouse, the genus *Baeolophus* was recently split into juniper titmouse and oak titmouse. The oak titmouse is a year-round resident in northern California of a variety of habitats and is most often associated with oaks, but also occurs in montane hardwood, oak woodlands, and mixed conifer habitats. It occurs in cismontane California from Humboldt County south to the Mexican border. It nests in tree cavities or old woodpecker holes, natural cavities or nest boxes. Breeding typically occurs between March and July (Zeiner *et. al.* 1990). Oak titmice are common in foothill oak woodland communities and are frequently observed within woodland areas of the Sierra Nevada foothills.

There are no CNDDDB records for this species occurring within five miles of the site and this species was not recorded during field surveys. However, oak titmouse is a commonly observed bird species within the Sierra Nevada foothill region and suitable nesting habitat is present within the SPRA. Given the presence of suitable habitat and widespread distribution of this species, this species has a low potential to occur within the SPRA. Therefore, any project-related impacts would not likely significantly impact the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

### **Pine Marten**

Pine marten is a federal species of concern and USFS sensitive species. It is predominantly a predator of small mammals and birds, but will also eat fruits and insects actively during day and night. Suitable habitats include dense coniferous forests or mixed conifer-hardwood forests, and deciduous trees including spruce, hemlock, birch, maple, white pine, and fir. Required habitat elements are believed to include several large limbs and fallen trees

in the forest understory, which provide prey, protection, and den sites. This species is threatened largely by habitat loss due to logging.

There are no CNDDDB records for this species within five miles of the SPRA and no evidence of this species was detected during field surveys. Based on research performed on behalf of EID, potential habitat for pine marten has been identified within the SPRA vicinity (EIP 2002a). Although, SPRA is most likely located at too low an elevation for pine marten to occur as this species occurs more often in upper montane, sub-alpine forest types. Therefore, pine marten has a low potential to occur within the SPRA. Any project-related impacts would not likely significantly impact the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

### **Special-status Bat Species**

The following federally sensitive bat species have a potential to occur within the SPRA: fringed myotis (*Myotis thysanodes*), greater western mastiff bat (*Eumops perotis californicus*), long-eared myotis (*Myotis evotis*), long-legged myotis (*Myotis volans*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Plecotus townsendii townsendii*), small-footed myotis (*Myotis ciliolabrum*), spotted bat (*Euderma maculatum*), and Yuma myotis (*Myotis yumanensis*). No evidence of bat roosts was detected during 2004 field surveys. Habitat ranges for these bat species are widespread throughout California; however, many of these species are rare within their habitats. Habitat for bat species consists of foraging habitat, night roosting sites, maternity roosting sites, and winter hibernacula.

Bat surveys were performed by the USFS on behalf of EID's project re-license application for Project 184. Surveys were performed during fall 1999, June and July 2000; surveys included visual observations, mist netting, and an Anabat remote recorder that collects ultrasonic echolocation signals emitted by bats to allow for bat species identification. Bat survey locations consisted of tunnels and canals in need of damage repair and included an area immediately south of South Fork American River and north of Highway 50. The study area included locations in close proximity to the SPRA. The bat study concluded that the woodlands within the study area is within the range of pallid bat, Townsends's big-eared bat, small-footed myotis, long-eared myotis, and Yuma myotis and woodland habitats provide suitable foraging habitat for these bat species. Also, the following special-status bat species were detected by Anabat acoustic monitoring: fringed myotis, Yuma myotis, long-legged myotis, and small-footed myotis (EIP 2002b).

No evidence of bat roosts was observed during 2004 field surveys and no CNDDDB records occur for within five miles of the SPRA for special-status bat

species. Because suitable foraging and roosting habitats occur within the woodland habitats within the SPRA and special-status species were detected for EID's infrastructure improvement study within close proximity to the SPRA, special-status bat species have a low potential to occur within the SPRA.

### **White-headed Woodpecker**

White-headed woodpecker is a species of local concern. This species is a year-round resident of montane coniferous forest and lodgepole pine and red fir habitats in the higher elevations of the Sierra Nevada. This species nests in open conifer habitats, often near edges of roads, natural openings, or edges of small clearings. There are no CNDDDB records for this species occurring within five miles of the site, and this species was not observed during field surveys. Also, this species is identified as a commonly occurring, year-round resident on the 1991 bird list for the Sly Park Recreation Area (EID 1991). Due to the presence of potential nesting and foraging habitat, this species has a low potential to occur within the SPRA. However, any project-related impacts would not likely significantly impact the local or regional population of this species; consequently, no mitigation measures are expected to be necessary.

## **5.7 Sensitive Habitats**

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. Additionally, wetlands and other sensitive habitats are protected under the specific policies outlined in the Conservation and Open Space Element of the County General Plan. Sensitive habitats identified onsite include potential waters of the U.S., other mesic areas and seeps along drainages that meet the Corps criteria for jurisdictional wetlands, riparian habitat, deer corridors and fishery resources. Also, oak woodland and forest resources, particularly oaks and landmark or heritage trees, are protected under the El Dorado County General Plan.

### **Wetlands and Waters of the U.S.**

To date, potential waters of the U.S. (riverine, lacustrine, montane riparian, and other mesic areas) have been preliminarily mapped but not formally delineated following the Corps three-parameter methodology within the SPRA (**Figure 4**). Jurisdictional waters of the U.S. include jurisdictional wetlands as well as all other waters of the U.S. such as creeks, ponds, and intermittent drainages. Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of

vegetation typically adapted for life in saturated soil conditions" (U.S. Army Corps of Engineers 1987). The majority of jurisdictional wetlands in the United States meet three wetland assessment criteria: hydrophytic vegetation, hydric soils, and wetland hydrology. Jurisdictional waters of the U.S. can also be defined by exhibiting a defined bed and bank and ordinary high-water mark (OHWM). As discussed in Section 2.0, Regulatory Framework, jurisdictional waters of the U.S. are subject to Section 404 of CWA and are regulated by the Corps.

### **Deer Corridors**

CDFG is concerned with protection of deer migration corridors where urban expansion may pose a threat, and has mapped mule deer critical habitat and migration patterns in El Dorado County (El Dorado County 2004). Critical habitat is defined by CDFG as habitat that is essential to the long-term productivity of the herd. Mule deer were sighted during 2004 surveys of the SPRA, as well as an abundance of tracks, scat, trails, and bedding areas, especially south of Jenkinson Lake. The CDFG deer migration corridor map designates critical winter and holding habitat on lands surrounding SPRA, and some of these areas may overlap slightly with the SPRA boundaries. However, the activities proposed under the SPRA Master Recreation are expected to be compatible with deer conservation, and would not hinder deer movement or migration corridors. Therefore, no mitigation is expected to be necessary.

### **Riparian Habitat**

Riparian habitat has been mapped within the SPRA along Hazel Creek, Sly Park Creek, and other unnamed tributaries to Jenkinson Lake (**Figure 4**). Riparian habitat provides habitat value for a number of wildlife species. The riparian habitat identified within the SPRA is subject to the jurisdiction of Section 1600 of the California Fish and Game Code. Section 1600 applies to projects that may potentially impact any portion of a stream with a defined bed, bank, or any riparian habitat associated with the stream.

## **6.0 DISCUSSION AND RECOMMENDATIONS**

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The SPRA consists of approximately 2,000 acres of mixed hardwood and coniferous forest habitat, including a ±640-acre reservoir, primarily used for recreational purposes. Known or potential biological constraints within the site include:

- Foraging and potential nesting habitat for the state and federally listed bald eagle;
- Foraging and potential nesting habitat for U.S. Forest Service sensitive raptor species, including northern goshawk and California spotted owl, as well as other raptor species;
- Potential California red-legged frog habitat and proposed critical habitat;
- Potential habitat for foothill yellow-legged frog;
- Potential habitat for special-status plants species;
- Potential western pond turtle habitat;
- Potential habitat for federally sensitive invertebrate species;
- Potential bat roost habitat; and
- Sensitive habitats (potential waters of the U.S., riparian habitat, protected trees and woodland resources).

### **6.1 Bald Eagle**

Any project component that would involve the removal of potential nest trees must be surveyed for the presence of a bald eagle nest. Federal protocol surveys must be performed to determine the presence or absence of nesting and wintering bald eagles. As stated previously, bald eagle are known to winter at Jenkinson Lake although, are not known to nest at Jenkinson Lake. However, nesting bald eagles have been recorded from nearby lakes in 2004. Therefore, tree removal shall not take place until confirming an active bald eagle nest does not occur within the trees planned for removal.

Timing construction activities to occur outside of the known wintering bald eagle season (late-October to early-March) at Jenkinson Lake, would reduce the likelihood of adverse effects on bald eagle; work associated with the implementation of the SPRA Master Plan is not expected to occur during the rainy season. CDFG recommends that specific survey guidelines and scheduling of surveys be handled with consultation with CDFG at the agency district or regional office level. CDFG recommends a minimum of three surveys during the nesting season to confirm the location of eagle territories

(CDFG 1999). One survey should be performed during early March (early incubation) to determine whether territories are occupied. CDFG recommends a second survey during late-April or early-May (early nesting period) to confirm if the territory is unoccupied, or if occupied in March to determine whether the breeding pair is still present. A third survey should be performed during mid-June (late nestling period) to determine how many nestlings are present and may fledge (CDFG 1999). Performing directed surveys to identify breeding bald eagles will also determine the location of any wintering bald eagles. Trees harboring any roosting wintering bald eagles shall not be removed.

If bald eagle nesting territories are found and defined, the bald eagle management and design guidelines for the SPRA Master Plan could establish management zones based on a radius around the bald eagle nest. For example, the Habitat Management Guidelines for the Bald Eagle in the Southeast Region (USFWS 1987) provides recommended restrictions in a "primary management zone" within approximately 750 feet of a bald eagle nest, and lesser restrictions within a "secondary management zone" between 750 feet and one mile from the nest (exact distance would be dependent upon site specific factors). The Washington Department of Fish and Wildlife's (WDFW) Priority Habitat and Species Management Recommendations (Washington Department of Fish and Wildlife 2004) recommend a survey buffer of at least 800 feet of a bald eagle nest. WDFW recommends buffering bald eagle nests within a two-zone management system similar to the USFWS guidelines, but with a primary zone within 400 feet of the nest and a secondary zone between 330 and 880 feet of the nest. For wintering eagles, 800- to 1,000-foot buffers around perching areas have been recommended where little screening cover is present (WDFW 2004). CDFG has not developed bald eagle protection guidelines for California, and reasonable measures may vary depending on site-specific and project-specific conditions. The bald eagle guidelines for the SPRA Master Plan should be developed in coordination with the wildlife agencies and based on site-specific information and the best available scientific information regarding the bald eagle.

The bald eagle management and design guidelines should be designed to avoid "take" of bald eagles as defined under the state and federal Endangered Species Acts and Bald and Golden Eagle Protection Acts, so that a take permit will not be necessary. However, even with these guidelines in place, if any federally funded or permitted activities take place that may affect bald eagles, a formal Section 7 Consultation with the USFWS shall be necessary. The bald eagle management and design guidelines could be a useful component in assisting any Section 7 Consultation that takes place, to

provide assurance to the USFWS that species impacts will be adequately minimized.

## **6.2 Northern Goshawk**

Any project component that would involve the removal of potential nest trees must be surveyed for the presence of a northern goshawk nest. The USFS has implemented a survey protocol for northern goshawk on USFS lands, *Survey Methodology for Northern Goshawks in the Pacific Southwest Region* (USFS 2000). This survey protocol is typically applied to USFS logging activities on state forest and non-state forest land; however, this survey methodology is recommended for implementation of the SPRA Master Plan project components as well. As with bald eagle, tree removal shall not take place until confirming an active northern goshawk nest does not occur within the trees planned for removal.

For activities planned adjacent to non-USFS lands, databases and resource agencies should be consulted for the location of known northern goshawk protected activity centers (PACs) (USFS 2004). To date, no northern goshawk PACs are known to occur within the SPRA. PACs are delineated to include the known and suspected nest stand and to designate the best available 200 acres of forested habitat in the largest continuous patches based on aerial photography. If PACs occur within the SPRA, directed surveys to establish the location or activity of the nest or PAC are necessary. The USFS also recommends maintaining a limited operating period (LOP) prohibiting activities occurring within approximately 0.25 mile of a goshawk nest during the breeding season (generally February 15 through September 15). The LOP would not apply to existing recreational trail use or maintenance or continued recreation use such as those at SPRA, however, new construction activities associated with the Master Plan projects would be subject to USFS protocol guidelines. The LOP may be waived for individual projects or activities of limited activity and duration or when a biological evaluation determines that such projects are unlikely to result in breeding disturbance. The LOP may be reduced if the biological evaluation concludes that a nest site would be shielded from the proposed activity by natural topographic features that would minimize disturbance. If a northern goshawk nest is identified, the CDFG and/or USFS should be consulted on subsequent impact avoidance measures.

## **6.3 California Spotted Owl**

As with northern goshawk, a similar USFS survey protocol is recommended for California spotted owl and is based on the presence of owl PACs within the project site. This survey protocol is typically applied to USFS logging activities on state forest and non-state forest land; however, this

methodology is recommended for implementation of the SPRA Master Plan project components. A California spotted owl protected activity center is identified by the USFS in the southeastern corner of the SPRA (USDA, USFS, pers. comm. 2004, Susan Yasuda). As with bald eagle and northern goshawk, tree removal shall not take place until confirming an active northern goshawk nest does not occur within the trees planned for removal.

For activities planned adjacent to non-USFS lands, databases and resource agencies should be consulted for the location of known northern goshawk protected activity centers (PACs) (USFS 2004). PACs are delineated using aerial photographs to include the known and suspected nest stand and to designate the best available 300 acres of contiguous forested habitat in the largest continuous patches. If PACs occur within the SPRA, directed surveys to establish the location or activity of the nest or PAC are necessary. The USFS recommends a LOP during the breeding season (generally March 1 through August 31) unless directed surveys conducted prior to confirmed no spotted owls were nesting. The LOP may be waived for individual projects or activities of limited activity and duration or when a biological evaluation determines that such projects are unlikely to result in breeding disturbance. The LOP may be reduced if the biological evaluation concludes that a nest site would be shielded from the proposed activity by natural topographic features that would minimize disturbance.

#### **6.4 Other Raptors**

Construction activities are not expected to occur during the rainy season; however, nesting territories of other raptor species could be established from December through spring to late-summer months during the time of construction start. Specifically, resident owl species are known to initiate nest building and breeding during early winter months. For this reason, pre-construction nesting raptor surveys should be performed within the SPRA. Based on the final grading plans for specific SPRA Master Plan projects, any trees that are planned for removal must be surveyed for the presence of active raptor nests. A pre-construction raptor survey is recommended to determine the activity status of any identified raptor nests within the SPRA including a 500-foot buffer from construction activities, if construction of any new facilities is expected to occur during the nesting season (January-August). The survey should be conducted by a qualified biologist no more than 30 days prior to the start of construction activities. If more than 30 days lapse between the survey and the start of construction, an additional survey must be performed. If the nests are found and considered to be active, construction activities should not occur within 500 feet of the nests until the young have fledged and the appropriate resource agencies (USFS, USFWS, or CDFG) should be consulted. If construction activities are

proposed to occur during the non-breeding season (August-December), a survey is not required and no further studies are necessary.

## **6.5 California Red-Legged Frog**

Protocol surveys should be performed to determine the presence or absence of California red legged-frog within the SPRA following the USFWS survey protocol (USFWS 2005b). Areas to be subject to protocol-level surveys include potential habitat (aquatic breeding habitat, dispersal, aquatic non-breeding habitat, and upland habitat) located within the impact footprint of the two span bridges and campground areas where campsites are planned for removal within 50 feet of drainage ways; survey areas should only be confined to impact area footprints for the intended activities.

The USFWS protocol shall be followed during all protocol-level surveys and shall be consulted on specific day and nighttime survey protocols and restrictions on timing of surveys (USFWS 2005b). The USFWS recommends a total of up to eight surveys (not exceeding) to determine the presence of red-legged frog at or near a project site. Surveys can begin anytime during January and should be completed by the end of September. Two day and four night surveys are recommended during the breeding season; one day and one night survey are recommended during the non-breeding season. The main purpose of day surveys during the breeding season is to look for larvae, metamorphs, and egg masses; the main purpose of daytime surveys during the non-breeding season is to look for metamorphosing sub-adults, and non-breeding adults. The main purpose of night surveys is to locate adult and metamorphosed frogs. The USFWS requires that at least seven days take place between surveys and the survey period must be over a minimum six-week period. This methodology is intended to cover periods when various life stages of red-legged frogs are identifiable within breeding and upland aestivation habitat i.e. adult frogs are most likely to be detected at night between January 1 and June 30, in the vicinity of a breeding location, whereas, sub-adults are most easily detected during daylight hours from July 1 through September 30 (USFWS 2005b). While approaching the creek to be surveyed, surveyors should listen for frog calls for a few minutes prior to disturbing the survey site. Surveyors should walk the entire length of the creek or stream being surveyed while repeatedly scanning for frogs. Surveyors may enter the water if necessary once it has been determined no egg masses will have been crushed and visually scan all shoreline and aquatic habitats. Generally, surveyors shall scan all open water to at least 6.5 feet up the bank. When walking along the shoreline or wading through water, surveyors should be careful to not disturb habitat cover. The results of directed surveys should be reported to the USFWS as indicated by the federal protocol (USFWS 2005b). If any of these species are identified within

the SPRA, CDFG and/or the USFWS shall be consulted on subsequent impact avoidance measures.

## **6.6 Proposed California Red-legged Frog Critical Habitat**

As stated previously, SPRA is located within a formally proposed California red-legged frog critical habitat unit. The USFWS published a proposed rule to re-establish critical habitat in El Dorado County (Critical Habitat Unit 3) and other areas where critical habitat was originally designated (USFWS 2001). Based on a revised proposal for critical habitat designation, the USFWS has proposed to designate Spivey Pond (ELD-1) as critical habitat, one of the five remaining extant California red-legged frog populations in the Sierra Nevada foothills (USFWS November 2005). Spivey Pond is not located within the SPRA. To date, the final designation of critical habitat for California red-legged frog has not been determined.

To qualify as California red-legged frog critical habitat, an area must exhibit "constituent elements" as defined in the formal critical habitat designation. The "constituent elements" of critical habitat for California red-legged frog consist of three components: (1) two or more suitable aquatic breeding locations with a permanent water source, within 1.25 miles of one another; (2) a 300-foot upland area, surrounding the aquatic habitat; and (3) a barrier-free dispersal corridor, at least 300 feet in width, between aquatic breeding sites. Projects can be designed to avoid potential impacts to red-legged frog critical habitat by providing 300-foot setbacks from aquatic habitat, and providing at least 300-foot-wide habitat connections for dispersal between aquatic sites. If avoidance cannot be accomplished, formal consultation with USFWS pursuant to section 7 of the Endangered Species Act may be necessary to ensure that the SPRA Master Plan elements do not result in adverse modification of critical habitat, i.e., changes in critical habitat characteristics that jeopardize the survival or recovery of the species.

The California red-legged frog recovery plan includes several recovery actions which could be pertinent to this project. These include (a) developing guidelines for fire management practices to decrease chances of incidental impacts to red-legged frogs, (b) reducing the effects of timber harvesting on red-legged frogs and their habitat, and (c) developing site-specific guidelines for recreational activities to reduce or eliminate impacts to the California red-legged frog where these activities pose an on-going threat to habitat quality. The SPRA Master Plan and the Forest Management Plan could incorporate these measures to promote the recovery of the California red-legged frog.

## **6.7 Foothill Yellow-legged Frog**

Protocol-level surveys performed for California red-legged frogs will also be used to determine the presence or absence of foothill-yellow legged frogs as this species has the potential to occur within the same general habitats within the SPRA. The directed survey methodology for this species should be implemented in the same manner as protocol California red-legged frog surveys. If foothill yellow-legged frogs are identified within the SPRA, CDFG and/or the USFWS shall be consulted on subsequent impact avoidance measures.

## **6.8 Special-status Plant Species**

Additional rare plant surveys are recommended prior to implementing specific projects under the SPRA Master Plan, focusing on the specific area of proposed disturbance during the appropriate season for detecting the species. Special attention shall be given to Pleasant Valley mariposa lily, which has a high likelihood of occurrence on the north side of the SPRA.

CDFG recommends a sufficient number of visits spaced throughout the blooming period of all special-status plant species to accurately determine their presence or absences of special-status plant species (CDFG 2000). Generally, the blooming period to cover all target plant species includes February through October. Field surveys performed during June and July 2004 adequately covered the mid-blooming range of target plant species; however additional surveys are recommended before and after these months in order to catch early- and late-blooming target plant species. A minimum of two additional surveys are recommended, one during late-winter and spring months and one to cover early fall months.

If special-status species are found, plant locations will be described and mapped and the project shall be designed to avoid impacts to the extent practicable. A mitigation plan developed from consultation with CDFG and CNPS should be prepared. The plan should detail the various mitigation approaches to ensure no-net-loss of special-status plants. Examples of mitigation include avoidance of the resource, salvage of plant materials where possible, acquisition of credits at an approved mitigation bank, or acquisition and preservation of property that supports these species. Preservation management strategies shall be developed in consultation with the appropriate resource agencies. For example, populations may be avoided and fenced if found where proposed trails or camping facilities are to be placed. Vegetation rehabilitation activities currently proposed under the SPRA Master Plan may be sufficient mitigation although consultation resource agencies shall be conducted to define an appropriate mitigation plan. If no

special-status plant species are observed, no further mitigation would be required.

### **6.9 Western Pond Turtle**

A pre-construction clearance survey for western pond turtle is recommended prior to construction activities occurring within potential habitat. Potential habitat for western pond turtle occurs along Sly Park and Hazel creeks and potentially other perennial, slow-moving drainages. The clearance survey should be performed during April through May when western pond turtle are most active and identifiable. It is assumed construction is not going to take place during the rainy season, a period when western pond turtle would be less identifiable. Open water areas with emergent vegetation with open rocks for basking should be adequately surveyed to determine the presence or absence of western pond turtle within the creek corridors. The areas to be subject to clearance surveys should be based upon final grading plans for each project element, specifically the two span bridges and campground reconfigurations. If western pond turtle are not observed, construction activities can proceed as scheduled. If western pond turtle are observed, the USFWS and/or CDFG should be consulted on subsequent impact avoidance measures.

### **6.10 Federally Sensitive Invertebrate Species**

Prior to construction occurring within any creek corridors, these potential habitat areas should be surveyed to determine the presence or absence of Button's Sierra sideband, Gold rush hanging scorpionfly, South Forks ground beetle, and spiny rhyacophilan caddisfly. A qualified entomologist or invertebrate zoologist shall be retained that is familiar with the biology, habitat requirements, and identification of these species. An adequate number of surveys must be performed over a period when the invertebrate species are identifiable. These species are assumed to active and identifiable year-round. If any of these federally sensitive invertebrate species are identified within the SPRA area, the USFWS should be consulted on subsequent impact avoidance measures. If these species are not identified, bridge construction can proceed as scheduled.

### **6.11 Potential Bat Roost Habitat**

Prior to the removal of any trees or structures within the SPRA, a clearance survey shall be performed for bat roosts. The pre-construction survey should be conducted by a qualified biologist familiar with the identification of bat species and roosting sign. If special-status roosting bats are found during the pre-construction survey, CDFG of the USFWS should be consulted regarding measures to minimize impacts to roosting bats during construction. No trees or park facility structures will be removed that is utilized as by

roosting bats. If special-status bats are not found during the pre-construction survey, no mitigation measures would be necessary for special-status bats.

### **6.12 Potential Waters of the U.S.**

Prior to any activities that could result in fill of potential waters of the U.S including Sly Park Creek, Hazel Creek, Carpenter Creek, Jenkinson Lake, and other drainages or mesic areas, a formal wetland delineation subject to the Corps 1987 manual should be conducted within the entire the SPRA. Prior to issuance of a grading permit, a formal wetland delineation report and map must be submitted to the Corps requesting verification of the wetland delineation map for the SPRA Master Plan project. A wetland delineation map must be prepared and verified by the Corps prior to construction and issuance of a grading permit to identify the extent of jurisdictional wetlands as areas to avoid during construction of SPRA Master Plan elements. If the 50- to 100-foot setback from potential waters can prove avoidance of potential waters of the U.S., then a Corps 404 permit would not be required as project-related impacts would not be impacting jurisdictional features. For project elements that will be occurring within the 50- and 100-foot creek buffers, impact to waters of the U.S. shall be determined from final grading plans for each specific project element. Based on the final grading plan and the verified wetland delineation map, if jurisdictional areas cannot be avoided, the appropriate 404 permit shall be obtained.

The appropriate terms of mitigation including the wetland acreage to be mitigated for would be defined in the issued Corps permit. Any wetlands or waters of the U.S. that would be lost or disturbed should be replaced or rehabilitated on a "no-net-loss" basis at a ratio of 1:1 or greater in accordance with the Corps' mitigation guidelines. Habitat restoration, rehabilitation, and/or replacement should be at a location and by methods agreeable to the Corps. The onsite restoration of existing riparian corridors and waterways already proposed under the SPRA Master Plan may be sufficient mitigation as long as restoration constitutes a no-net-loss of wetland habitat based on the calculated impact acreage.

Construction of SPRA Master Plan elements may indirectly impact unnamed tributaries, creeks, or Jenkinson Lake from runoff during construction. If indirect impacts have the potential to occur during construction activities, additional measures may be required to maintain water quality standards of the waterways. If a 404 permit is required for the SPRA Master Plan, water quality concerns during construction would be addressed in a required Section 401 water quality certification by the Regional Water Quality Control Board. A Storm Water Pollution Prevention Program (SWPPP) may be required during construction activities in conjunction with the 401 water

quality certification. SWPPPs are required in issuance of a National Pollutant Discharge Elimination System (NPDES) construction discharge permit by the U.S. Environmental Protection Agency. Implementation of Best Management Practices (BMPs) during construction is standard in most SWPPPs and water quality certifications. Examples of BMPs include stockpiling of debris away from regulated wetlands and waterways; immediate removal of debris piles from the site during the rainy season; use of silt fencing and construction fencing around regulated waterways; and use of drip pans under work vehicles and containment of fuel waste throughout the site during construction.

### **6.13 Riparian and Stream Habitat**

A Streambed Alteration Agreement shall be obtained from CDFG, pursuant to Section 1602 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank or associated riparian vegetation of any stream on the project site. Appropriate mitigation measures would be developed in coordination with CDFG in the context of the 1602 agreement process.

### **6.14 Forest, Woodlands, Trees**

In order for the SPRA Master Plan to comply with General Plan Policy 7.4.4.4 and for a grading permit to be issued under General Plan Policy 7.4.4.5, a certified arborist shall be retained to calculate the percentage of tree canopy to be removed versus the percentage to be retained under each project element. Proposed facilities shall demonstrate that the above canopy retention standards are established and met for all new developments; additionally, the arborist and site plans must identify and demonstrate that the healthiest trees within a stand are avoided. Policy 7.4.4.4 would not apply to current fuel load management practices in place within SPRA.

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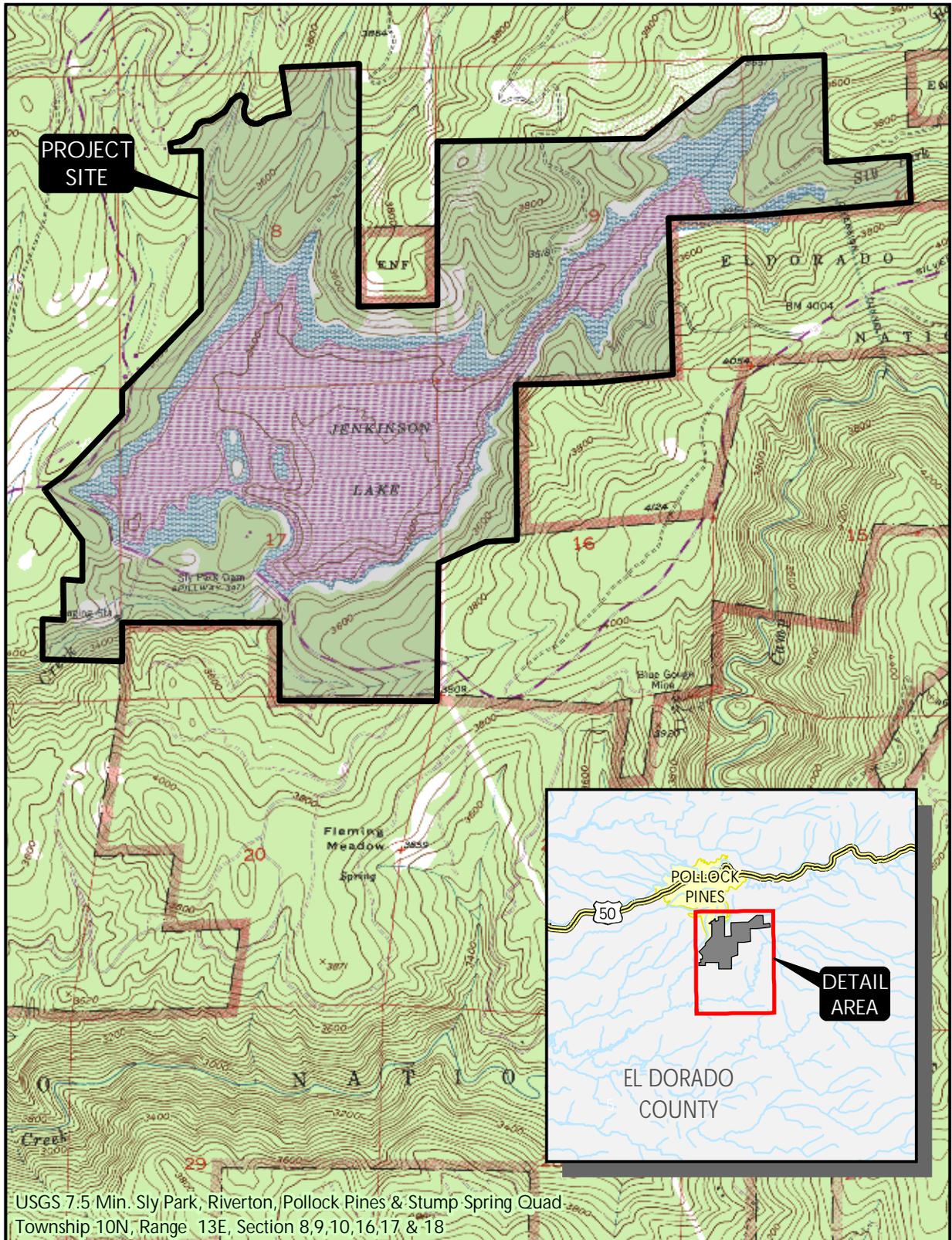
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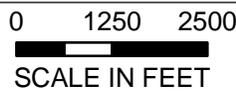
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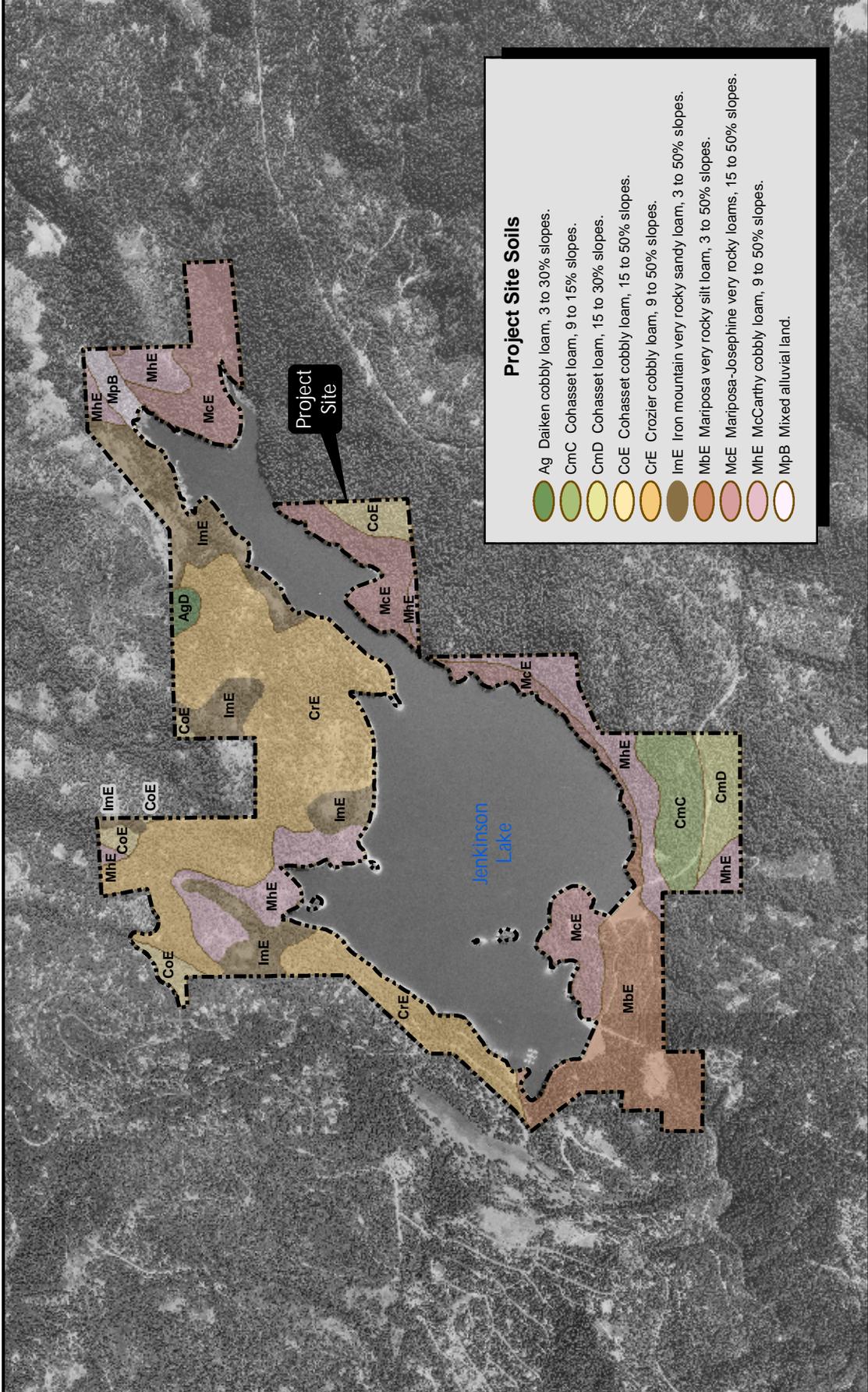
USGS 7.5 Min. Sly Park, Riverton, Pollock Pines & Stump Spring Quad  
 Township 10N, Range 13E, Section 8,9,10,16,17 & 18

SITE AND VICINITY



Drawn By: AH  
 Date: 09/15/05

FIGURE 1



**Project Site Soils**

- Ag Daiken cobbly loam, 3 to 30% slopes.
- CmC Cohasset loam, 9 to 15% slopes.
- CmD Cohasset loam, 15 to 30% slopes.
- CoE Cohasset cobbly loam, 15 to 50% slopes.
- CrE Crozier cobbly loam, 9 to 50% slopes.
- ImE Iron mountain very rocky sandy loam, 3 to 50% slopes.
- MbE Mariposa very rocky silt loam, 3 to 50% slopes.
- McE Mariposa-Josephine very rocky loams, 15 to 50% slopes.
- MhE McCarthy cobbly loam, 9 to 50% slopes.
- MpB Mixed alluvial land.

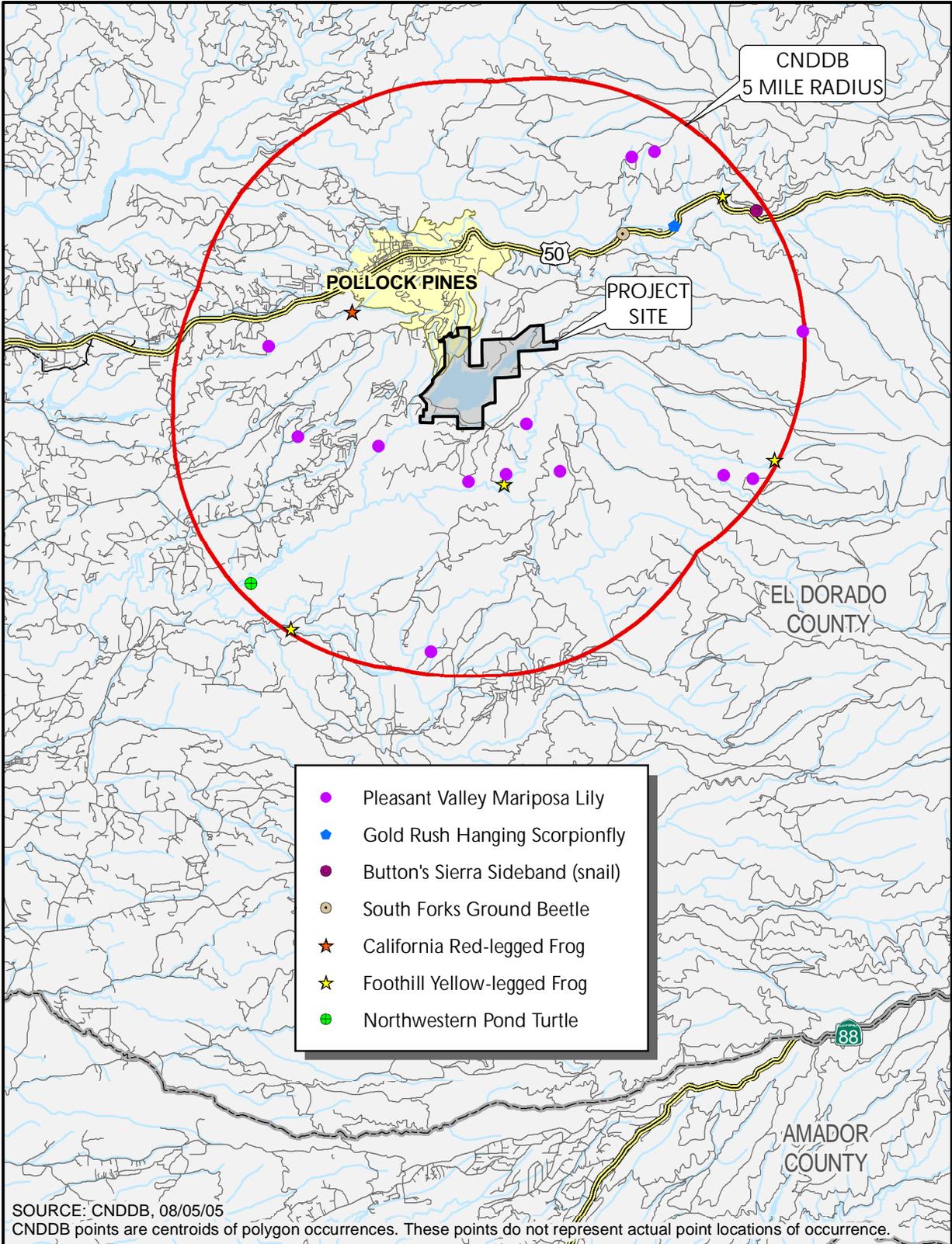
**SOILS**

**FOOTHILL ASSOCIATES**  
 ENVIRONMENTAL CONSULTING • PLANNING  
 LANDSCAPE ARCHITECTURE



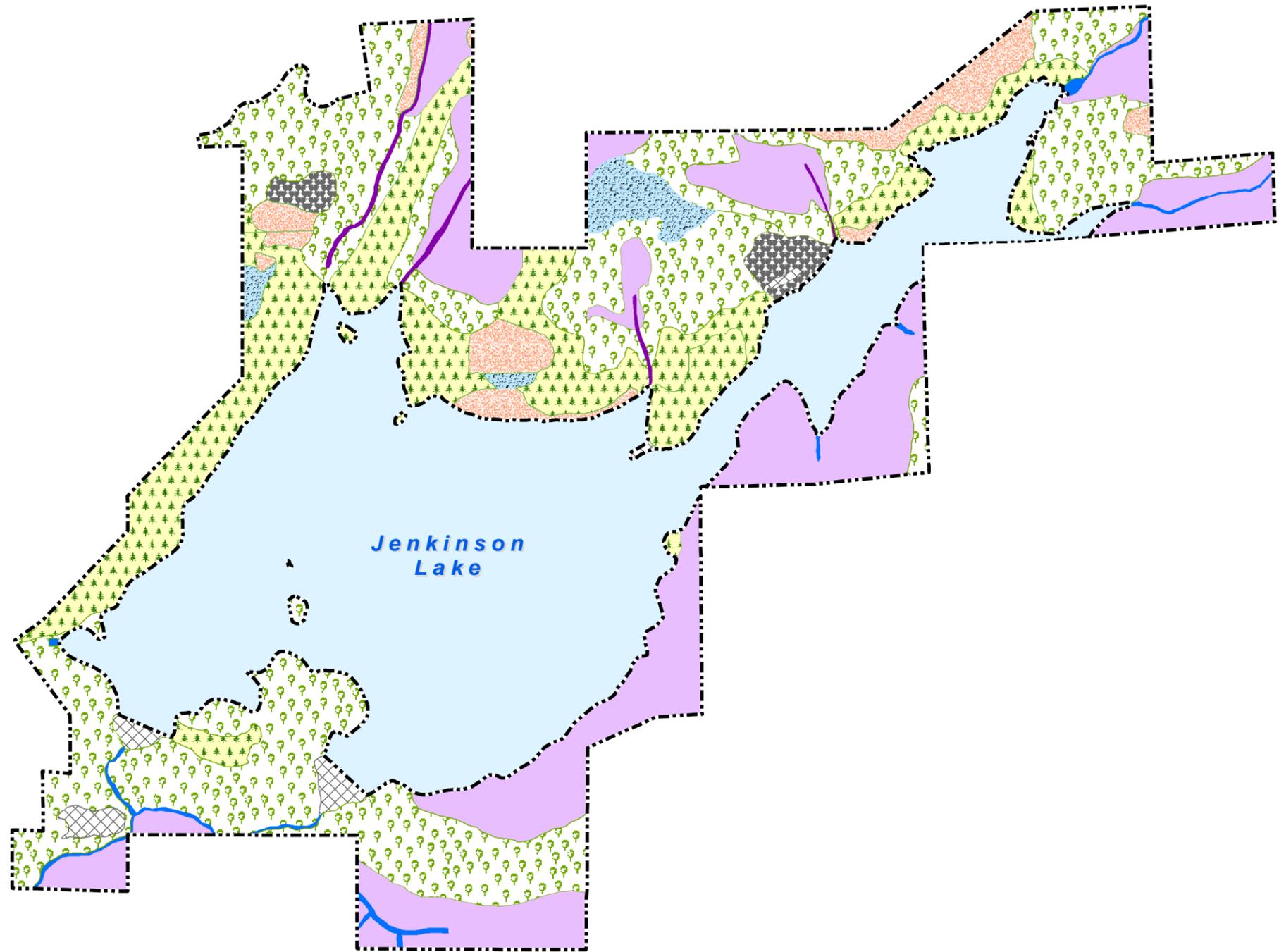
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 Date: 11/09/05

**FIGURE 2**



**CNDDB**

 <p><b>FOOTHILL ASSOCIATES</b>  <small>ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE</small></p>	<p>N</p>  <p>0 1 2  <b>SCALE IN MILES</b></p>	<p>Drawn By: AH      Date: 09/21/05</p>	<p><b>FIGURE 3</b></p>
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HABITAT TYPES	
VEGETATION TYPES	ACREAGE
Mixed Conifer Series	426.82
Douglas Fir Series	285.21
Ponderosa Pine Series	214.22
Montane Hardwood Conifer	17.56
Deer Brush Series	24.21
Wedge Leaf Ceanothus Series/Grassland	56.08
Riverine	6.08
Montane Riparian	8.82
Lacustrine	651.62
<b>TOTAL</b>	<b>1690.62</b>

Other     
 Boundary

PLANT COMMUNITIES & HABITAT TYPES



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Appendix F  
Geologic/Geotechnical Considerations

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**GEOLOGIC/GEOTECHNICAL  
CONSIDERATIONS  
FOR THE  
SLY PARK RECREATION MASTER PLAN AND  
ENVIRONMENTAL IMPACT REPORT**

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Project No. 04264

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**GEOLOGIC/GEOTECHNICAL CONSIDERATIONS  
FOR THE  
SLY PARK RECREATION MASTER PLAN AND  
ENVIRONMENTAL IMPACT REPORT**

**1.0 INTRODUCTION**

The purpose of this reconnaissance level Geologic/Geotechnical Study is to evaluate the existing geologic and geotechnical reports pertaining to the site, and to provide an Environmental Impact Report level evaluation of geologic and geotechnical impacts which may be encountered by the project. To achieve the objective of addressing the geologic and geotechnical issues for the project, *Youngdahl Consulting Group, Inc.* has adhered to the California Environmental Quality Act (CEQA) and the California Geological Survey (CGS) Note 46 regarding the Guidelines for Geologic/Seismic Considerations in Environmental Impact Reports.

**1.1 Project Location and Description**

The Sly Park Master Plan and EIR project includes the Sly Park Dam and Jenkinson Lake, located on Sly Park Creek about 3 miles south of the Community of Pollock Pines and 14 miles east of Placerville in El Dorado County, California. The property is composed of approximately 2,037 acres. The project is bordered by mixed Forest Service and privately owned land. The area along Sly Park Road, west of and outside of the project area includes some residential property with the rest of bordering private property being predominately owned and operated by lumber companies. The location of the project is within portions of Sections 7, 8, 9, 10, 16, 17, 13, and 18 of Township 10 North and Range 13 East of the Mount Diablo Base and Meridian.

Improvement plans call for the construction of a fine arts camp on the south side of the lake, a conference center on the southwest portion of the lake shore, and tent cabin facilities on ridges above the north lake shore.

**1.2 Services Performed**

Research of published and unpublished geological and geotechnical literature pertaining to the site and immediate vicinity was performed. Geological maps and reports by the California Geological Survey were reviewed. Data compiled from this literature was used to generate a geological description of the site, a preliminary site reconnaissance to verify California Geological Survey map data was conducted also. The data and information from the above activities were reviewed, analyzed, and summarized to prepare this report.

**2.0 EARTH**

**2.1 Topography**

Topography within the project is dominated by the reservoir basin. The reservoir basin represents the confluence of three major drainages, that of an unnamed drainage (on the USGS 7.5 minute topographic map), Hazel creek, and Sly Park Creek. Elevations range from about 3280 feet Mean Sea Level (MSL) below the Sly Park Dam to approximately 4000 feet on knolls and ridges north of the lake. Numerous smaller drainages enter the area from the north, east, and south sides.

**2.2 Geology**

**2.2.1 Regional Geologic Setting**

The project is located within the upper Sierra Nevada Foothills. Rock types found in the area includes volcanic and metamorphic rocks. The area lies between the Foothills Fault System and the fault systems associated with the western edge of the Basin and Range Province such as the Genoa or Lake Tahoe faults.

Loyd (1987) summarizes regional geology of the Sierra Nevada Foothills in the project area, based upon published information, as being comprised of three major tectonic terranes dominated by a

series of north to northwest trending fault systems; the Western Terrane, the Central Terrane (Calaveras Complex), and the Eastern Terrane (Shoo Fly Complex). The project site lies in the eastern terrane which Loyd describes as being bounded on the east by the intrusive contact of the granitoid rocks of the Sierra Nevada Batholith and on the west by the faults of the Calaveras-Shoo Fly thrust.

### **2.2.2 Site Geologic Setting**

The project is underlain by three major rock units: the Shoo Fly Complex, the Valley Springs Formation, and the Mehrten Formation (Figure 1). The Shoo Fly Formation is comprised of highly deformed and somewhat chaotic Early to Middle Paleozoic Miogeoclinal Rocks of predominately quartzofeldspathic schist and gneiss, quartz-mica schist, and phyllite (Loyd, 1987). The best exposures in the project area are along the southern lake shore, in the vicinity of the dam abutments, and in the rock quarry below the dam.

The Valley Springs Formation is of Oligocene to early Miocene in age (Schweikert, 1981), and was deposited unconformably onto the eroded surface of the Shoo-Fly Complex. Locally, it is composed primarily of rhyolitic ashflow tuffs and alluvial deposits derived mainly from rhyolitic volcanic rocks. Welded tuffs are exposed as resistant slopes on and above portions of the north shore of the lake and are well exposed in the cuts of campground access roads along the lake.

According to Schweikert (1981), the Mehrten Formation is part of a group of andesitic volcanic events that occurred after a 5 to 10 million year hiatus from the rhyolitic volcanics. The Mehrten Formation in the project area is represented mostly by volcanic mudflow rocks (agglomerates) derived from andesitic ash and vulcanism to the east in the Sierra Nevada. The deposits traveled down stream channels and valleys carved within the underlying rock and form the resistant ridge top capping units (lava cap) found in the Pollock Pines to Placerville area. The best exposures of the Mehrten Formation within the project are along a section of the south lake shore, on Scout Hill on the north side of the project, in road cuts along Sly Park Road north of the project, and in road cuts along Mormon Emigrant Trail a few hundred feet south of the south dam.

### **2.2.3 Soils & Climate**

Soils across the site tend to vary in accordance with differences in parent material, drainage, and age or degree of development since their deposition. The Soil Conservation Service has prepared a Soil Survey of El Dorado Area, California, dated 1974. The soils surrounding Jenkinson Lake consists mostly of Cohasset loam, Cohasset cobbly loam, Crozier cobbly loam, Mariposa very rocky silt loam, Mariposa-Josephine very rocky loams, and mixed alluvial land with minor amounts of Iron Mountain very rocky sandy loam. The following descriptions are summarized from the above referenced report, but are not representative of geotechnical engineering properties; which can only be established through site and project specific geotechnical studies.

**Cohasset Series** consists of well-drained soils underlain by weathered andesitic conglomerates at a depth greater than 40 inches. It is gently to strongly sloping on smooth ridges and moderately steep to steep on the sides of the ridges. The top layer is brown to a yellowish-red cobbly loam, slightly hard and friable soil. The permeability is moderate, surface runoff is medium to rapid, and the erosion hazard is moderate to high. The soil provides fair to poor topsoil and makes fair to poor road fill. This soil is severely limited for use for septic system leach fields where it occurs on steeper slopes.

**Crozier Series** consists of well-drained soils that are underlain by andesitic conglomerate at a depth of 24 to 40 inches. It is strongly sloping on ridges and moderately steep to steep on the sides of the ridges. The surface layer is brown to reddish-brown, slightly acidic and medium acid and

strongly acid cobbly heavy loam and cobbly clay loam approximately 20 inches thick. Parent material consists of weathered andesitic breccia at a depth of approximately 36 inches. Permeability is moderate, surface runoff is medium to rapid, and the erosion hazard is moderate to high. The Crozier series provides fair topsoil and is fair to poor for use as road fill. This soil is severely limited for use for septic system leach fields due to slopes and the shallowness of bedrock.

**Iron Mountain Series** consists of dark brown, medium acid cobbly sandy loam approximately 12 inches thick, underlain by hard volcanic breccia. Permeability is moderately rapid, surface runoff is medium to rapid, and the erosion hazard is slight to high. The Iron Mountain Series has a poor suitability as topsoil but does make good road fill. This soil is severely limited for use for septic systems due to the shallowness of bedrock and the steepness of slopes in some places.

**Mariposa Series** consists of a pink surface layer, medium acid gravelly silt loam approximately 8 inches thick. Subsoil is reddish-yellow, medium and strong acid gravelly silt loam approximately 18 inches thick. It is underlain by schists or slate at approximately 26 inches depth. Permeability is moderate, surface runoff is medium to rapid, and the erosion hazard is slight to high. The Mariposa Series is poorly suitable for topsoil but does provide fair road fill. This soil is severely limited for use for septic systems due to slopes and the shallow bedrock.

**McCarthy Series** consists of a surface layer that is a dark grayish brown to brown, slightly acid cobbly loam approximately 10 inches thick. Subsoil is strong brown, medium acid very cobbly loam approximately 28 inches thick. This is underlain by weathered andesitic conglomerate. Permeability is moderate, surface runoff is medium to rapid, and the erosion hazard is moderate to high. The McCarthy Series is poorly suitable for topsoil but is fairly suitable as a source for road fill. This soil is severely limited for use for septic systems due to slopes and the shallow bedrock.

**Mixed Alluvial Land** consists of small areas of recent mixed alluvium adjacent to stream channels. It is variable in color and is stratified from gravelly sand loam, loam, and clay loam that grades into sand and gravel as the depth increases. Depth to unrelated underlying rocks is approximately 36 inches. The soil is moderately well-drained to poorly drained. Permeability is rapid to slow, surface runoff is slow to medium, and the erosion hazard is moderate.

The climate of the western portion of El Dorado County is characterized by warm dry summers and cool moist winters with mild spring and fall seasons. The precipitation in the Sly Park Area usually ranges from 40 to 50 inches per year. Temperatures may range from below freezing to well over 100 degrees Fahrenheit, the temperature averages about 60 degrees Fahrenheit (Rogers, 1974).

**Table 1 - Soil Engineering Properties (From Soil Survey of El Dorado Area, 1974)**

<b>Soil Series</b>	Cohasset Loam 9-15% slopes	Crozier cobbly loam 9-50 % slopes	Iron Mountain very rocky sandy loam, 3 - 50% slopes	Mariposa very rocky silt loam 3-50% slopes	Mariposa-Josephine very rocky loams, 15 - 50 % slopes	McCarthy cobbly loam, 9-50% slopes
Depth to Bedrock (feet)	3.5 - 5.0+	2.0 - 3.5	0.5 - 2.0	1.5 - 2.5	3.5 - 5.0	2.0 - 3.5
Unified Texture*	ML & CL	ML & CL	SM	SM & ML	ML, CL, & GM	SC or SM
Coarse Fragments greater than 3 inches (%)	0 - 35	10 - 35	10 - 20	0	0 - 5	15 - 65
Percent Passing No. 4 Sieve	85 - 100	95 - 100	75 - 95	60 - 90	35 - 100	70 - 80
Percent Passing No. 10 Sieve	80 - 90	85 - 95	65 - 90	55 - 85	30 - 100	65 - 75
Percent Passing No. 40 Sieve	75 - 85	70 - 85	45 - 65	50 - 80	25 - 95	55 - 70
Percent Passing No. 200 Sieve	50 - 75	60 - 70	25 - 35	40 - 70	20 - 85	35 - 50
Atterberg Liquid Limit	10 - 50	20 - 40	20 - 30	20 - 30	20 - 40	20 - 30
Atterberg Plasticity	0 - 25	5 - 25	0 - 10	0 - 5	0 - 30	5 - 10
Permeability (inches per hour)	0.63 - 2.00	<b>2.0-6.30</b>	2.0 - 6.30	0.63 - 2.00	0.63 - 2.00	0.63 - 2.00
Available Water Holding Capacity (inches per inch of soil)	0.13 - 0.17	0.13 - 0.18	0.08 - 0.10	0.12 - 0.14	0.07 - 0.18	0.10 - 0.12
Reaction (pH)	5.1 - 6.0	5.1 - 6.5	5.6 - 6.0	5.1 - 6.5	4.5 - 6.0	5.1 - 6.5
Shrink-Swell Potential	Low - Moderate	Low - Moderate	Low	Low	Low- Moderate	Low
Corrosivity	Moderate	Moderate	Low	Low	Moderate	Moderate

\* Unified Soil Classification Texture System

### **2.3 Potential Earthquake Hazards & Impacts**

According to the Fault Activity Map of California and Adjacent Areas (Jennings, 1994) and the Peak Acceleration from Maximum Credible Earthquakes in California (CDMG, 1992), no active faults or Earthquake Fault Zones (Special Studies Zones) are located on the project site. No evidence of recent or active faulting was observed during our field study.

Jennings' (1994) map shows two possible Cenozoic fault traces (dashed and question marked on the map) extending northeasterly along the north and south shores of Jenkinson Lake. In Jennings' discussion accompanying the map, he describes the method of fault identification as using offsets in Mehrten and other late Cenozoic formations to identify locations of late Cenozoic deformation, or the use of gradient changes on significant geomorphic surfaces to identify potential fault features. The inference is that this map faulting is uncertain and based on generalized potential indicators of faulting. Based upon our review of the literature, previous geologic mapping, and our geologic reconnaissance, it is our opinion that there is no unequivocal evidence of any fault movement within the project area.

#### **2.3.1 Seismic Considerations**

According to the Division of Mines and Geology's publication Fault Rupture Hazard Zones in California (Hart, 1990) there are no Alquist Priolo Special Studies Zones in El Dorado County. According to the California Division of Mines and Geology (Jennings, 1994) the nearest mapped faults to the site other than those discussed above are the east and west branches of the Melones Fault Zones located 11 miles and 12 miles, respectively, west of the project site. The nearest mapped active fault (Holocene) to the project site is the North Tahoe Fault located about 33 miles to the northeast. Maximum probable accelerations from a seismic event are estimated to be on the order of 0.3g (percent of gravity) with a 10% probability of exceedence in 50 years (Petersen, CDMG OFR 96-08, 1996). A deterministic table of faults and estimated ground accelerations is attached as Table 2.

## **3.0 IMPACTS**

### **3.1 Fault Movement**

No unequivocal evidence of fault movement has been identified within the project area. All fault movement impacts can be expected to come from fault movement outside of the project area. Seismic ground shaking can trigger localized ground motion effects such as liquefaction, seismic settlement, landslides, and localized ground rupture.

### **3.2 Liquefaction**

Liquefaction is the sudden loss of soil shear strength and sudden increase in porewater pressure caused by shear strains, as could result from an earthquake. Research has shown that saturated, loose to medium-dense sands with a silt content less than about 25 percent located within the top 40 feet are most susceptible to liquefaction.

The only area with significant amounts of alluvium is located where Hazel Creek enters Jenkinson Lake. No other areas of significant alluvium were observed.

### **3.3 Landslides**

Mass movement refers to the downward movement of rock and soil due to gravity once they have been displaced from their normal positions. Soil creep and shallow landsliding is occurring on the steeper slopes of the project site. Lake shore erosion at high water is undermining the banks, creating localized areas of instability. Seismic events are likely to trigger small localized areas of landslides and shoreline bank collapse, especially when the soil is saturated. Areas of

oversteepened slopes undergoing soil creep and landsliding must be addressed during grading operations as cut slopes alter current slope stability. Our field reconnaissance reveals a moderate potential impact from soil creep and landslides. **(Impact 1)**

### **3.4 Differential Compaction/Seismic Settlement**

Fine-grained soil and clay are subject to seismic settlement and differential compaction. Areas underlain by low-density silts and clays associated with fluvial depositional environments are suspect to seismically-induced settlement. These environments include old lakes, sloughs, swamps, dredge tailing ponds, and stream beds. The amount of compaction may range from a few inches to several feet. The potential for differential compaction is highest and occurs over the largest areas during large earthquakes.

The soil observed in cuts and surface exposures at the project were clayey and silty SANDS (SC/SM) with only minor amounts of sandy CLAY (CL) . Deep, loose deposits of these soils would be prone to differential compaction or seismic settlement, however, seismic settlement is not likely to occur within the project area due to the presence of the thin soil mantle developed on bedrock of relatively strong moderately weathered material. Our field reconnaissance reveals a very low potential impact from seismic settlement on slopes and ridges where the soil mantle is thin. A moderately low potential impact exists in drainage areas and within the Hazel Creek flood plain **(Impact 2)**.

### **3.5 Ground Rupture**

Given the available geologic and seismologic data, ground rupture is anticipated to be possible but highly unlikely within the site. Ground rupture would be a function of seismic settlement or landsliding inducing by seismic ground shaking. A low potential exists for impacts resulting from ground rupture at this site **(Impact 3)**.

### **3.6 Ground Shaking**

Strong earthquakes generated along any of the faults within the region may affect the site depending on the characteristics of the earthquake and the location of the epicenter. In general, the effects will be confined to those phenomena associated with shaking and/or ground acceleration. These effects can be minimized by appropriate design and construction procedures. The Uniform Building Code classifies the site as being within the seismic region Zone 3. The minimum ground accelerations used for structure design within seismic region Zone 3 is 0.3 g and agrees well with the estimated 0.3g (percent of gravity) earthquake generated ground accelerations with a 10% probability of exceedence in 50 years. A low potential for severe ground shaking exists at the project site **(Impact 4)**.

### **3.7 Tsunami**

A sea wave produced by earthquake or volcanic activity is described as a tsunami. The project is located approximately 134 miles from the California coast and no losses due to tsunamis are anticipated.

### **3.8 Seiche**

A seiche is a periodic oscillation of a body of water whose period is determined by the resonant characteristics of the containing basin. In inland lakes, these periods usually are a few minutes long. Losses due to flooding or dam failure are possible with extended duration of ground shaking at a frequency constructive with the period of the lake.

Seiches may develop within Jenkinson Lake. We consider the likelihood of seiches impacting the site to be low to moderate corresponding to the low to moderate probability of ground shaking to occur at the site. **(Impact 5).**

### **3.9 Flooding Due to Failure of Dams and Levees**

The lower portion of the project area lies below Sly Park Dam. Dams with artificial barriers 25 feet or more in height or which have an impounding capacity of 50 acre-feet or more are under the jurisdiction of the California Division of Safety of Dams. Sly Park Dam underwent periodic review by the United States Bureau of Reclamation (USBR) while under their ownership (communication with Mr. Chris Word of EID). Their last review occurred in 1996.

Failure of the dam would impact the portion of the project area located below the dam. We consider the likelihood of the flood event occurring because of failure of structures to be low however flooding could occur along drainages during periods of heavy rainfall **(Impact 6).**

### **3.10 Change in Groundwater Level**

The groundwater levels in the region are most likely controlled by the elevation of the water within Jenkinson Lake and the recharge by rainfall and streams entering the basin. Springs and areas of water saturation were observed, especially in association with the Valley Springs Formation on the north side of the project.

Very little wastewater appears to be generated within the present facilities. All campgrounds appear to use vault toilets. Future plans include facilities in the southern portion of the project, the area between the two dams, and on the ridges overlooking the north shore of the lake. If these facilities use on-site wastewater disposal, additional water infiltration could effect groundwater levels **(Impact 7).**

### **3.11 Disposal of Excavated Material**

Future grading operations could generate excess material such as soil or rock **(Impact 8).**

### **3.12 Percolation of Waste Material**

Present facilities predominately use vault toilets. Future facilities likely may include flush toilets discharging to on-site wastewater disposal systems. This could result in impacts on groundwater quality and on the water quality of Jenkinson Lake **(Impact 9).**

### **3.13 Topographic Alteration**

Because of the large areas of significant relief difference across the site topographic alteration due to grading activities could result in moderate impacts from increased sedimentation and erosion **(Impact 10).**

### **3.14 Slope Stability**

Soil creep was evidenced by exposures of shallow overturning laminar rock fabric. No clearly visible evidence of slope instability was identified during our field visit, on the project aerial photograph, or on the map prepared by Loyd (1987). However, incipient slope instability is often not readily identifiable without detailed and focused studies and therefore cannot be precluded for this project. The steeper slopes are undergoing minor soil creep and minor landsliding may be present. Construction activities resulting in ground disturbance could result in a moderate potential for accelerated soil creep and landsliding at the project site **(Impact 11).**

### **3.15 Erosion Potential**

Light erosion is presently occurring along trails and unpaved roads within the project boundary. Some light erosion is also generated by logging activities adjacent to the project. Whenever the lake reaches high water levels, wave action causes erosion along the shoreline. Construction activities resulting in ground disturbance could result in a moderate potential for accelerated soil erosion at the project site. **(Impact 12).**

### **3.16 Unstable Cut and Fill Slopes**

Gentle to steep slopes are present on the site and construction activities will likely include cut and fill slopes. As mentioned in Section 2.3.4 - Landsliding may occur on steeper portions of the property. Construction activities resulting in ground disturbance could result in a moderate to high potential for unstable cut and fill slopes at the project site **(Impact 13).**

### **3.17 Collapsible and Expansive Soil**

Soils such as collapsible silts and expansive clays can be found within areas with a fluvial depositional history. The soil mapped by the United States Department of Agriculture (1974) and observed during the site reconnaissance appears to have low to moderate collapsible or expansive characteristics. Volcanic rocks are present within the site. Certain clays developed from volcanic rocks may display expansive characteristics **(Impact 14).**

### **3.18 Trench Wall Stability**

Subsurface conditions may be somewhat variable ranging from competent to weak. The weaker soils can be expected nearer the creek channels, swale areas, and within a few feet of the ground surface. A low to moderate potential impact from trench wall stability exists at the project site **(Impact 15).**

### **3.19 Land Subsidence**

#### **3.19.1 Extraction of Groundwater, Gas, Oil, or Steam for Geothermal Use**

No gas, oil or geothermal wells are known to exist within the site. No deposits of peat are known to exist within the site. Extraction of groundwater has been known to cause land subsidence within alluvial environments. The conditions at the site consist of shallow bedrock and are mostly not alluvial environments. Land subsidence on the property is not expected to be an impact.

### **3.20 Volcanic Hazards**

Under present conditions, damage due to volcanic hazards is most likely to occur in the vicinity of Mt. Shasta, Lassen Peak, Medicine Lake Highland, Long Valley Caldera at Mono Lake (active volcanic zones) and less likely at other Quaternary volcanic hazard zones in California. Volcanic hazards zones portray potential hazards from: (1) lava flows, pyroclastic flows, mudflows, and floods; (2) from surge, including base surge, eruptions; and (3) from falling ash (tephra) (Miller, 1981).

#### **3.20.1 Lava Flow**

Lava flows from an active California volcano are not anticipated to have an impact to the site.

#### **3.20.2 Ash Fall**

Tephra from the Long Valley Caldera eruption about 700,000 years ago was thickly accumulated at least 40 miles from the source area of the eruption. However, down-wind air-fall ejecta was deposited over most of the southwestern United States. The Long Valley Caldera is located about 112 miles to the southeast of the site, the Clear Lake volcanic areas are located approximately 120 miles to the west. It is not possible to predict when or if these volcanic centers will reactivate, but

based on their past quiescence and their distance from the site, the probability is low for tephra impacts on the site. We consider the probability for tephra impact on the site to be very low. We do not consider ash fall to be a significant impact.

### **3.21 Loss of Mineral Resources**

A mineral resource is a concentration of elements in a particular location in such a form that a usable mineral commodity can be extracted from the deposit. The site is located within a gold producing region of the Sierra Nevada Mountains. Loyd (1987) shows a placer gold mine on Sly Park Creek near the eastern edge of the project area and identifies it as the Theodore Rupley Claim. Some mounds of gravel possibly related to this claim were observed on the south side of Sly Park Creek near the eastern edge of the project. A depression associated with a tailings pile, possibly indicative a collapsed exploratory tunnel, was observed on the south shore (Figure 1). The western portion of the project site is mapped as MRZ-4 (Areas where the available data do not preclude the presence or absence of mineral deposits) for all minerals by the California Geological Survey. The eastern edge of the project area is mapped by the California Geological Survey as MRZ-3a (Areas underlain by geologic settings within which undiscovered mineral resources similar to known deposits in the same producing district or region may be reasonably expected to exist) for lode gold. Due to the evidence of earlier prospecting and the lack of evidence of production, we conclude the potential loss of mineral resources to be low to moderate (**Impact 16**).

### **3.22 Naturally Occurring Asbestos**

Naturally occurring asbestos has been identified in association with ultramafic rock, fault zones, and certain hydrothermally altered mineral assemblages. Hydrothermal alteration of the Shoo-Fly Complex was observed along the Jenkinson Lake Shoreline. We consider it to be highly unlikely for naturally occurring asbestos to be associated with either the Valley Springs Formation or the Mehrten Formation. No other locations likely to be associated with naturally occurring asbestos were noted. The potential for naturally occurring asbestos to present in quantities representing a significant impact is very low.

## **4.0 HAZARDS MITIGATION**

Hazard characteristics and general code mitigation recommendations are provided below and summarized in Table 2, based on CGS Note 46.

1. Landslides (**Impact 1**). A detailed geologic and geotechnical investigation should be conducted on each site of planned improvements prior to development. These investigation should map in detail the extent of landsliding, if present. Existing landslides should either be repaired or avoided by development if they pose no risk to life or property.
2. Differential Compaction/Seismic Settlement (**Impact 2**). Detailed geotechnical subsurface exploration should be performed as a part of integrated geotechnical studies within potential low density areas if development is planned in these particular areas. Soil samples should be taken and analyzed to determine their engineering characteristics. Special foundations or recompaction of soils may be necessary if low density materials are found.
3. Ground Rupture (**Impact 3**). The geology of the each improvement site should be mapped in detail as a part of integrated geotechnical engineering studies. The study should make recommendations for earthwork and/or foundation designs to minimize potential impacts from ground rupture.
4. Ground Shaking (**Impact 4**). The California Health and Safety Code requires that buildings be designed to resist stresses developed by earthquakes. Accepted seismic design criteria

for most structures are presented in the California Building Code. Integrated geotechnical studies for each improvement area will provide parameters for the design of the improvements sufficient to mitigate this potential impact.

5. Seiche (**Impact 5**). Waves generated by seismic energy may impact structures near the Jenkinson Lake may impact structures built near the shore. This hazard can be mitigated most effectively by providing a building setback from the shore.
6. Flooding due to Failure of Dams and Levees (**Impact 6**). Failure of either of the Sly Park dams would flood along the lower part of the project along Camp This hazard can be mitigated most effectively by restricting building below the dam to points above a calculated dam inundation zone.
7. Change in Groundwater Level (**Impact 7**). Rising groundwater levels from on-site wastewater treatment systems might effect slope stability, foundation moisture, and road bed integrity. The use of setbacks and good design practices can best mitigate this impact.
8. Disposal of Excavated Material (**Impact 8**). The generation of excess excavated material during earthwork can be mitigated by planning earthwork cuts and fills to balance, or by exporting excess materials off site.
9. Percolation of Waste Material (**Impact 9**). The use of on-site wastewater disposal could effect both ground and surface water quality. This impact can be mitigated by designing such systems to minimize impacts.
10. Topographic Alteration (**Impact 10**). Topographic modifications of the site should be planned to reduce sedimentation and erosion potential. Drainage facilities should be lined as necessary to prevent erosion of the site soils. A detailed geotechnical investigation should be performed to confirm site characteristics. Site soils may be subject to erosion when excavated and exposed to weathering. Erosion control measures should be implemented during and after construction to conform with National Pollution Discharge Elimination System, Storm Drain Standards and Natural Resource and Conservation District erosion control standards. Parking facilities, roadway surfaces and buildings all have impervious surfaces which concentrate runoff and artificially change existing drainage conditions. Collection systems should be designed where possible to manage the flows in accordance with the above mentioned standards.
11. Slope Stability (**Impact 11**). A detailed geologic and geotechnical investigation should be performed for each improvement site to map and characterize landslide prone areas.
12. Erosion Potential (**Impact 12**). Existing trails, drainages, and unsurfaced roads are currently undergoing slight to moderate erosion. The shoreline of the lake undergoes additional erosion during periods of highest water. Where necessary to reduce erosion, the shoreline should be reinforced with either rip-rap or geotextile fabric to reduce the erosion. All erosion control measures should follow, at a minimum, Natural Resource and Conservation District standards.

13. Unstable Cut and Fill Slopes (**Impact 13**). All projects that require cuts and/or fills should be reviewed for the applicability of a grading permit. The implementation of a grading permit, oversight by local regulatory agencies, and observation with testing under the direction of California licensed engineers and geologists will provide mitigation for this impact.
14. Collapsible and Expansive Soil (**Impact 14**). The potential impacts from collapsible and expansive soils can be mitigated by the completion geotechnical engineering studies for all planned improvements.
15. Trench Wall Stability (**Impact 15**). Trenches greater than 5 feet in depth should be shored, sloped back at a 1H:1V (horizontal to vertical) slope angle or reviewed for stability by the Geotechnical Engineer in accordance with the Occupational Safety and Health Administration regulations if personnel are to enter the excavations. Trench excavations should also conform with local ordinances.
16. Loss of Mineral Resources (**Impact 16**). A detailed records search should be performed to identify if viable mineral resources are present. The project area should be reviewed by a qualified mining geologist to identify if any economic mineral resources are present.

## **5.0 OPPORTUNITIES AND CONSTRAINTS ANALYSIS**

The Sly Park Recreation Area topography is dominated by the reservoir basin. The reservoir basin represents the confluence of three major drainages, that of an unnamed drainage (on the USGS 7.5 minute topographic map), Hazel creek, and Sly Park Creek. The nature of the soils and underlying rocks, coupled with the topography generate substantial constraints to the types of buildings and facilities that can be constructed in the study area. Recreational uses can also be constrained by impacts to water supply such as by shore erosion by boating wakes or from trail erosion runoff draining into the lake. However, there are numerous opportunities for construction and recreation provided that mitigation measures are applied.

New facilities such as a fine arts center in the southeast project area, a conference center between the two dams, and a tent cabin area above the western camping areas, are planned. New recreational facilities will also require restrooms and parking. Some facilities may require kitchens.

New facilities and expanded recreational uses will be constrained by the capability of the land to support the planned improvements and uses. Currently, the campgrounds use vault privies for restroom facilities. The planned fine arts center and conference center will most likely require on-site wastewater disposal. The presence of kitchens can place even larger demands on waste water disposal systems. The soils at the planned conference center are very shallow and may not be able to support an on-site wastewater disposal system.

The Valley Springs and Merhten formations often contain hard rock that can require blasting in order to excavate for new construction. These formations can also sometimes contain clays that might be dispersive or may have a significant shrink-swell capability. Most of the slopes around the recreation area exhibit some degree of soil creep where exposed by cuts. All grading activities will be subject to local regulations. Most shoreline areas have already been very heavily eroded, changing lake uses (more high speed boat traffic) would likely continue that erosion.

All of these constraints can be managed by site specific planning for each new facility. This is typically achieved by focused studies to identify site specific conditions as to how they might impact the planned improvements. This would include on-site wastewater disposal studies for each facility planning to use on-site wastewater disposal. All facilities requiring any earthwork should be evaluated by a geotechnical engineering study. These project specific studies would also address slope stability and expansive clays.

All of the soils are moderately to highly erosive. Erosion resulting from construction can be mitigated by applying revegetation and other standard erosion controls as a part of construction along with limiting construction work to the drier seasons (late spring through early fall). Should erosion along shorelines become a problem, geotextile fabrics could be installed to retain soils and absorb wave energy. Timber harvest will require erosion control and revegetation. The erosion of trails and unsurfaced roads will be the most difficult to contain and will require careful planning for individual trails and roads.

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## **7.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS**

1. The recommendations of this report are based upon the assumption that the soil and bedrock conditions do not deviate from those disclosed during our study. Should any variations or undesirable conditions be encountered during the development of the site, *Youngdahl Consulting Group, Inc.* will provide supplemental recommendations as dictated by the field conditions.
2. This report is issued with the understanding that it is the responsibility of the owner or his/her representative to ensure that the information and recommendations contained herein are brought to the attention of the architect and engineer for the project, and incorporated into the project plans and specifications. The owner or his/her representative is responsible to see that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.
3. As of the present date, the findings of this report are valid for the property studied. With the passage of time, changes in the conditions of a property can occur whether they be due to natural processes or to the works of man on this or adjacent properties. Legislation or the broadening of knowledge may result in changes in applicable standards. Changes outside of our control may find this report to be invalid, wholly or partially. Therefore, this report should not be relied upon after a period of three years without our review nor should it be used or is it applicable for any properties other than those studied.

**TABLE 2  
DETERMINISTIC SEISMICITY TABLE**

SITE NAME & LOCATION: **Sly Park Master Plan and EIR** PROJECT NUMBER: **04264**  
 LATITUDE: **38.7251** DEGREES DATE: **Jul-04**  
 LONGITUDE: **120.5527** DEGREES  
 SITE CLASSES\* : **Vs 30 (avg.)**  
 SITE CLASS\* = **B** A - HARD ROCK 1300 m/s  
**Vs= 550** B - SOFT ROCK/TERRACE 550  
 C - ALLUVIUM 270  
 D - BAY MUDDS, PEAT 175

**DESIGN BASIS EARTHQUAKE (DBE) and UPPER BOUND EARTHQUAKE (UBE)**  
 PEAK HORIZONTAL GROUND ACCELERATION (PHGA) ESTIMATE  
 (PREDICTIVE PHGA EQUATION FROM BOORE, JOYNER AND FUMAL, 1994a; 1997\*)

FAULT ZONE/ ACTIVITY LEVEL	DBE MOMENT MAGNITUDE (Mw)	UBE MOMENT MAGNITUDE (Mw)	DISTANCE TO SITE (km)	DIRECTION FROM SITE (COMPASS)	MAX. DURATION OF SHAKING** (seconds)	DBE PHGA* (g)	UBE PHGA* (g)
North Tahoe [H]	6.25	6.5	54	NE	17	0.07	0.08
Genoa [H]	6.25	7.3	62	E	28	0.06	0.11
Dog Valley, South [H]	6.25	6.5	62	NE	18	0.06	0.07
Antelope Valley [H]	6.25	6.7	90	E	24	0.05	0.06
Melones Fault Zone [Q]							
- East	6.25	6.5	17	W	10	0.16	0.19
-West	6.25	6.5	20	W	11	0.15	0.17
Bear Mountain Fault Zone [Q]							
- West Branch:	6.25	6.5	32.0	W	14	0.11	0.12
- East Branch:	6.25	6.5	42	W	15	0.09	0.10
Mormon Island Shear Zone [LQ]	6.25	6.5	45.0	W	16	0.08	0.09

\* BOORE, JOYNER AND FUMAL, 1994a: U.S.G.S. OPEN-FILE REPORT 94-127; 1997: SEISMOLOGICAL RESEARCH LETTERS, VOL. 68, No. 1

\*\* ABRAHAMSON, N.A. & SILVA, W.J., 1996: EMPIRICAL GROUND MOTION MODELS: REPORT PREPARED FOR BROOKHAVEN NATIONAL LABORATORY, USA.

Mw BASED ON PUBLISHED SLIP RATE DATA, WHERE AVAILABLE AND BRACKETED, i.e.

PETERSEN AND WESNOUSKY, 1994, BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA, VOL 84, No. 5, pp. 1608 - 1649

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CAO AND OTHERS, 2003, CALIF. GEOLOGICAL SURVEY, 2002 REVISION OF [OFR 96-08] CALIF. PROBABILISTIC SEISMIC HAZARD MAPS

BAND, J.W., 1998, NEOTECTONICS OF THE SACRAMENTO-SAN JOAQUIN DELTA AREA, EAST-CENTRAL COAST RANGES, CA; Ph.D. DISSERTATION, U.C. BERKELEY

WORKING GROUP ON CALIF. EARTHQUAKE PROBABILITIES, 1995, BULL. OF SEISMO. SOC. OF AM., VOL. 85, No. 2, pp. 379 - 439.

INTERNAT'L CONGRESS OF BUILDING OFFICIALS, 1998, MAPS OF KNOWN ACTIVE FAULT NEAR-SOURCE ZONES IN CALIF. & ADJ. PORTIONS OF NEVADA

ALTERNATELY, WHEN SLIP RATE DATA IS ABSENT OR NON-BRACKETED Mw BASED ON:

(1) A POSTULATED RUPTURE L (M/UBE) OR L/seg (M/DBE) AND ASSOCIATED SLIP RATE, WHERE L IS TOTAL FAULT LENGTH (ALL SEGMENTS);

OR

(2) A PUBLISHED SOURCE CATALOG OF ESTIMATED DBE OR UBE EVENTS, i.e.:

MUALCHIN AND JONES, 1996, CALTRANS TECHNICAL REPORT TO ACCOMPANY CALIFORNIA SEISMIC HAZARD MAP 1996.

JENNINGS, 1994, FAULT ACTIVITY MAP OF CALIFORNIA & ADJACENT AREAS, CDMG GEOLOGIC DATA MAP NO. 6 & TEXT

SCHWARTZ, 1994, ATC 35-1 SEMINAR PROCEEDINGS, pp. 4-1 to 4-9.

MUALCHIN AND JONES, 1992, C.D.M.G. OPEN-FILE REPORT 92-1.

**DBE = 10% EXCEEDENCE IN 50 YEARS**

**UBE = Mmax [PETERSEN: CDMG OFR 96-08]**

**[Q] = QUATERNARY/POTENTIALLY ACTIVE; [LQ]= LATE QUATERNARY/POTENTIALLY ACTIVE; [H]= HOLOCENE/ACTIVE**

**REGENCY OF MOVEMENT: [H]<10,000 YRS B.P. ; [LQ]<700,000 YRS B.P. ; [Q]<1,600,000 YRS B.P.**

**TABLE 3**  
**CHECKLIST OF GEOTECHNICAL HAZARDS AND POTENTIAL MITIGATION MEASURES**  
(MODIFIED FROM CGS NOTE 46)

Geologic Problems		Degree of Hazard or Problem				Possible Mitigation Measure		
		None	Slight	Moderate	Severe	Code Conformance	Code Conformance + Special Work	Advanced Planning, Avoidance, Restrictions
Problem	Activity Causing Problem							
Earthquake Damage	Fault Movement (onsite)	X				X		
	Liquefaction		X			X		
	Landslides			X			X	X
	Differential Compaction / Seismic Settlement			X		X		
	Ground Rupture		X			X		
	Ground Shaking		X			na		
	Tsunami	X				na		
	Seiches			X				X
	Flooding (Dam or Levee Failure)			X			X	
Loss of Mineral Resources	Loss of Access		X				X	
	Deposits Covered by Changed Land Use		X				X	
	Zoning Restrictions			X			X	
Waste Disposal Problems	Change in Groundwater Level		X			X		
	Disposal of Excavated Material		X			X		
	Percolation of Waste Material			X			X	
Slope and/or Foundation Instability	Landslides and Mudflows			X		X		
	Unstable Cut and Fill Slopes		X			X		
	Collapsible and Expansive Soil		X			X		
	Trench-Wall Stability			X		X		
Erosion, Sedimentation, Flooding	Erosion of Graded Areas			X		X		
	Alteration of Runoff			X		X		
	Unprotected Drainage Ways			X		X		
	Increased Impervious Surfaces			X		X		
Land Subsidence	Extraction of Groundwater, Gas, Oil, Geothermal Energy	X				na		
	Hydrocompaction, Peat Oxidation	X				na		
Volcanic Hazards	Lava Flow	X				na		
	Ash Fall		X			na		

\* "Special Work" can include additional investigation, special site preparation, or special foundations.

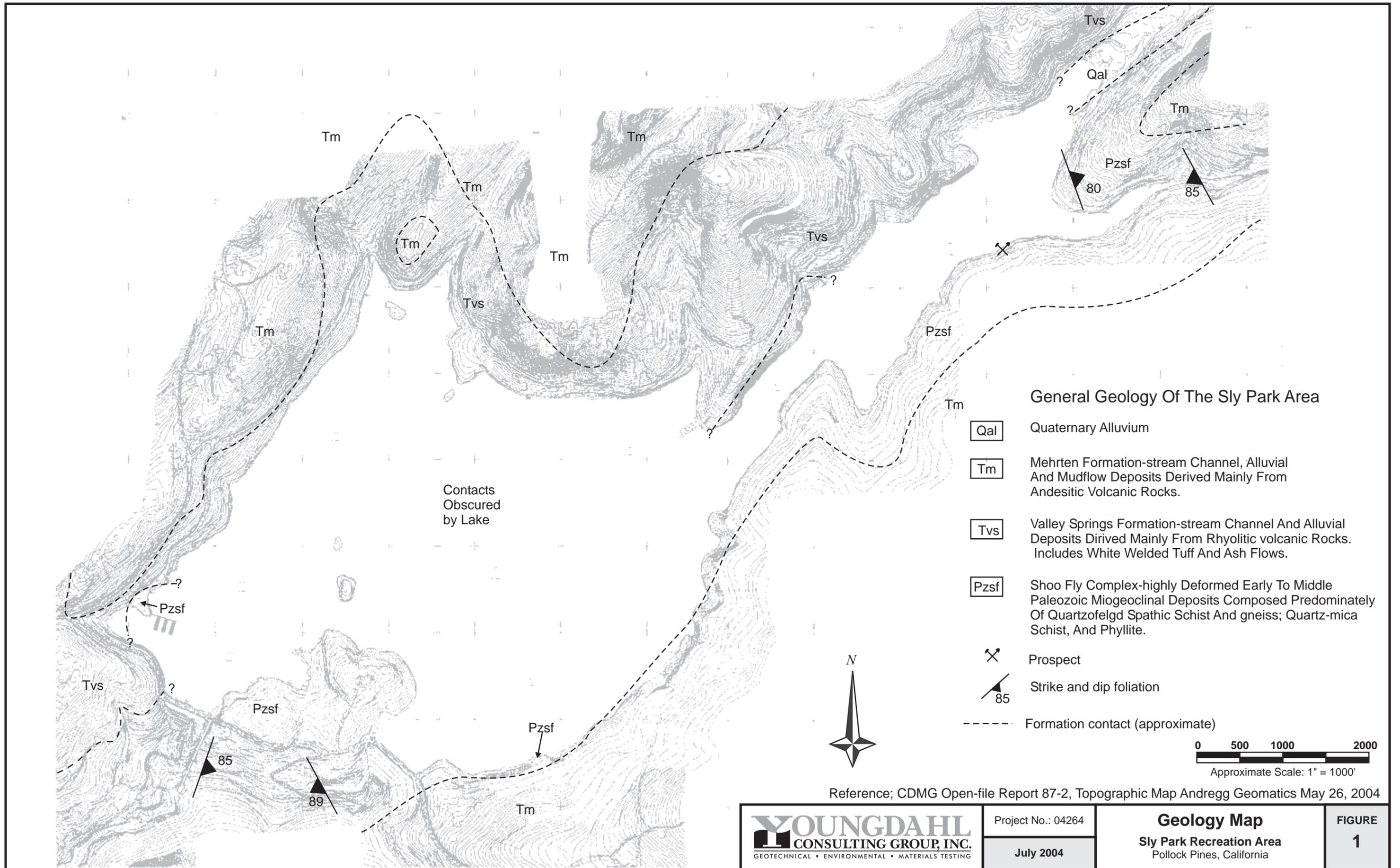
**APPENDIX A**

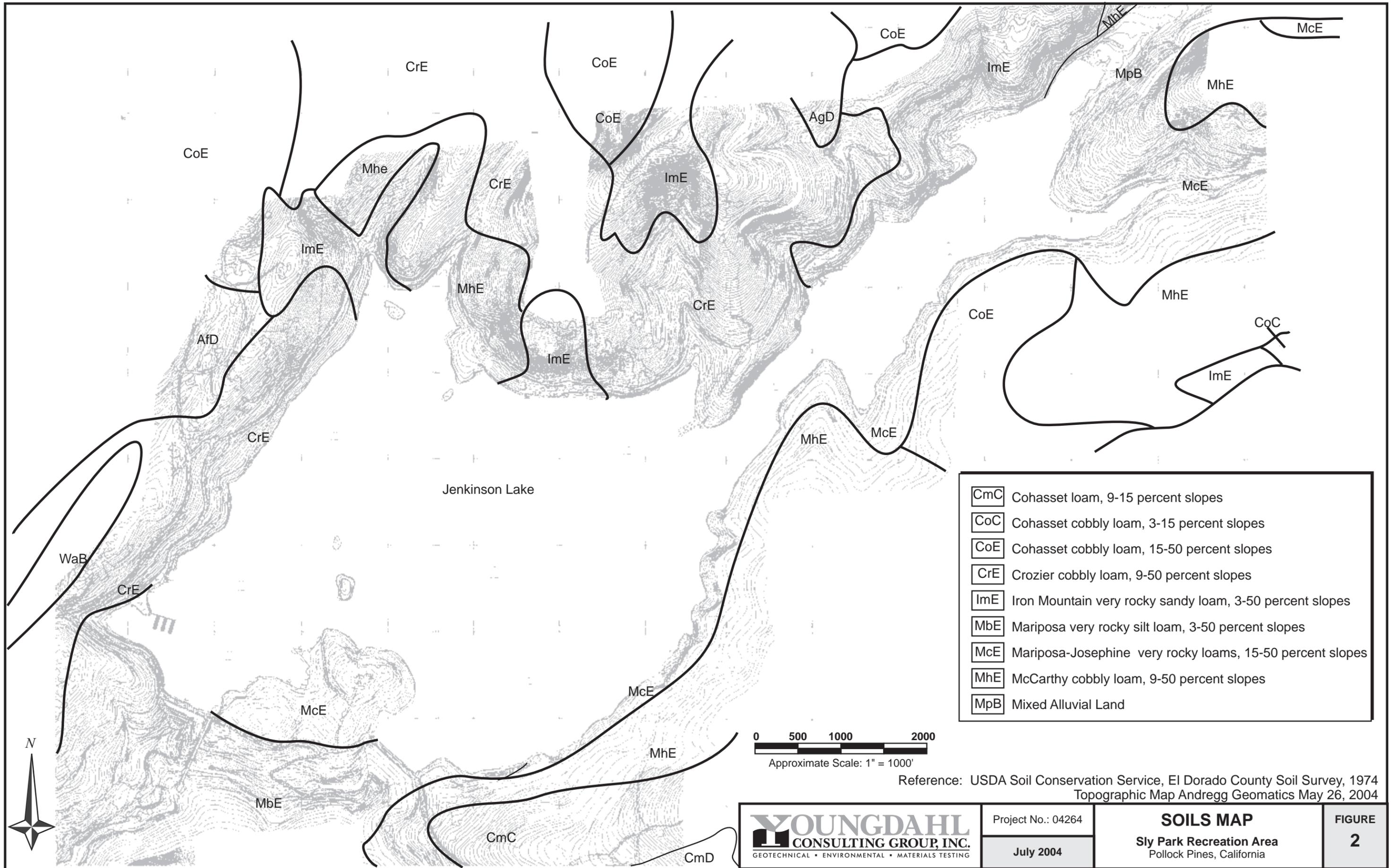
Geologic Map

Soils Map

Regional Fault Map







CoC	Cohasset cobbly loam, 3-15 percent slopes
CoE	Cohasset cobbly loam, 15-50 percent slopes
CrE	Crozier cobbly loam, 9-50 percent slopes
ImE	Iron Mountain very rocky sandy loam, 3-50 percent slopes
MbE	Mariposa very rocky silt loam, 3-50 percent slopes
McE	Mariposa-Josephine very rocky loams, 15-50 percent slopes
MhE	McCarthy cobbly loam, 9-50 percent slopes
MpB	Mixed Alluvial Land



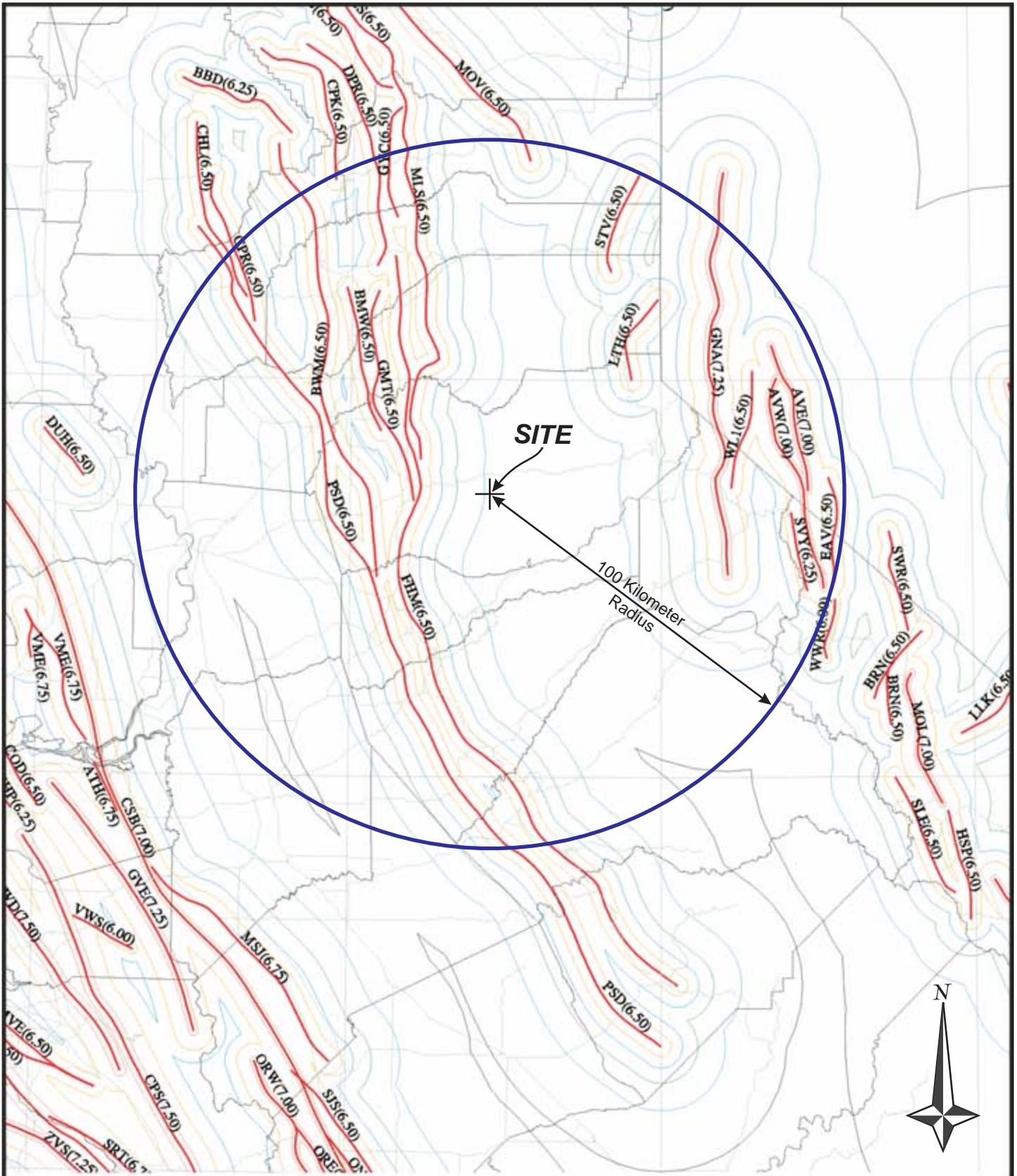
Reference: USDA Soil Conservation Service, El Dorado County Soil Survey, 1974  
Topographic Map Andregg Geomatics May 26, 2004

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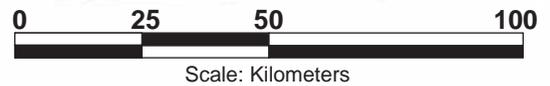
Project No.: 04264  
July 2004

**SOILS MAP**  
Sly Park Recreation Area  
Pollock Pines, California

**FIGURE**  
**2**



BASE MAP REF: California Seismic Hazard Map 1996 By Caltrans Office of Earthquake Engineering. Fault Names & Map Symbol Legend Follow on FIGURE 4



**LEGEND**

- 0.7g Peak Acceleration Contour
- 0.6g Peak Acceleration Contour
- 0.5g Peak Acceleration Contour
- 0.4g Peak Acceleration Contour
- 0.3g Peak Acceleration Contour
- 0.2g Peak Acceleration Contour
- 0.1g Peak Acceleration Contour
- Special Seismic Sources (SSS)
- Faults With Fault Codes (MCE)
- County Boundary

**FAULT ABBREVIATION CODES**

Airport Lake	APL
AL-4 (unnamed)	AL4
Antelope Valley/E	AVE
Antelope Valley/W	AVW
Antioch	ATH
Arrastre Canyon	ACN
Ash Hill	AHL
Bailey	BLY
Bald Mountain-Big Lagoon	BML
Bartlett Springs-Round Valley	BSR
Battle Creek	BCK
Bear Mountain/W	BMW
Benton Valley	BVY
Big Bend	BBD
Big Bend-wolf Creek-maidu-bear Mountain/E	BWM
Big Pine	BPN
Big Valley	BIV
Blackwater	BLW
Blythe Graben	BGN
Brawley-Imperial/E	BIE
Brawley-Imperial/W	BIW
Brawley Seismic Zone	BSZ
Bridgeport Basin-Robinson Creek/N	BRN
Bridgeport Basin-Robinson Creek/S	BRS
Buck Ridge	BUR
Cabrillo	CBR
Calaveras-Pacines-San Benito	CPS
Calico-Hidalgo/E	CHE
Caligo-Hidalgo/W	CHW
Cambria	CAR
Camel Peak	CPK
Camp Rock-Johnson Valley	CJV
Casa Loma-Clark	CLV
Cascadia Subduction Zone	CSZ
Casmalia	CMA
Cedar Mountain/E	CME
Cedar Mountain/W	CMW
Centinela	CTA
Central Avenue	CAV
Charnock	CNK
Chatworth/N	CWN
Chatworth/S	CWS
Chemehuevi Graben	CGR
Chino	CNO
Clamshell-Sawpit Canyon	CSC
Cleanwater	CWT
Cleghorn-North Frontal	CNF
Cleveland Hill/E-Paynes Peak-Swain Ravine	CPR
Cleveland Hill/W	CHL
Coast Ranges Sierran Block Boundary Zone	CSB
Collayomi	CYM
Concord	COD
Cordelia	CDA
Coyote Creek-Superstition Mountain	CSM
Crafton Hills	CRH
Cypress Point	CPT
Davis Creek	DCR
Death Valley/C	DVC
Death Valley/S	DVS
Dogwood Peak-Ramshorn	DPR
Duck Flat	DFN
Dunnigan Hills	DUH
Durwood	DWD
DV-1 (unnamed)	DV1
Eagle Rock	ERK
Earthquake Valley	EQV
East Antelope Valley	EVA
El Modeno-Peralta Hills	EMP
Elysian park	EPK
Emerson-Copper Mountain-Galway Lake	ECG
Forest Hill-Melones	FHM
Fort Sage	FTS
Franklin	FRA
Garlock/E	GLE
Garlock/W	GLW
Garnet Hill	GHL
Genoa	GNA
Gillem	GLM
Gillis Mountain	GMT
Good Years Creek	GYC
Goose Lake-Alturas	GLA

Goose Lake-Redding	GLR
Gorda Plate NE	GPL
Gravel Hills-Harper-Harper Lake	GHH
Green Valley	GVY
Greenville	GVE
Hartley Springs	HSP
Hat Creek	HCK
Hayward	HWD
Helendale	HDE
Hidden Springs	HSS
Hilton Creek	HLC
Homestead Valley	HVY
Honda	HND
Honey Lake	HLK
Hosgri/E	HOE
Hosgri/W	HOW
Hot Springs-San Andreas	HTA
Hot Springs-San Jacinto	HTJ
Hunting Creek	HCR
Ikes Mountain	IMT
Independence	IND
Indian Hill-Cucamonga	IHC
Indian Valley	IVY
Johnson Valley	JVY
Kern Front	KFT
Kern Gorge	KGE
King City-Reliz	KCR
Knociti Bay Fault Zone	KOB
Kramer Hills	KRH
Laguna Salada/E	LSE
Laguna Salada/W	LSW
Lake City	LCL
Lake Mountain	LMT
Lake Tahoe	LTH
Landers E'Quake	LEQ
Larkin Lake	LLK
LB-1 (unnamed)	LB1
LB-2/E (unnamed)	L2E
LB-2/W (unnamed)	L2W
Lenwood-Old Woman Springs/E	LOE
Lenwood-Old Woman Springs/W	LOW
Luehmann	LMN
Lions Head	LHD
Little Lake	LLK
Little Salmon-Yaeger	LSY
LLano	LLO
Lockhart	LHT
Lockhart/S	LHS
Los Alamitos	LAO
Los Alamos-Baseline	LAB
Los Osos	LOS
Maacama-Brush	MBM
Mad River/C	MAC
Mad River/N	MAN
Mad River/S	MAS
Mahogany Mountain	MMT
Malibu Coast-Santa Monica-Hollywood-Raymond	MMR
Malibu Coast/S	MCS
Manix	MXN
MA-1 (unnamed)	MA1
Mayfield	MFD
McArthur	MAR
Meiss Lake	MLK
Melones Fault Zone	MLS
Mendocino-Mattole Canyon	MMC
Mesa-Rincon Creek	MRC
Mesquite Lake	MQL
Midway-san Joaquin/N	MSJ
Mirage Valley	MVY
Mohawk Valley	MOV
Mono Lake	MOL
Monte Vista/E	MVE
Monte Vista/W	MVW
Monterey Bay Zone	MBY
More Ranch-Mission Ridge-Arroyo Parida-Santa Ana	MMA
Morongo Valley-Pinto Mountain/N	MPN
Morongo Valley-Pinto Mountain/S	MPS
Mount General	MGL
Mount Hebron	MHN
Mule Spring	MSP
Murietta Hot Spring	MHS
Nelson-Corral	NCL
Newport-Inglewood-Rose Canyon/E	NIE
Newport-Inglewood-Rose Canyon/W	NIW
North Hollywood	NHW
Northern Death Valley-Furnace Creek	NDF
Oakridge	OKE
Oceanic-West Huasna	OWH
Oceano	OCO
Oil Fields Fault Zone/N	OFN
Oil Fields Fault Zone/S	OFS
O'Neill	ONL
Ortigalita/E	ORE
Ortigalita/W	ORW
Owens Valley	Ovy
Owl lake	OLE

Pacifico	PCO
Pahrump-Stateline	PAS
Palos Verdes	PVS
Palos Verdes Hills-Coronado Bank	PVC
Panamint Valley/S-Brown Mountain	PSB
Pine Mountain	PMN
Pisgah-Bullion	PIB
Pitas Point-Ventura	PPV
Pittville	PVE
Pleito	PLO
Point Loma	PTL
Prairie Creek-Spenceville Dentman	PSD
Quien Sabe	QSE
Red Hill-Etiwanda Avenue	RHE
Red Mountain	RMN
Redondo Canyon	RCO
Rialto-Colton-Claremont	RCC
Rich Bar	RIB
Rinconada	RCD
Rodgers Creek-Healdsburg	RCH
Round Valley	RVM
Russ	RUS
Saline Valley-Hunter Mountain-Panamint Valley/N	SHP
San Andreas/C	SAC
San Andreas/Creep	SAR
San Andreas/N	SAN
San Andreas/N-Offshore	SAO
San Andreas/S	SAS
San Andreas/S/E	SAE
San Andreas/S/W	SAW
San Antonio	SAT
San Cayetano-Holser-Del Valle	SHD
San Clemente	SCE
San Diego Trough	SDT
San Fernando-Sierra Madre-Duerte	SSD
San Gabriel	SGL
San Geronio Mountain	SGM
San Geronio Pass	SGP
San Gregorio-Palo Colorado	SGC
San Jacinto	SJO
San Joaquin/S	SJS
San Jose	SJE
Santa Cruz Island	SCI
Santa Cruz-Santa Catalina Ridge	SSC
Santa Maria River-Foxen Canyon	SMF
Santa Rosa Island	SRI
Santa Susana	SSA
Santa Ynez	SYZ
Santa Ynez-South Branch	SYS
Santa Ynez River	SYR
SA-1 (unnamed)	SA1
Sargent	SRT
Sierra Nevada	SNA
Silver Lake	SLE
Simi-Santa Rosa-Northridge Hills	SSN
Slinkard Valley	SVY
SLO-1 (unnamed)	SLO
Soda Creek	SCK
Southampton	SHP
SR-1/E (unnamed)	SRE
SR-1/W (unnamed)	SRW
SS-1 (unnamed)	SS1
Stampepe Valley	STV
Su-4 (unnamed, Nevada)	SU4
Superstition Hills	SUH
Sur-Arroyo Laguna-San Simeon	SLS
Surprise Valley	SUV
Su-6 (unnamed)	SU6
Su-3 (unnamed, Nevada)	SU3
Sweetwater	SWR
Tank Canyon	TCN
Towne Pass	TPS
Trinidad	TRD
TR-1 (unnamed)	TR1
TR-2 (unnamed)	TR2
Tularcitos-Navy	TNY
Vaca-Kriby Hill-Montezuma Hills/E	VME
Vaca-Kriby Hill-Montezuma Hills/W	VMW
Verdugo	VDO
Verona-Williams	VVS
Warm Springs Valley	WSV
Waterman Canyon	WCN
West Napa	WNP
West Walker River	WWR
Whale Gulch-Bear Harbor	WBH
Wheeler Ridge	WRE
White Canyon-Red Hills-Gillis Canyon-San Juan	WRS
White Mountains/N	WMN
White Mountains/S	WMS
White Wolf	WWF
Whittier-Elsinore	WEE
WL-1 (unnamed)	WL1
WL-2 (unnamed)	WL2
Yuha Wells	YWS
Zayante-Vergales	ZVS

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Appendix G  
SPRA Phase I Environmental Site Assessment

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**PHASE I  
ENVIRONMENTAL SITE ASSESSMENT  
SLY PARK RECREATION AREA  
POLLOCK PINES, CALIFORNIA**

**Prepared for  
North Form Associates  
Auburn, California**

**Prepared by**

**URS**

**Sacramento, California  
February 2003**



PHASE I ENVIRONMENTAL SITE ASSESSMENT  
SLY PARK RECREATION AREA  
POLLOCK PINES, CALIFORNIA

Prepared for:

North Fork Associates  
Auburn, California

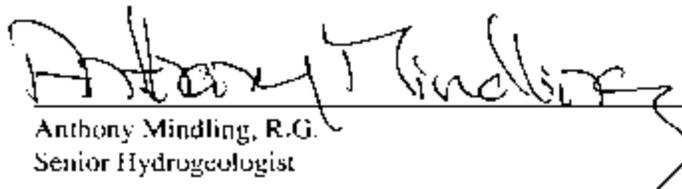
Prepared by:

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February 2003

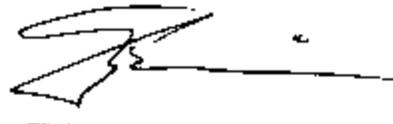
Prepared by:

  
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2-20-03

Date

Approved by:

  
Scott Allin, R.F.A. II  
Senior Program Manager

2/19/03

Date



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- APPENDIX B - SITE PHOTOGRAPHS
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## EXECUTIVE SUMMARY

URS Corporation Americas (URS) was retained by North Fork Associates (NFA) to conduct a Phase I Environmental Site Assessment (ESA) of the Sly Park Recreation Area, which is located approximately 17 miles east of Placerville, California, and five miles south of the town of Pollock Pines. The ESA was performed in general conformance with the scope and limitations of the American Society of Testing and Materials (ASTM) Standard Practice E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, and in conformance with NFA's Contract for Consultant Services, Sly Park Unit Transfer Project, El Dorado County, dated December 19, 2002.

The purpose of this ESA was to review past and present land use practices, site operations and conditions, nearby off-site land uses, and existing documentation to identify recognized environmental conditions (RECs) as defined by ASTM E 1527-00. The scope of work included a visual inspection of the subject site, performed on December 12, 2002; interview with the site manager; review of pertinent background and historical information; contact with appropriate regulatory agencies; review of chemical and waste handling, storage, and disposal practices; observation of land use on surrounding land; review of a regulatory database report; and photographic documentation of the site.

The subject site includes Sly Park Recreation Area, which includes 640-acre Jenkinson Lake and approximately 300 acres of surrounding recreational lands. This ESA did not include the EID treatment plant that is located approximately one mile west of the site. The subject site is developed with several buildings, most of which are located in two areas: the park headquarters area located near the park entrance on the northwest side of the lake, and the reservoir shops area, which is located on the peninsula between the two dams at the southwest end of the lake. The park headquarters area includes the entrance station and headquarters office building, and a workshop and storage buildings in the adjacent maintenance area. The reservoir shops area includes a second workshop, a storage building, and an unused residence. Other improvements include nine campgrounds containing a total of 196 campsites, day use areas, toilet facilities, a small museum, a boat ramp, docks, and a RV dump station. The site is currently under the jurisdiction of the U.S. Bureau of Reclamation (USBR) and is operated by the El Dorado Irrigation District (EID). URS understands that jurisdiction of the subject site is to be transferred from the USBR to the EID.

Based on the findings of this ESA, URS has identified no RECs for the subject site.

The following recommendations are provided for consideration:

- Several partially full vehicle fuel containers in the 2-1/2- to 5-gallon size were observed stored on the wooden floor of a wooden storage shed within the site maintenance yard. While no significant staining or evidence of a release to the environment was noted, it is recommended that these containers be stored on spill containment pallets or trays as a best management practice.
- Sierra Pacific Industries is currently under a waste discharge order to monitor runoff from reconsolidated tailings piles at the former Hazel Creek Mine, approximately one half to one mile upstream from Jenkinson Lake. It is recommended that the EID obtain and review copies of the

waste discharge reports, which are submitted semiannually to the RWQCB, to verify continued compliance with water quality criteria.

## 1.0 INTRODUCTION

This report summarizes the findings of a Phase I Environmental Site Assessment (ESA) conducted by URS Corporation, Americas (URS) for North Fork Associates (NFA), Auburn, California. This ESA was conducted for the Sly Park Recreation Area (subject site, Figure 1). The subject site includes 600-acre Jenkinson Lake and approximately 300 acres of surrounding recreational lands. This ESA did not include the EID treatment plant that is located approximately one mile west of the site. The subject site is developed with several buildings, most of which are located in two areas: the park headquarters area located near the park entrance on the northwest side of the lake, and the reservoir shops area, which is located on the peninsula between the two dams at the southwest end of the lake. The park headquarters area includes the entrance station and headquarters office building, and a workshop and storage buildings in the adjacent maintenance area. The reservoir shops area includes a second workshop, a storage building, and an unused residence. Other improvements include nine campgrounds containing a total of 196 campsites, day use areas, toilet facilities, a small museum, a boat ramp, docks, and a RV dump station. URS understands that jurisdiction of the subject site is to be transferred from the U.S. Bureau of Reclamation to the El Dorado Irrigation District.

The purpose of this ESA was to review past and present land use practices, site operations and conditions, nearby off-site land uses, and existing documentation to identify recognized environmental conditions (RECs) as defined by ASTM E 1527-00. The scope of services conducted for this ESA generally corresponds to the American Society of Testing and Materials (ASTM) guidance presented in ASTM Standard E 1527-00. The work was performed under NFA's Contract for Consultant Services, Sly Park Unit Transfer Project, El Dorado County, dated December 19, 2002.

### 1.1 REPORT ORGANIZATION

This report is organized into eight sections including this introduction. Section 2 describes the purpose and scope of this ESA. Section 3 presents the subject site location, physiography and climate. Section 4 outlines subject site history and regulatory files. Section 5 summarizes the reconnaissance of the subject site and surrounding vicinity. Sections 6 and 7 present the conclusions and limitations, respectively. References utilized during this study are presented in Section 8. Environmental Data Resources, Inc. (EDR) Regulatory Database Report for the subject site is presented in Appendix A. Photographs taken during the visit to the subject site on December 12, 2002, are presented in Appendix B. Appendix C provides the qualifications of URS personnel contributing to this report, and documentation relating to underground storage tanks at Sly Park Resort is included in Appendix D.

## 2.0 PURPOSE AND SCOPE OF SERVICES

The purpose of this ESA was to review past and current land uses and activities at the subject site in order to assess the possible presence of hazardous substances, including hazardous wastes. This assessment was accomplished by, and limited to, a subject site and property vicinity reconnaissance and review of readily available pertinent documentation regarding past and current land use to identify any REC's, regulatory enforcement actions, permit status, or investigations into hazardous materials or wastes associated with the subject site. ASTM standards on environmental site assessments E 1527-00 define a REC as:

The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimus conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Because of the size of the subject site, the field reconnaissance portion of this site assessment focused on the readily accessible portions of the subject site and areas deemed most likely to store hazardous materials and wastes.

This ESA included the following tasks:

- Review of pertinent, available documents and maps describing local geologic and hydrogeologic conditions;
- Review of readily available historical aerial photographs of the subject site and surrounding area. These photographs were reviewed for evidence of previous activities and development which would suggest the potential presence of hazardous substances at the subject site;
- Review and interpretation of archival U.S. Geologic Survey (USGS) topographic maps for information regarding historical land use potentially involving the manufacture, generation, use, storage, and/or disposal of hazardous substances at the subject site and adjacent properties;
- A reconnaissance of readily accessible portions of the subject site to assess evidence of current and/or past use or storage of toxic or hazardous materials; onsite ponds, landfills, dry wells, waste streams or other disposal units; visible soil contamination, aboveground or underground storage tanks; electrical transformers containing polychlorinated biphenyls (PCBs); and drums, barrels and other storage containers;
- A visual review of adjacent properties to assess their potential to adversely impact the subject site;

- Review of the database list search conducted by EDR of federal and state known or potential hazardous waste sites or landfills, and sites currently under investigation for environmental violations;
- Inquiries to the El Dorado County Environmental Management Department (EDCEMD) for information regarding environmental permits, environmental violations or incidents, and/or the status of enforcement actions at the subject site or adjacent properties; and
- Preparation of this report to present our findings and conclusions.

### 3.0 SITE OVERVIEW

This section presents a general description of the subject site and a summary of documents reviewed by URS that describe the physical setting of subject site and surrounding area. Observations made during the reconnaissance of the subject site and surrounding area on December 12, 2002, are discussed in Section 5.0.

#### 3.1 SUBJECT SITE LOCATION AND PHYSIOGRAPHY

The subject site is located in the Sierra Nevada foothills of El Dorado County, approximately 17 miles east of Placerville, and five miles south of the town of Pollock Pines, with a population of approximately 3,600. The subject site is accessed from Sly Park Road to the northwest and Mormon Immigrant Trail from the east. The principal feature of the subject site is Jenkinson Lake (Photo 1), a 640-acre reservoir completed by the Bureau of Reclamation in 1955. Jenkinson Lake is formed by two dams, located at the southwest end of the lake along Mormon Immigrant Trail. The maximum elevation of Jenkinson Lake is approximately 3,500 feet above mean sea level (MSL). The elevation of the Sly Park Recreation Area lands surrounding the lake ranges from approximately 3,300 feet in the Sly Park Creek drainage below the dams in the southwest portion of the subject site to approximately 4,000 feet MSL on the ridge to the northwest of the lake. Hazel Creek and Sly Park Creek flow into the lake's northeastern arm, and Sly Park Creek exits the subject site on the southwest below the two dams. The climate is characterized by cool, dry summers and snowy winters.

#### 3.2 GEOLOGIC AND HYDROGEOLOGIC SETTING

Sly Park lies at an elevation of approximately 3,500 feet in the Central Sierra Nevada range (Starns, 2001). This range is composed of a granite batholith that has a gentle western slope and an abrupt eastern escarpment. This formation was the result of fault action that uplifted the range in a manner to create the steeper eastern side. Occasional uplifts continue to increase the height of the range.

The geologic fault known as the Eastern Belt runs through the park. This Belt is a Paleozoic (250 million years ago) fault zone that trends in an approximate north-south direction. It contains, as does its westerly counterpart, the Mother Lode Belt, rocks that contain gold and other minerals. These rocks are known as the Shoo Fly Formation of the Calaveras Complex, a series of metamorphic rocks created by millions of years of transformation by pressure and temperature. They appear as a light colored slate or schist and are exposed to the north of Jenkinson Lake. During the Paleozoic Era, this formation developed out of sediments deposited on the floor of a sea.

During the Tertiary Period (65-30 mya) of the Cenozoic Era, volcanic action deposited rhyolite and andesite to depths of hundreds of feet over the older metamorphic formations. The volcanic activity originated to the southwest of Lake Tahoe. Rhyolite, a soft volcanic rock with granitic composition, was deposited over andesite, the volcanic equivalent of diorite, and appears in the form of rounded beige bedrock along the lakeshore and in road cuts within the campground areas. The andesite appears as a conglomerate containing rounded cobbles. The cobbles were derived from stream channels that were periodically filled and blocked by the andesitic volcanic deposits. These streams were tributary to the ancestral Tertiary American River that carried gold bearing gravels.

The meadow that comprised Sly Park prior to the construction of the reservoir was probably formed when the channel to the Tertiary American River was eroded after being blocked by volcanic debris. Gradually, the meadow formed with sloping sides, bisected by a small creek.

No groundwater wells are located on the subject site, and no groundwater data are available for the site vicinity. Based on interpretation from the lithology and topography of the site vicinity, it is likely that two groundwater systems exist; a shallow, possibly locally intermittent system within unconsolidated materials, and a deeper system within shallow bedrock. The shallow system would exist seasonally during and following winter precipitation, at a depth of from zero to a few tens of feet below ground surface (bgs). Flow direction in this system is controlled by topography, following swales and drainages toward Sly Park Creek or Jenkinson Lake. Portions of this system likely persist year round as underflow along Sly Park Creek and Hazel Creek. A deeper groundwater system also exists within the bedrock, with the flow direction controlled locally by topography and fractures, but trending regionally toward the southwest.

## **4.0 SITE HISTORY AND REGULATORY FILE REVIEW**

This section discusses data obtained from aerial photographs and historical topographic maps. Information obtained from federal, state, and county database files is also presented in this section.

### **4.1 HISTORICAL AERIAL PHOTOGRAPHS**

Historical aerial photographs of the subject site and vicinity for the years 1952, 1962, and 1994 provided by Environmental Data Resources were reviewed and interpreted for indications of past subject site land use and/or subject site activities which may have involved the manufacture, generation, use, storage, and/or disposal of hazardous materials. The following observations were made:

#### **1952 (Scale 1 inch = 833 feet)**

The site and vicinity consist of a large meadow, approximately 2-1/2 miles east to west and one mile north to south, surrounded by forest. Dirt logging roads access the forest, and a larger dirt road borders the north side of the meadow. There is no indication of row crops or orchards in the meadow area. Some small buildings are located in the northeast margin of the meadow. A creek flows from northeast to southwest along the southern border of the meadow.

#### **1962 (Scale 1 inch = 833 feet)**

A lake fills the meadow area and extends up the drainage to the northeast of the meadow. A powerboat is visible on the lake. Two dams are located at the southeast end of the lake. A borrow pit just below the westernmost dam and haul roads between the pit and dams are clearly visible. Sly Park Road is shown as a paved road passing the site to the west. Buildings are visible at the location of Sly Park Resort on the east side of Sly Park Road adjacent to the Sly Park Recreation Area entrance.

#### **1994 (Scale 1 inch = 666 feet)**

A marina with slips and a launch ramp to the north is present at the west end of the lake. Vegetation has encroached on the borrow pit area, and the haul roads have become somewhat overgrown and are less distinct. No other significant differences from the 1962 photograph were identified.

### **4.2 HISTORICAL TOPOGRAPHIC MAPS**

In order to corroborate and supplement information obtained through the review of aerial photographs and discussions with agency and other contacts, archival topographic maps were reviewed and interpreted for indication of topographic and land use change. This review may indicate if potential negative environmental impacts exist on the subject site and its surroundings. The following observations were made for the maps that were reviewed:

### USGS Sly Park, California Quadrangle – 1952, 7.5 Minute Series, 1:24,000

With the exception of a few dirt roads, the site and vicinity are undeveloped. The area is shown as forested, with a meadow area within the area of present-day Jenkinson Lake.

### USGS Sly Park, California Quadrangle – 1952 (Photo revised 1973), 7.5 Minute Series, 1:24,000

The Sly Park Dam and reservoir are shown. Sly Park Road is shown as a paved road passing to the west of the site, and Silver Lake Road is shown as a paved road to the south of the site. A low-density residential development, probably summer cabins, is shown to the west of the site, and another to the north of the site. Structures are shown at the location of the Sly Park Recreation area headquarters, the Sly Park Resort, and in the reservoir shops area.

## 4.3 REGULATORY AGENCY FILES

A review of readily available agency lists was conducted for information regarding hazardous substance releases, landfills, hazardous waste facilities, or environmental investigations at or near the subject site. A radius search of state and federal agency databases was obtained from EDR in their report dated January 14, 2003. The EDR Report is discussed below and presented in Appendix A.

### 4.3.1 Environmental Data Resources, Inc., Report

Environmental Data Resources, Inc. (EDR) reviews databases compiled by federal, state, and local governmental agencies. The complete list of databases reviewed by EDR, together with a description of each database and its release date, is provided in the EDR Report. It should be noted that this information is reported as it was received by URS from EDR. EDR, in turn, reports information as it is provided by various federal and state databases. Neither URS nor EDR can verify the accuracy or completeness of information contained in these federal and state databases. However, the use of and reliance on this information is a generally accepted practice in the conduct of environmental due diligence. Facilities within the ASTM search radius of the subject site are discussed below. The number in parenthesis following each site address refers to the site number in the EDR report and the EDR map.

#### *Cortese List (CORTESE)*

The Cortese list identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial actions, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release, and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

- **Sly Park Resort, 4782 Sly Park Road (2)** – The Sly Park Resort is located adjacent to and to the northwest of the subject site. It is at a higher elevation and directly upgradient from the subject site. The Sly Park Resort also appears on the LUST, UST, and HIST UST databases (see below).

The following summarizes the information provided in all of those databases. Two 1,000-gallon USTs are identified for the site. A release of gasoline fuel to soil was discovered during closure of a single-wall UST in 1987. The case was closed in 1987 with the explanation that no action was required in that the incident was minor, requiring no remedial action. Based on closure of the site, there is a low likelihood of impact to the subject site.

#### ***Leaking Underground Storage Tank (LUST) Incident Report***

The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking underground Storage Tank Information system.

- Sly Park Resort, 4782 Sly Park Road (2) – See summary under Cortese List, above.

#### ***UST***

The Underground Storage Tank database contains registered USTs; USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

- Sly Park Resort, 4782 Sly Park Road (2) – See summary under Cortese List, above.

#### ***Historical UST Registered Database (HIST UST)***

- Sly Park Recreation, across from 4782 Sly Park Road (1) – The subject site is identified as having a 500-gallon UST used for storage of unleaded fuel. Supplemental information obtained by URS (see Section 5.6, below) indicates that this UST was removed in about 1988, and that the El Dorado County Environmental Management Department has no record of contamination related to the former tank. Based on this information, there is a low likelihood of impact to the subject site related to the former UST.
- Sly Park Resort, 4782 Sly Park Road (2) – See summary under Cortese List, above.

#### ***Unmapped Sites***

Unmapped sites are properties that are identified in the various databases as being present in the same geographic region as the subject site, but they have not been georeferenced by the various governmental agencies to allow electronic location. The sites were reviewed to evaluate if they posed a REC to the site. Evidence that the unmapped sites listed in the EDR report pose a REC to the subject site was not identified during this ESA.

### **4.3.2 El Dorado County Environmental Management Department**

On January 14, 2003, URS reviewed records for the Sly Park Resort and interviewed Ms. Jean Pierce of the El Dorado County Environmental Management Department (EDCEMD) with respect to Sly Park Resort and Sly

Park Recreation Area. Ms. Pierce said that they have no records of existing environmental problems at either site. Because Sly Park Resort is directly adjacent to and upgradient of the subject site, URS performed a review of EDCEMD records for Sly Park Resort. That review indicated that two USTs are currently permitted for the Sly Park Resort, which includes a service station, RV park, and small store. Copies of records related to USTs at Sly Park Resort are included in Appendix C. Both of the USTs are of 1,000-gallon capacity, and are used for the storage of regular gasoline and diesel fuel. The regular gasoline tank consists of a double-walled fiberglass tank that was installed in 1998. The diesel tank is double walled steel, installed in 1987 and upgraded in 1998. Soil sampling was conducted adjacent to the former single-walled steel tank in 1996, and again in 1998 when the tank was removed; neither set of analyses indicates contamination. Letters were issued to Sly Park Resort in 2001 and again in 2002 related to minor UST maintenance and procedural issues. According to Mr. Jeffrey Rusert, Senior Environmental Health Specialist for EDCEMD (Rusert, 2003), these issues have been resolved, and Sly Park Resort is currently in compliance.

#### **4.4 PREVIOUS ENVIRONMENTAL REPORTS**

No previous environmental reports were identified for the subject site.

## **5.0 SITE RECONNAISSANCE AND INTERVIEW**

URS' site reconnaissance was conducted on Thursday, December 12, 2002, and included a site walk to observe and photograph the project area. Mr. Don Pearson, Recreation Director for the EID, accompanied URS for a portion of the reconnaissance and provided information about the property. Mr. Pearson has worked at Sly Park for approximately 20 years. Photographs of the project area are presented in Appendix B.

### **5.1 CURRENT USES OF THE PROPERTY**

The subject site is used for public recreation, including camping, hiking, picnicking, boating, and fishing. The Sly Park Recreation Area (Photos 1, 2, 3 and 4) was developed following construction of Sly Park Dam, an earth and rock fill structure with a concrete core, by the Bureau of Reclamation between 1950 and 1955 as part of the Central Valley Project. The reservoir known as Jenkinson Lake supplies domestic and irrigation water to a large portion of El Dorado County. The reservoir and associated recreation area are managed for the Bureau of Reclamation by the EID. The subject site includes nine campgrounds (photo 3), a boat ramp and docks (Photo 1), a RV dump station (Photo 5), and a bilge oil recycling station (Photo 6). Structures on the subject site include the entrance station (Photo 7), headquarters building, maintenance yard and associated shop and storage buildings (Photos 8, 9, 10, and 11), small museum, and a former residence within the reservoir shops area that is to be developed as a retreat (Photo 12). A maintenance shop and storage building are also located in the reservoir shops area. The storage building is used for storage of park rental boats, miscellaneous park supplies, and geotechnical cores obtained by the Bureau of Reclamation during planning work for a water development project which was not completed.

### **5.2 PAST USES OF THE PROPERTY**

The principal past use of the subject site was for timber harvesting, which began in the mid-1800s to supply timber for mines, and later for the development of ranches and fences (Starns, 2001). The subject site and vicinity have in the past also been used as high altitude summer grazing for cattle and sheep.

### **5.3 CURRENT USES OF ADJOINING PROPERTIES**

A large proportion of the lands surrounding the subject site is owned by Sierra Pacific Industries and is used for timber harvesting. Jenkinson Estates, a gated residential community, borders a portion of the northwest side of the subject site. Sly Park Resort is located just west of the Sly Park Recreation Area entrance. It includes a RV park, service station, and small store. Federal lands border a large part of the southern and southeastern boundaries, and a lesser portion of the northern boundary of the site. These lands are administered by El Dorado National Forest (Figure 2).

### **5.4 PAST USES OF ADJOINING PROPERTIES**

Past uses of surrounding properties were the same as the past uses of the subject site; namely timber harvesting and grazing (Starns, 2001).

## 5.5 HAZARDOUS SUBSTANCES OR WASTE

A wood-frame shed with a wooden floor located in the maintenance yard is used to store gasoline, lubricants, and waste oil (Photo 8). Approximately eight gasoline containers of up to 5-gallon capacity, three 5-gallon buckets of waste oil, and a 55-gallon drum containing transmission fluid were stored in the shed (Photo 13). Secondary containment was provided for the waste oil, transmission fluid, and a portion of the fuel. Some staining was observed on the wooden floor inside the building; none was observed on the soil outside the building.

A metal-sided storage shed with a concrete floor, approximately 20 feet by 10 feet in size (photo 11), contained cleaning supplies, disinfectant, deodorants, wasp spray, hand cleaner, toilet paper and other paper products, and a 5-gallon container of wood preservative (Photo 14). No staining or other indication of a potential REC was observed in this building.

A small wooden structure toward the rear of the maintenance yard (Photo 10) contained oil-based paints in containers of up to one-gallon capacity, and latex-based paints in containers of up to five-gallon capacity (Photo 15). No staining or other indication of a potential REC was observed in this building.

The maintenance shop (Photo 8) contained a small quantity of spray paints that were stored in a metal cabinet. A pair of acetylene and oxygen tanks chained onto a dolly for welding was observed in the maintenance shop. No potential for a REC was observed in this area.

A bilge-oil pad recycling station is located near the boat ramp (Figure 2, Photo 6). The recycling station is maintained by the El Dorado County Hazardous Materials Division. No potential for a REC was observed.

An 8-bay garage with metal siding and concrete floor is located within the reservoir shops area located on the peninsula between the two dams on the west end of Jenkinson Lake. This area includes a small residence that until recently was used by a park staff member. According to Mr. Pearson, improvements are planned for the structure to develop it as a retreat center. The garage is currently used as a maintenance shop and storage area. Small quantities of paint, some fuel in five-gallon containers, and an acetylene/oxygen welding setup are located in the building (Photo 16), together with tools, lumber, and miscellaneous maintenance materials and supplies. While the housekeeping in this area was poor, no REC is indicated. A third structure in this area is used solely for the storage of geotechnical core samples collected at the time of construction of the reservoir. No staining or other evidence of spills or leaks were observed in the reservoir shops area.

## 5.6 UNDERGROUND/ABOVEGROUND STORAGE TANKS

Five aboveground storage tanks (ASTs) are located at the subject site; two in the maintenance yard (Photos 10 and 17), one outside the headquarters office building (Photo 18), one adjacent to the caretaker's RV site, and one near the maintenance shop located in the reservoir shops area (Photo 19). All but one of the ASTs are used for the storage of propane, which is used for heating. The fifth AST is used to store motor vehicle fuel. The tank is fiberglass, double-walled, and contains dual, 500-gallon compartments for diesel and unleaded regular gasoline. According to Mr. Pearson, the tank was installed in about 1988, and replaces a former underground storage tank. According to Ms. Jean Pierce of the El Dorado County Environmental Management Department

(Personal communication, January 14, 2003), no release is known to have occurred related to the former UST.

## 5.7 PCBS

Old transformers have the potential for containing hazardous materials, specifically polychlorinated biphenyls (PCBs), in the oil. No pole or pad-mounted transformers were observed in the vicinity of the site.

## 5.8 SOLID WASTE

Solid waste generated by light office work, maintenance work, and by campers is removed by El Dorado Waste Disposal. A former informal dumping area (Figure 1) was observed in an area below the westernmost of the two dams within a borrow area created during construction of the dams. According to Mr. Pearson, the area had been used in the past for informal disposal of park debris, including broken picnic tables and firepit rings, for informal dumping of household trash until the late 1970s (Photo 20). Items observed in this area at the time of the site reconnaissance included a 1930s car body, rusting steel drum, and a rusting water heater. Additional information for this area was obtained from Ms. Cheryl Goss (Goss, 2003), Supervising Park Ranger. Ms. Goss has been employed at the park for approximately 22 years. Ms. Goss confirmed the information obtained from Mr. Pearson, and added that in the mid-1980s the park had cleaned up the area. She recalled removing a washing machine and the remains of picnic tables and firepits. Due to the casual nature of the dumping, the limited time during which it occurred, the information obtained regarding the type of debris disposed of there, and the lack of a source in the vicinity for more than minor amounts of hazardous materials, this former dumping area is not anticipated to pose a REC for the site.

## 5.9 DRAINS AND SUMPS

No drains or sumps were observed within the subject site.

## 5.10 WASTEWATER

Sanitary wastewater is generated at the operations centers, the RV dump stations, and the toilet facilities that serve the campgrounds and day use areas (Photo 21). Septic tanks and leach fields that are pumped annually serve the operations centers and RV dump station. Septic tanks with 1,000-gallon holding tanks and leach fields also serve the campground and day use area toilet facilities. The holding tanks are pumped weekly during the camping and boating season, and the wastewater hauled to the Sacramento County Regional Wastewater Treatment Plant. A total of approximately 56,000 gallons of sanitary wastewater was removed during 2002. According to Mr. Pearson, a program to replace the public use holding tanks has been ongoing for the last few years, and is nearly complete. While the integrity of the sanitary wastewater system could not be determined during this ESA, based on the frequency of maintenance and ongoing holding tank replacement, the sanitary wastewater system is not anticipated to pose a REC for the subject site.

## 5.11 WELLS

No wells were observed or are reported to be located at the site.

## 5.12 PITS, PONDS, AND LAGOONS

Pits, ponds or lagoons were not observed at the subject site during URS' site reconnaissance.

## 5.13 UTILITIES

Utilities provided to the site include electricity and public drinking water. Electricity is supplied by Pacific Gas and Electric Company (PG&E). Public drinking water is provided by the El Dorado Irrigation District via the Pollock Pines treated water system, and supplemented by water trucked from outside sources during the summer months. The supplemental trucked water is required to keep storage tanks from going dry due to leakage of the park water system. A grant request is currently in preparation to upgrade the system (Goss, 2003)

## 5.14 MINES

Although the subject site is located geologically within a mineralized zone related to Sierra Nevada foothill gold occurrence, no commercial mining is known to have occurred within the Sly Park Recreation Area. The historic Hazel Creek Mine, which was developed beginning in 1948 on the north bank of Hazel Creek approximately one-half to one mile northeast of the site, included a mill which employed flotation, amalgamation, and a retort system (Starns, 2001). According to Mr. John Moody, Water Resources Control Engineer for the California Regional Water Quality Control Board (RWQCB), the mine was closed in 1989. Sierra Pacific Industries currently owns it, and is under a Cleanup and Abatement Order to close six tailings piles formerly located along Hazel Creek. Closure approval by the RWQCB was provided based on rendering the tailings material as a group C mining waste under Title 27. According to Section 22480, Article I, Chapter 7, "mining wastes from Group C are wastes from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity." Treatment, storage, and disposal units for class C mining wastes are exempt from requirements for liners and leachate collection and removal systems. According to Mr. Moody, the tailings piles had a moderate potential to generate acid mine drainage. In approximately 1998, the tailings material was reconsolidated and mixed with lime to render it a class C waste, and placed within a closure unit located on higher ground with an engineered soil foundation and engineered soil cap. Sierra Pacific Industries has been under a Waste Discharge Order to monitor runoff semiannually from the disposal unit. According to Mr. Moody, the monitoring has been conducted as required, and the results have been in compliance with the discharge requirements.

Based on the distance of the mine from the subject site, and the reclamation and monitoring conducted under state oversight, the Hazel Creek mine is not anticipated to pose a REC for the subject site.

## 5.15 SPILLS

Ms. Cheryl Goss, Supervising Park Ranger, was interviewed regarding spills or other hazardous waste incidents (Goss, 2003). Ms. Goss has been associated with the Sly Park Recreation Area for approximately 22 years. She said that during her tenure, four to five boats have sunk in the lake, three automobiles have entered the lake, and a recreational vehicle spilled raw sewage from its holding tank at the parking lot adjacent to the boat ramp. She said that her policy following occurrence of incidents like these is to:

- Notify the Recreational Director, Don Pearson;
- Notify the water quality supervisor at the EID treatment plant, who provides staff to assist with cleanup;
- Notify the state Office of Emergency Services (OES), which provides a control number for the spill;
- Notify the Department of Fish and Game, which tracks the incident via the control number; and
- Notify the EDCDEM.

She said that sunken boats and vehicles are removed from the lake as soon as possible, and that the EDCDEM only responded to one incident, a boat sinking which involved release of fuel, but did not feel it necessary to supplement the cleanup work being conducted by the park.



## 6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of this ESA, URS has identified no current or historical recognized environmental conditions (REC) for the subject site.

The following recommendations are provided for consideration:

- Several partially full vehicle fuel containers in the 2-1/2- to 5-gallon size were observed stored on the wooden floor of a wooden storage shed located within the site maintenance yard. While no significant staining indicative of potential environmental contamination was noted, it is recommended that these containers be stored on spill containment pallets or trays as a best management practice.
- Sierra Pacific Industries is currently under a waste discharge order to monitor runoff from reconsolidated tailings piles at the former Hazel Creek Mine, approximately one-half to one mile upstream from Jenkinson Lake. It is recommended that the EID obtain and review copies of the waste discharge reports, which are submitted semiannually to the RWQCB, to verify continued compliance with water quality criteria.

## 7.0 LIMITATIONS

The conclusions presented in this report are professional opinions based upon visual observations of the subject site and vicinity, and our interpretation of the available historical information and documents reviewed, as described in this report. The conclusions are intended exclusively for the purpose outlined in this report and at the subject site location and project indicated. This report is intended for the sole use of North Fork Associates. The scope of services performed in execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or reuse of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

It should be recognized that this study was not intended to be a definitive investigation of potential environmental impacts at the subject site. Given that the scope of services for this investigation was limited, it is possible that currently unrecognized contamination may exist at the subject site.

Opinions presented herein apply to the existing and reasonably foreseeable subject site conditions at the time of our assessment. They cannot necessarily apply to subject site changes of which this office is unaware and has not had the opportunity to evaluate. Changes in the conditions of this property may occur with time due to natural processes or works of man on the subject site or adjacent sites. Changes in applicable standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

## 8.0 REFERENCES

Aerial photographs provided by EDR and reviewed by URS:

<u>Flight Date</u>	<u>Source</u>	<u>Scale</u>
1952	Pacific Air	1 inch = 833 feet
1962	Cartwright	1 inch = 833 feet
1994	USGS	1 inch = 666 feet

Goss, Cheryl, 2003. Personal communication with Supervising Park Ranger, Sly Park Recreation Area. January 23.

Moody, John, 2003. Personal communication with Water Resources Control Engineer for the California Regional Water Quality Control Board (RWQCB). January 27.

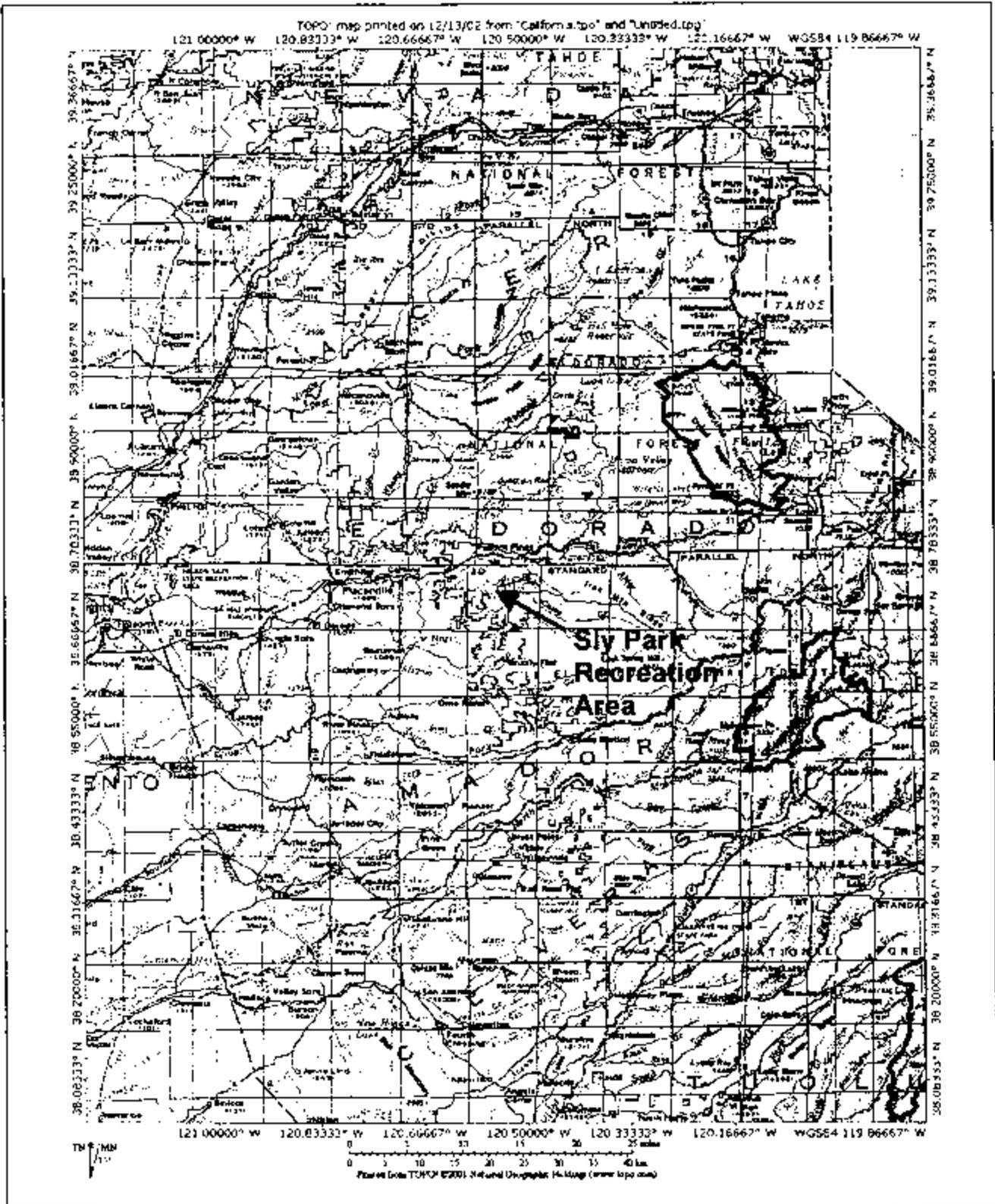
Pearson, Don, 2002. Personal communication, Recreation Director, Sly Park Recreation Area, December 12.

Pierce, Jean, 2003. Personal communication. Senior Environmental Health Specialist, El Dorado County Department of Environmental Health. January 14.

Rusert, Jeffrey, 2003. Senior Environmental Health Specialist, El Dorado County Department of Environmental Health. January 14.

Starns, Jean E., and Cheryl V. Goss, 2001. A Natural History of Sly Park, Pollock Pines, California.

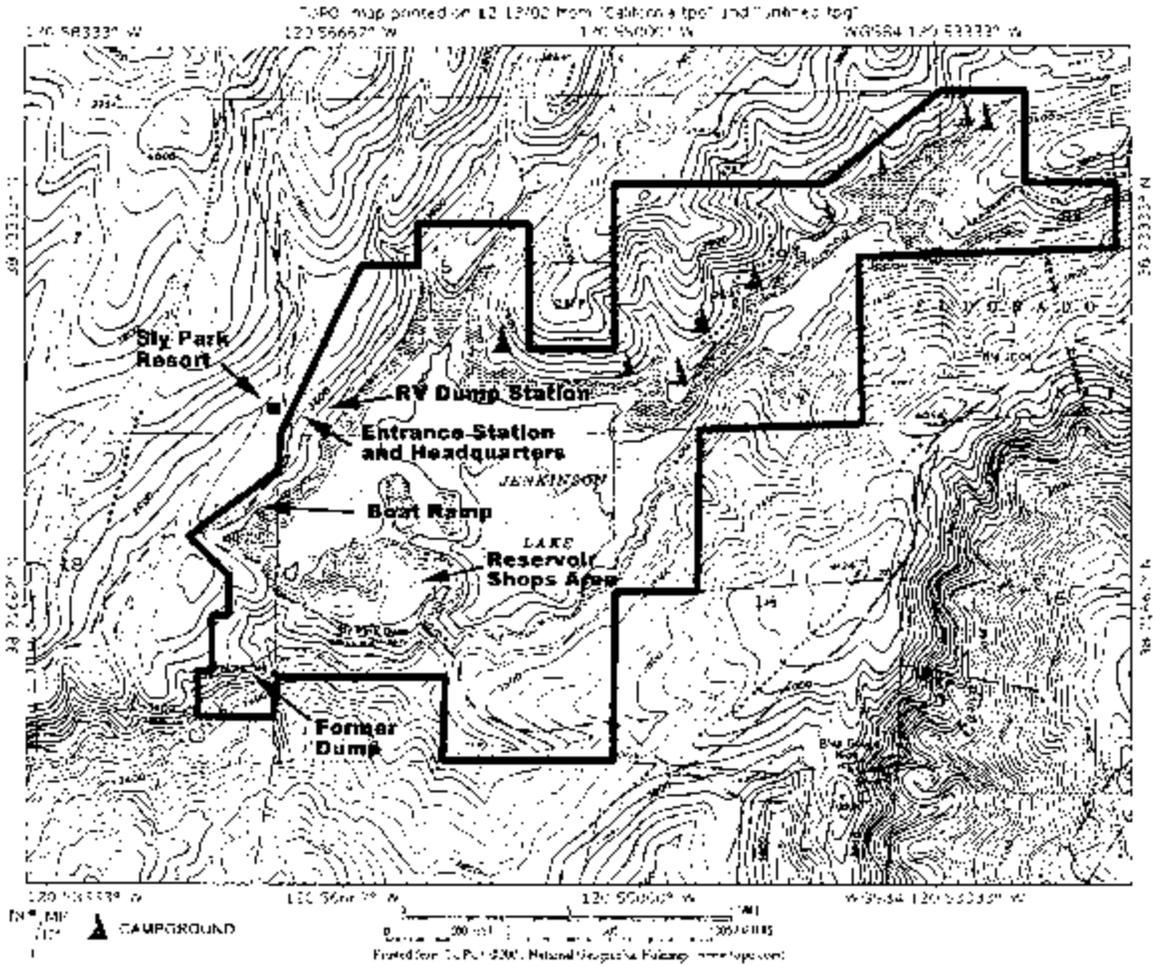
## FIGURES



**SITE LOCATION MAP**  
Phase I Environmental Site Assessment  
Sly Park Recreation Area  
Pollock Pines, California



**FIGURE 1**



**SITE MAP**  
 Phase I Environmental Site Assessment  
 Sly Park Recreation Area  
 Pollock Pines, California

**FIGURE 2**

**APPENDIX A**  
**EDR REGULATORY DATABASE REPORT**  
**January 14, 2003**



## **The EDR Area Study Report**

**Study Area  
Sly Park Recreation Area  
Pollock Pines, CA 95726**

**January 14, 2003**

**Inquiry number 909387.2s**

## ***The Source For Environmental Risk Management Data***

3530 Post Road  
Southport, Connecticut 06890

### **Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)

# Sly Park Recreation Area

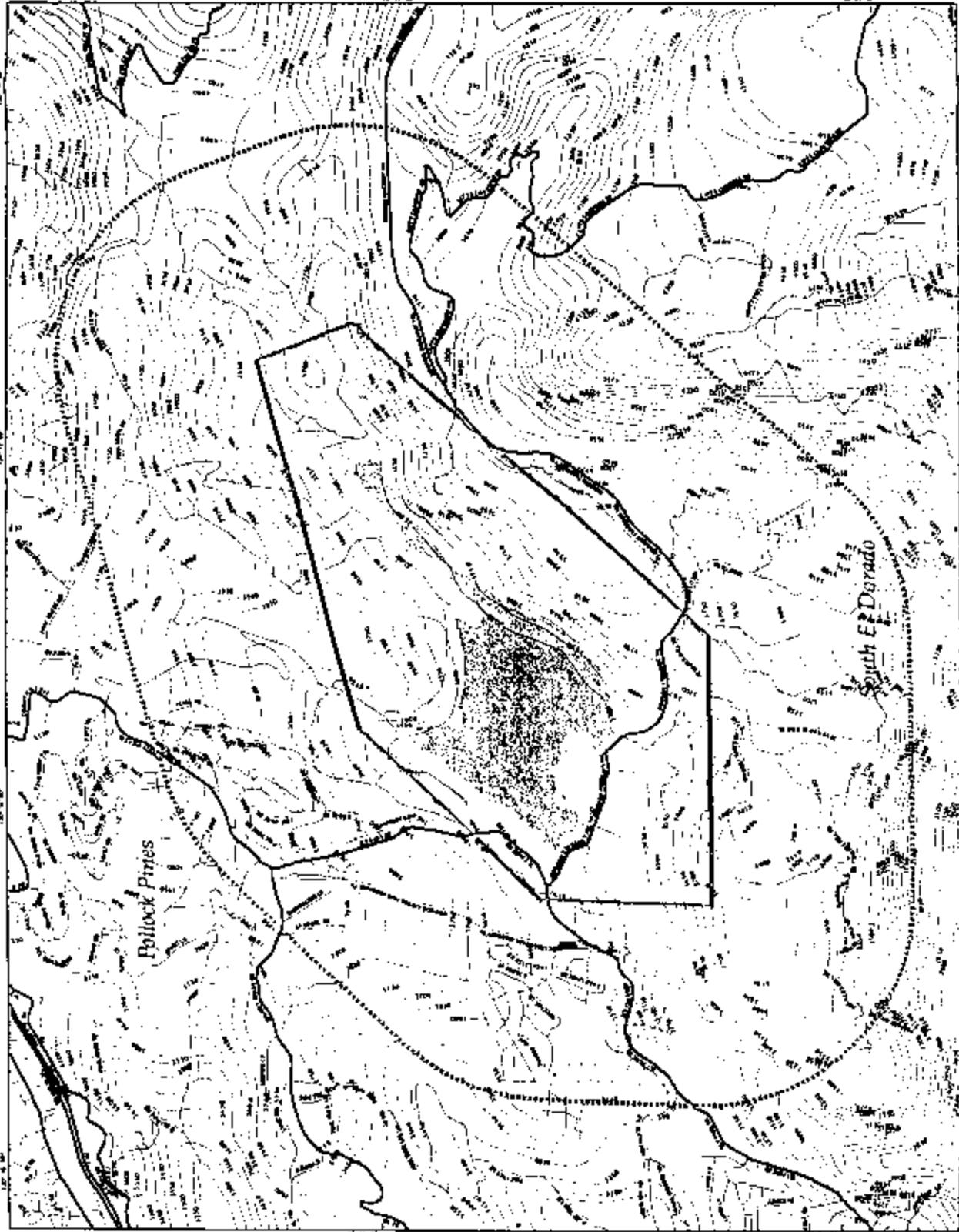
- Limited Stress
- Earthquake Epicenters (Magnitude 5 or greater)
- Search Boundary
- Roads
- Major Roads
- Waterways
- Railroads
- Contour Lines
- Popelines
- Powerlines
- Fruit Lines
- Water
- Superfund Sites
- 100 Yr Flood Zones
- Wetlands



Pollock Pines, CA  
0 1/2 1



Scale in Miles



Reduced from  
Original Size

## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR).

### TARGET PROPERTY INFORMATION

#### ADDRESS

SLY PARK RECREATION AREA  
POLLOCK PINES, CA 95726

### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ( "reasonably ascertainable " ) government records within the requested search area for the following databases:

#### FEDERAL ASTM STANDARD

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System  
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned  
CORRACTS..... Corrective Action Report  
RCRIS-TSD..... Resource Conservation and Recovery Information System  
RCRIS-LQG..... Resource Conservation and Recovery Information System  
RCRIS-SQG..... Resource Conservation and Recovery Information System  
ERNS..... Emergency Response Notification System

#### STATE ASTM STANDARD

AWP..... Annual Workplan Sites  
Cal-Sites..... Calsites Database  
CHMIRS..... California Hazardous Material Incident Report System  
Notify 65..... Proposition 65 Records  
Toxic Pits..... Toxic Pits Cleanup Act Sites  
SWFLF..... Solid Waste Information System  
WMUDS/SWAT..... Waste Management Unit Database  
CA BOND EXP. PLAN..... Bond Expenditure Plan  
VCP..... Voluntary Cleanup Program Properties  
INDIAN UST..... Underground Storage Tanks on Indian Land  
CA FID UST..... Facility Inventory Database

#### FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees  
ROD..... Records Of Decision  
Delisted NPL..... National Priority List Deletions  
FINDS..... Facility Index System/Facility Identification Initiative Program Summary Report  
HMIRS..... Hazardous Materials Information Reporting System  
MLTS..... Material Licensing Tracking System  
MINES..... Mines Master Index File  
NPL Liens..... Federal Superfund Liens  
PADS..... PCB Activity Database System

## EXECUTIVE SUMMARY

RAATS.....	RCRA Administrative Action Tracking System
TRIS.....	Toxic Chemical Release Inventory System
TSCA.....	Toxic Substances Control Act
SSTS.....	Section 7 Tracking Systems
FTTS.....	FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

### STATE OR LOCAL ASTM SUPPLEMENTAL

AST.....	Aboveground Petroleum Storage Tank Facilities
CLEANERS.....	Cleaner Facilities
CA WDS.....	Waste Discharge System
DEED.....	List of Deed Restrictions
CA SLIC.....	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
HAZNET.....	Hazardous Waste Information System

### EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas.....	Former Manufactured Gas (Coal Gas) Sites
---------------	--

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in *bold italics* are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STATE ASTM STANDARD

**CORTESE:** This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, has revealed that there is 1 Cortese site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<b><i>SLY PARK RESORT</i></b>	<b><i>4782 SLY PARK RD</i></b>	<b><i>2</i></b>	<b><i>3</i></b>

**LUST:** The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 07/11/2002 has revealed that there is 1 LUST site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<b><i>SLY PARK RESORT</i></b>	<b><i>4782 SLY PARK RD</i></b>	<b><i>2</i></b>	<b><i>3</i></b>

## EXECUTIVE SUMMARY

**UST:** The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 01/17/2002 has revealed that there is 1 UST site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<i>SLY PARK RESORT</i>	<i>4782 SLY PARK RD</i>	<i>2</i>	<i>3</i>

**HIST UST:** Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<i>SLY PARK RECREATION</i>	<i>ACROSS FROM: 4782 SLY P</i>	<i>1</i>	<i>3</i>
<i>SLY PARK RESORT</i>	<i>4782 SLY PARK RD</i>	<i>2</i>	<i>3</i>

## **EXECUTIVE SUMMARY**

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

**MAP FINDINGS SUMMARY**

<u>Database</u>	<u>Total Plotted</u>
<b><u>FEDERAL ASTM STANDARD</u></b>	
NPL	0
Proposed NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRIS-TSD	0
RCRIS Lg. Quan. Gen.	0
RCRIS Sm. Quan. Gen.	0
ERNS	0
<b><u>STATE ASTM STANDARD</u></b>	
AWP	0
Cal-Sites	0
CHMIRS	0
Cortese	1
Notify 65	0
Toxic Pits	0
State Landfill	0
WMUDS/SWAT	0
LUST	1
CA Bond Exp. Plan	0
UST	1
VCP	0
INDIAN UST	0
CA FID UST	0
HIST UST	2
<b><u>FEDERAL ASTM SUPPLEMENTAL</u></b>	
CONSENT	0
ROD	0
Delisted NPL	0
FINDS	0
HMIRS	0
MLTS	0
MINES	0
NPL Liens	0
PADS	0
RAATS	0
TRIS	0
TSCA	0
SSTS	0
FTTS	0
<b><u>STATE OR LOCAL ASTM SUPPLEMENTAL</u></b>	
AST	0

**MAP FINDINGS SUMMARY**

<u>Database</u>	<u>Total Plotted</u>
CLEANERS	0
CA WDS	0
DEED	0
CA SLIC	0
HAZNET	0

**EDR PROPRIETARY HISTORICAL DATABASES**

Coal Gas	0
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**NOTES:**

Sites may be listed in more than one database

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.) Site

EDR ID Number  
 EPA ID Number

Database(s)

**Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.**

1      **SLY PARK RECREATION**      HIST UST      U001560096  
**ACROSS FROM: 4782 SLY PARK ROA**  
**POLLOCK PINES, CA 9572**      N/A

UST HIST:

Facility ID:	38739	Container Num:	EID 2
Tank Num:	1	Year Installed:	Not reported
Tank Capacity:	500	Tank Construction:	Not reported
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Telephone:	(916) 644-2545
Leak Detection:	Visual	Region:	STATE
Contact Name:	DON PEARSON	Other Type:	Not reported
Total Tanks:	1		
Facility Type:	1		

2      **SLY PARK RESORT**      LUST      U001614827  
**4782 SLY PARK RD**      Corlese      N/A  
**POLLOCK PINES, CA 95726**      UST  
 HIST UST

State LUST:

Cross Street:	Not reported	Confirm Leak:	Not reported
Qty Leaked:	Not reported	Prelim Assess:	Not reported
Case Number:	90030	Remed Plan:	Not reported
Reg Board:	5	Monitoring:	Not reported
Chemical:	Gasoline		
Lead Agency:	Regional Board		
Local Agency:	9000		
Case Type:	Soil only		
Status:	Not reported		
County:	9		
Abate Method:	No Action Required - incident is minor, requiring no remedial action		
Review Date:	Not reported		
Workplan:	Not reported		
Pollution Char:	Not reported		
Remed Action:	Not reported		
Close Date:	9/1/87		
Release Date:	Not reported		
Cleanup Fund Id:	Not reported		
Discover Date:	Not reported		
Enforcement Dt:	1/1/85		
Enf Type:	None Taken		
Enter Date:	5/23/88		
Funding:	Not reported		
Staff Initials:	UNK		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim:	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date:	Not reported		
Max MTBE GW:	Not reported		
MTBE Tested:	Site NOT Tested for MTBE Includes Unknown and Not Analyzed.		
Priority:	Low priority. Priority ranking can change over time.		
Local Case #:	Not reported		
Beneficial:	Not reported		
Staff:	PGM		

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.) Site

EDR ID Number

Database(s) EPA ID Number

**SLY PARK RESORT (Continued)**

**U001614827**

GW Qualifier : Not reported  
 Max MTBE Soil : Not reported  
 Soil Qualifier : Not reported  
 Hydr Basin #: Not reported  
 Operator : Not reported  
 Oversight Prgm: RB Lead Underground Storage Tank  
 Oversight Prgm : UST  
 Review Date : 9/1/87  
 Stop Date : Not reported  
 Work Suspended N  
 Responsible Party: SLY PARK RESORT  
 RP Address: Not reported  
 Global Id: T0601700017  
 Org Name: Not reported  
 Contact Person: Not reported  
 MTBE Conc: 0  
 Mtb Fuel: Not reported  
 Water System Name: UPPER 34 MILESTONE TRACT  
 Well Name: LPA REPORTED PRIMARY SOURCE  
 Distance To LUST: 10082.45782  
 Waste Discharge Global ID: Not reported  
 Waste Disch Assigned Name: Not reported

**LUST Region 5:**

Substance: GASOLINE  
 Case Type: Soil only  
 Program: LUST  
 Staff Initials: PGM  
 Status: Case Closed  
 MTBE Code: N/A  
 Respble Party: SLY PARK RESORT  
 County Name: EL DORADO

Case Number: 090030

**CORTESE:**

Reg Id: 090030  
 Region: CORTESE  
 Reg By: Leaking Underground Storage Tanks

**UST HIST:**

Facility ID: 18279	Container Num: 001
Tank Num: 1	Year Installed: Not reported
Tank Capacity: 1000	
Tank Used for: PRODUCT	Tank Construction: Not reported
Type of Fuel: REGULAR	
Leak Detection: Visual, Stock Inventor	Telephone: (916) 644-1113
Contact Name: BOB MILLER	Region: STATE
Total Tanks: 2	Other Type: Not reported
Facility Type: 1	
Facility ID: 18279	Container Num: 002
Tank Num: 2	Year Installed: Not reported
Tank Capacity: 1000	
Tank Used for: PRODUCT	Tank Construction: Not reported
Type of Fuel: UNLEADED	
Leak Detection: Visual, Stock Inventor	Telephone: (916) 644-1113
Contact Name: BOB MILLER	Region: STATE
Total Tanks: 2	Other Type: Not reported
Facility Type: 1	

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

**SLY PARK RESORT (Continued)**

**U001614827**

State UST:

Facility ID: FA0000365  
 Total Tanks: 1  
 Region: STATE  
 Local Agency: 9000

UST Yolo County:

Facility ID: FA0000365  
 Owner: MAYFIELD, ROBERT  
 3130 DULUTH  
 W SACRAMENTO, CA 95691  
 Owner ID : OW0002467  
 Business Type : 99 - OTHER  
 Business Code : 09 - UNKNOWN  
 Current Status : 02  
 Program/Element : 2306 - UST PERMANENT CLOSURE PERMIT  
 Tank Number : 1  
 Tank Type : 02  
 Tank Description : SINGLE WALLED  
 Product Type : 003  
 Capacity : 4,000  
 Leak Detection Number Not reported  
 Tank Status : 02  
 LEA Id : Not reported  
 Surcharge Year : 10/31/92  
 Inv Gen , 1992000365

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Data base(s)
DIAMOND SPRINGS	S103656978	EL DORADO DISPOSAL SERVICE	3940 HWY 49	95667	HAZNET
FRESH POND	1003878552	SMUDEA CAMP GROUNDS	ICEHOUSE RD	95726	CERC-NFRAP
FRESH POND	S101294311	SMUDEA CAMPGROUND	ICEHOUSE RD	95726	Cal-Sites, Corlese
PLACER	S103987483	SPPP LP (COLFAX STATION)	17 MI. EAST AUBURN ON HWY. 80	95667	HAZNET
PLACERVILLE	1000137103	PG & E CHUBAR POWERHOUSE	HWY 197 3 MI N OF PVILLE	95667	ACRIS-SQG, FINDS, HAZNET
PLACERVILLE	S100350726	BONANZA AUTO DISMANTLERS	5200 BONANZA AUTO ROAD	95667	Cal-Sites
PLACERVILLE	S104569630	US FOREST SERVICE EL DORADO NAT'L FOREST	ON CARSON RD. 2.5MP NE OF HWY 50	95667	HAZNET
PLACERVILLE	S102359927	FINNON	FINNON RESERVOIR 0.1 MI FR ROCK CREEK R	95667	SWFLF
PLACERVILLE	S104572674	CEDAR SPRINGS WALDORF SCHOOL	8029 GOLD MEADOW RD	95667	HAZNET
PLACERVILLE	S104568678	J & M LAND RESTORATION INC	POLLACK PINES/HWY 50.1/2 MI SLY PK EXIT	95667	HAZNET
PLACERVILLE	S105155530	WESTERN EL DORADO RECOVERY SYSTEMS MRF	4100 THROWITA WAY	95726	HIST UST
POLLOCK PINES	U001614687	RIVERTON LOGGING YARD	HIGHWAY 50	95726	HIST UST
POLLOCK PINES	U001614817	PACIFIC WORK CENTER	HIGHWAY 50	95726	HIST UST
POLLOCK PINES	S104574085	PEBE CAMP 5 HYDRO SVC CTR	CAMP 5 HWY 50	95667	HAZNET
POLLOCK PINES	1000137192	PG & E CAMP 5 HYDRO SVC CTR	CAMP 5 HWY 50	95726	FINDS, RCRIS-LOG
POLLOCK PINES	S105085829	LAYNE CHRISTENSEN INC AT SMUD POWERHOUSE	SO FORK OF AMERICAN RIVER	95726	HAZNET
POLLOCK PINES	S101480001	HAZEL CREEK MINE	HAZEL CREEK ROAD	95726	Cal-Sites
POLLOCK PINES	S103442021	BLUE GOUBE MINE	OFF MORMON EMIGRANT TRAIL		WMUDS/SWAT
POLLOCK PINES	S103679560	ARENS BROTHERS ENTERPRISES	PARK CREEK RD	95726	HAZNET
POLLOCK PINES	S103667060	POLLOCK PINES USD/PINEWOOD ELEMENTARY	6181 PINE ST STE A	95726	HAZNET
POLLOCK PINES	U001614818	PINEWOOD SCHOOL	6181A PINE ST	95726	HIST UST
POLLOCK PINES	S102359928	FRESH POND #1	E SIDE OLD CARSON RD .6 MI FR PARK CR RD	95726	SWFLF

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
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**EL DORADO DISPOSAL SERVICE**  
**3840 HWY 49**  
**DIAMOND SPRINGS, CA 95667**

**HAZNET** **S103856978**  
**N/A**

**HAZNET:**

Gepaid: CAD980637698  
Tepaid: NVD982358483  
Gen County: 9  
Tsd County: 99  
Tons: 1.4595  
Category: Unspecified oil-containing waste  
Disposal Method: Recycler  
Contact: EL DORADO DISPOSAL SVCS INC  
Telephone: (000) 000-0000  
Mailing Address: PO BOX 1270  
DIAMOND SPRINGS, CA 95619 - 1270  
County 9

Gepaid: CAD980637698  
Tepaid: CAD982446874  
Gen County: 9  
Tsd County: Yolo  
Tons: 0.4567  
Category: Aqueous solution with less than 10% total organic residues  
Disposal Method: Transfer Station  
Contact: EL DORADO DISPOSAL SVCS INC  
Telephone: (000) 000-0000  
Mailing Address: PO BOX 1270  
DIAMOND SPRINGS, CA 95619 - 1270  
County 9

Gepaid: CAD980637698  
Tepaid: CAD980887418  
Gen County: 9  
Tsd County: 1  
Tons: 1.5637  
Category: Waste oil and mixed oil  
Disposal Method: Recycler  
Contact: EL DORADO DISPOSAL SVCS INC  
Telephone: (000) 000-0000  
Mailing Address: PO BOX 1270  
DIAMOND SPRINGS, CA 95619 - 1270  
County 9

**SMUDEA CAMP GROUNDS**  
**ICEHOUSE RD**  
**FRESH POND, CA 95726**

**CERC-NFRAP** **1003878552**  
**CAD980637433**

**CERCLIS-NFRAP Classification Data:**

Site Incident Category: Not reported	Federal Facility: Not a Federal Facility
Non NPL Code: NFRAP	
Ownership Status: Unknown	NPL Status: Not on the NPL

**CERCLIS-NFRAP Assessment History:**

Assessment: DISCOVERY	Completed: 06/01/1981
Assessment: PRELIMINARY ASSESSMENT	Completed: 07/01/1985
Assessment: SITE INSPECTION	Completed: 08/01/1986
Assessment: ARCHIVE SITE	Completed: 09/12/1990
Assessment: SITE INSPECTION	Completed: 09/12/1990

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
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**SMUDEA CAMPGROUND  
ICEHOUSE RD  
FRESH POND, CA 95726**

**Cal-Sites S101294311  
Cortese N/A**

**CAL-SITES:**

Facility ID:	09700001	
Status:	REFOA - DOES NOT REQUIRE DTSC ACTION OR OVERSITE ACTIVITY. REFERRED TO OTHER AGENCY LEAD	
Status Date:	11/16/1994	
Lead:	Not reported	
Region:	1 - SACRAMENTO	
Branch:	CC - CENTRAL CALIFORNIA	
File Name:	Not reported	
Status Name:	PROPERTY/SITE REFERRED TO ANOTHER AGENCY	
Lead Agency:	N/A	Not reported
NPL:	Not reported	
SIC:	70 HOTELS & OTHER LODGING PLACES	
Facility Type:	N/A	
Type Name:	Not reported	
Staff Member Responsible for Site:	Not reported	
Supervisor Responsible for Site:	Not reported	
Region Water Control Board:	CV - CENTRAL VALLEY	
Access:	Controlled	
Cortese:	C	
Hazardous Ranking Score:	Not reported	
Date Site Hazard Flagged:	Not reported	
Groundwater Contamination:	Not reported	
No. of Contamination Sources:	0	
Lat/Long:	0° 0' 0.00" / 0° 0' 0.00"	
Lat/Long Method:	Not reported	
State Assembly District Code:	Not reported	
State Senate District:	Not reported	

The CAL-SITES database may contain additional details for this site.  
Please contact your EDR Account Executive for more information.

**CORTESE:**

Reg Id:	09700001
Region:	CORTESE
Reg By:	CALSI

**SFPP LP (COLFAX STATION)  
17 MI. EAST AUBURN ON HWY. 80  
PLACER, CA 95667**

**HAZNET S103987483  
N/A**

**HAZNET:**

Gepaid:	CAT080011208
Tepaid:	CAD982444481
Gen County:	Placer
Tsd County:	San Bernardino
Tons:	.1000
Category:	Other organic solids
Disposal Method:	Recycler
Contact:	SFPP LP
Telephone:	(714) 560-4873
Mailing Address:	1100 TOWN AND COUNTRY RD ORANGE, CA 92668 - 4600
County:	Placer

DETAILED ORPHAN LISTING

Site	Database(s)	EOR ID Number EPA ID Number
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SFPP LP (COLFAX STATION) (Continued)

S103987483

Gepaid: CAT080011208  
 Tepaid: CAD008302903  
 Gen County: Placer  
 Tsd County: Los Angeles  
 Tons: .2150  
 Category: Other organic solids  
 Disposal Method: Recycler  
 Contact: SFPP L P  
 Telephone: (714) 560-4873  
 Mailing Address: 1100 TOWN AND COUNTRY RD  
 ORANGE, CA 92868 - 4600  
 County: Placer

Gepaid: CAT080011208  
 Tepaid: CAD008302903  
 Gen County: Placer  
 Tsd County: Los Angeles  
 Tons: 0.0625  
 Category: Unspecified solvent mixture Waste  
 Disposal Method: Recycler  
 Contact: SFPP L P  
 Telephone: (714) 560-4873  
 Mailing Address: 1100 TOWN AND COUNTRY RD  
 ORANGE, CA 92868 - 4600  
 County: Placer

Gepaid: CAT080011208  
 Tepaid: CAD008302903  
 Gen County: Placer  
 Tsd County: Los Angeles  
 Tons: 1.2500  
 Category: Other organic solids  
 Disposal Method: Transfer Station  
 Contact: SFPP L P  
 Telephone: (714) 560-4873  
 Mailing Address: 1100 TOWN AND COUNTRY RD  
 ORANGE, CA 92868 - 4600  
 County: Placer

PG & E CHILI BAR POWERHOUSE  
 HWY 193 3 MI N OF P'VILLE  
 PLACERVILLE, CA 95667

RCRIS-SQG 1000137193  
 FINDS CAD981373376  
 HAZNET

RCRIS:  
 Owner: PG & E  
 (415) 555-1212  
 EPA ID: CAD981373376  
 Contact: ENVIRONMENTAL MANAGER  
 (916) 644-1960

Classification: Small Quantity Generator  
 Used Oil Recyc: No  
 TSOE Activities: Not reported

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
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PG & E CHILI BAR POWERHOUSE (Continued)

1000137193

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:  
 Facility Registry System (FRS)  
 Resource Conservation and Recovery Act Information system (RCRAINFO)

HAZNET:

Gepaid: CAD981373376  
 Tepaid: CAD059494310  
 Gen County: 9  
 Tsd County: Santa Clara  
 Tons: .1750  
 Category: Organic solids with halogens  
 Disposal Method: Transfer Station  
 Contact: Not reported  
 Telephone: (900) 000-0000  
 Mailing Address: 471 PIERROZ RD  
 PLACERVILLE, CA 95667  
 County: 9

**BONANZA AUTO DISMANTLERS**  
**5200 BONANZA AUTO ROAD**  
**PLACERVILLE, CA 95667**

Cal-Sites: S100350726  
 N/A

CAL-SITES:

Facility ID: 09500003  
 Status: REFOA - DOES NOT REQUIRE DTSC ACTION OR OVERSITE ACTIVITY. REFERRED TO OTHER AGENCY LEAD  
 Status Date: 09/12/1995  
 Lead: Not reported  
 Region: 1 - SACRAMENTO  
 Branch: CC - CENTRAL CALIFORNIA  
 File Name: Not reported  
 Status Name: PROPERTY/SITE REFERRED TO ANOTHER AGENCY  
 Lead Agency: N/A Not reported  
 NPL: Not reported  
 SIC: 50 WHOLESALE TRADE - DURABLE GOODS  
 Facility Type: N/A  
 Type Name: Not reported  
 Staff Member Responsible for Site: Not reported  
 Supervisor Responsible for Site: Not reported  
 Region Water Control Board: CV - CENTRAL VALLEY  
 Access: Uncontrolled  
 Cortese: U  
 Hazardous Ranking Score: Not reported  
 Date Site Hazard Ranked: Not reported  
 Groundwater Contamination: Not reported  
 No. of Contamination Sources: 0  
 Lat/Long: 0° 0' 0.00" : 0° 0' 0.00"  
 Lat/Long Method: Not reported  
 State Assembly District Code: Not reported  
 State Senate District: Not reported

The CAL-SITES database may contain additional details for this site.  
 Please contact your EDR Account Executive for more information.

DETAILED ORPHAN LISTING

Site	Database(s)	EOR ID Number EPA ID Number
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**US FOREST SERVICE/EL DORADO NAT'L FOREST  
ON CARSON RD, 2.5MI NE OF HWY 50  
PLACERVILLE, CA 95667**

**HAZNET S104569630  
N/A**

**HAZNET:**

Gepaid: CAC002112792  
 Tepad: CAT080022148  
 Gen County: 9  
 Tsd County: San Bernardino  
 Tons: 0.3  
 Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)  
 Disposal Method: Transfer Station  
 Contact: US FOREST SERVICE  
 Telephone: (530) 333-5551  
 Mailing Address: 100 FORNI RD  
 PLACERVILLE, CA 95667  
 County: 9

Gepaid: CAC002112792  
 Tepad: CAT080022148  
 Gen County: 9  
 Tsd County: San Bernardino  
 Tons: 0.8428  
 Category: Paint sludge  
 Disposal Method: Transfer Station  
 Contact: US FOREST SERVICE  
 Telephone: (530) 333-5551  
 Mailing Address: 100 FORNI RD  
 PLACERVILLE, CA 95667  
 County: 9

**FINNON  
FINNON RESERVOIR 0.1 MI FR ROCK CREEK RD  
PLACERVILLE, CA 95667**

**SWF/LF S102358927  
N/A**

**LF:**

Facility ID: 09-CR-0006  
 Operator: Calif State Lands Commission  
 Operator Phone: (916) 481-1900  
 Operator Addr: 100 Howe Ave, Ste 100  
 Sacramento, CA 95825  
 Owner: Calif State Lands Commission  
 Owner Address: Not reported  
 100 Howe Ave, Ste 100  
 Sacramento, CA 95825  
 Owner Telephone: (916) 481-1900  
 Activity: Solid Waste Disposal Site  
 Operator's Status: Closed  
 Regulation Status: Pre-regulations  
 Region: STATE  
 Lat/Long: 38.79667 / -120.755  
 Permit Date: Not reported  
 Accepted Waste:  
 Restrictions:  
 Status: Not reported  
 Swisnumber: Not reported  
 Site Type: Not reported  
 Aka: Not reported  
 Type Of Waste: Not reported  
 Disposal Area: Not reported  
 SWFP Date: Not reported

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
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FINNON (Continued)

S102359927

WOR Number :	Not reported
Dates Of Operation :	Not reported
Closure Approved :	Not reported
Date Of Field Units :	Not reported
Surface Condition :	Not reported
Landfill Gas :	Not reported
Leachate :	Not reported
Emergency Response :	Not reported
Other Recommendation :	Not reported
Reassess Site :	Not reported
Priority For Site Assessment :	Not reported
Lea Date :	Not reported
Explanation:	Not Reported
No Further Action:	Not Reported
Permitted Throughput with Units:	0
Permitted Throughput with Units:	0
Permitted Throughput with Units:	0
Actual Throughput with Units:	Not reported
Actual Capacity with Units:	0
Permitted Capacity with Units:	0
Remaining Capacity with Units:	Not reported
Permitted Total Acreage:	0
Inspection Frequency:	Annual
Landuse Name:	Not reported
GIS Source:	Map
Permit Status:	Not reported
Category:	Disposal
Unit Number	01
Last Waste Tire Inspection Count :	0
Last Waste Tire Inspection Date:	0
Original Waste Tire Count:	Not reported
Original Waste Tire Count Date:	Not reported
Closure Date	01/01/1972
Closure Type	Actual
Disposal Acreage:	0
Remaining Capacity:	0

**CEDAR SPRINGS WALDORF SCHOOL**  
**6029 GOLD MEADOW RD**  
**PLACERVILLE, CA 95667**

**HAZNET S104572674**  
**N/A**

HAZNET:

Gepaid.	CAC002222337
Tepaid.	CAD9B1382732
Gen County:	9
Tsd County:	1
Tons:	0.8428
Category:	Asbestos-containing waste
Disposal Method:	Disposal, Land Fill
Contact:	CEDAR SPRINGS WALDORF SCHOOL
Telephone:	(510) 642-9903
Mailing Address:	6029 GOLD MEADOW RD PLACERVILLE, CA 95667
County	9

DETAILED ORPHAN LISTING

Site	Database(s)	EOR ID Number EPA ID Number
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**J & M LAND RESTORATION INC**  
**POLLACK PINES/HWY 50, 1/2 MI SLY PK EXIT**  
**PLACERVILLE, CA 95667**

**HAZNET** S104568678  
 N/A

HAZNET:  
 Copaid: CAC001476800  
 Tepad: CAT080033681  
 Gen County: 9  
 Tsd County: Los Angeles  
 Tons: 0.8  
 Category: Other organic solids  
 Disposal Method: Disposal, Land Fill  
 Contact: J&M LAND RESTORATION INC  
 Telephone: (000) 000-0000  
 Mailing Address: 1640 JAMES RD  
 BAKERSFIELD, CA 93308  
 County 9

**WESTERN EL DORADO RECOVERY SYSTEMS MRF**  
**4100 THROWITA WAY**  
**PLACERVILLE, CA 95667**

**SWF/LF** S105155530  
 N/A

LF:  
 Facility ID: 09-AA-0004  
 Operator: Western El Dorado Reg System  
 Operator Phone: (530) 626-4141  
 Operator Addr: 4100 Throwita Way  
 Placerville, CA 95667  
 Owner: Western El Dorado Reg System  
 Owner Address: Not reported  
 4100 Throwita Way  
 Placerville, CA 95667  
 Owner Telephone: (530) 626-4141  
 Activity: Large Volume Transfer/Proc Facility  
 Operator's Status: Active  
 Regulation Status: Permitted  
 Region: STATE  
 Lat/Long: 38.6992 / -120.81498  
 Permi Date: 5/29/02  
 Accepted Waste: Mixed municipal  
 Restrictions:  
 Status : Not reported  
 Swisnumber : Not reported  
 Site Type : Not reported  
 Aka : Not reported  
 Type Of Waste : Not reported  
 Disposal Area : Not reported  
 SWFP Date : Not reported  
 WDR Number : Not reported  
 Dates Of Operation : Not reported  
 Closure Approved : Not reported  
 Date Of Field Units : Not reported  
 Surface Condition : Not reported  
 Landfill Gas : Not reported  
 Leachate : Not reported  
 Emergency Response : Not reported  
 Other Recommendation : Not reported  
 Reassess Site : Not reported  
 Priority For Site Assessment : Not reported  
 Lea Date : Not reported

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
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WESTERN EL DORADO RECOVERY SYSTEMS MRF (Continued)

S105155530

Explanation:	Not Reported
No Further Action:	Not Reported
Permitted Throughput with Units:	400
Permitted Throughput with Units:	400
Permitted Throughput with Units:	400
Actual Throughput with Units:	Tons/day
Actual Capacity with Units:	400
Permitted Capacity with Units:	400
Remaining Capacity with Units:	Tons/day
Permitted Total Acreage:	10.1
Inspection Frequency:	Monthly
Landuse Name:	Not reported
GIS Source:	Map
Permit Status:	Permitted
Category:	Transfer/Processing
Unit Number:	01
Last Waste Tire Inspection Count :	Not reported
Last Waste Tire Inspection Date:	Not reported
Original Waste Tire Count:	311
Original Waste Tire Count Date:	12/18/01
Closure Date:	/ /
Closure Type:	Not reported
Disposal Acreage:	Not reported
Remaining Capacity	Not reported

RIVERTON LOGGING YARD  
HIGHWAY 50  
POLLOCK PINES, CA 95726

HIST UST U001614587  
N/A

UST HIST:

Facility ID:	59328	Container Num:	24
Tank Num:	1	Year Installed:	Not reported
Tank Capacity:	4000	Tank Construction:	Not reported
Tank Used for:	PRODUCT	Telephone:	(916) 644-2311
Type of Fuel:	REGULAR	Region:	STATE
Leak Detection:	Visual	Other Type:	LOGGING YARD
Contact Name:	HENRY ALDEN		
Total Tanks:	0		
Facility Type:	2		
Facility ID:	59328	Container Num:	23
Tank Num:	2	Year Installed:	Not reported
Tank Capacity:	10000	Tank Construction:	Not reported
Tank Used for:	PRODUCT	Telephone:	(916) 644-2311
Type of Fuel:	DIESEL	Region:	STATE
Leak Detection:	Visual	Other Type:	LOGGING YARD
Contact Name:	HENRY ALDEN		
Total Tanks:	0		
Facility Type:	2		

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
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**PACIFIC WORK CENTER  
HIGHWAY 50  
POLLOCK PINES, CA 95726**

**HIST UST**    **UD01614617**  
**N/A**

UST HIST:

Facility ID:	37396		
Tank Num:	1	Container Num:	2442
Tank Capacity:	2000	Year Installed:	1984
Tank Used for:	PRODUCT		
Type of Fuel:	DIESEL	Tank Construction:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	Not reported	Telephone:	(916) 644-2349
Total Tanks:	2	Region:	STATE
Facility Type:	2	Other Type:	GOVERNMENT
Facility ID:	37396		
Tank Num:	2	Container Num:	2443
Tank Capacity:	4000	Year Installed:	1984
Tank Used for:	PRODUCT		
Type of Fuel:	UNLEADED	Tank Construction:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	Not reported	Telephone:	(916) 644-2349
Total Tanks:	2	Region:	STATE
Facility Type:	2	Other Type:	GOVERNMENT

**PG&E CAMP 5 HYDRO SVC CTR  
CAMP 5 HWY 50  
POLLOCK PINES, CA 95657**

**HAZNET**    **S104574085**  
**N/A**

HAZNET:

Gepaid:	CAD981373319
Tepaid:	CAT000646117
Gen County:	9
Tsd County:	Kings
Tons:	.1250
Category:	Unspecified oil-containing waste
Disposal Method:	Disposal, Land Fill
Contact:	PACIFIC GAS & ELECTRIC
Telephone:	(415) 973-5682
Mailing Address:	4636 MISSOURI FLAT RD PLACERVILLE, CA 95667 - 6823
County:	9
Gepaid:	CAD981373319
Tepaid:	CAT000646117
Gen County:	9
Tsd County:	Kings
Tons:	31.5408
Category:	Other organic solids
Disposal Method:	Disposal, Land Fill
Contact:	PACIFIC GAS & ELECTRIC
Telephone:	(415) 973-5682
Mailing Address:	4636 MISSOURI FLAT RD PLACERVILLE, CA 95667 - 6823
County:	9

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
PG&E CAMP 5 HYDRO SVC CTR (Continued)		S104574085

Gepaid: CAD981373319  
 Tepaid: CAD044429835  
 Gen County: 9  
 Tsd County: Los Angeles  
 Tons: .0600  
 Category: Other organic solids  
 Disposal Method: Treatment, Incineration  
 Contact: PACIFIC GAS & ELECTRIC  
 Telephone: (415) 973-5682  
 Mailing Address: 4636 MISSOURI FLAT RD  
 PLACERVILLE, CA 95667 - 6823  
 County: 9

Gepaid: CAD981373319  
 Tepaid: CAD044429835  
 Gen County: 9  
 Tsd County: Los Angeles  
 Tons: .1350  
 Category: Off-specification, aged, or surplus organics  
 Disposal Method: Treatment, Incineration  
 Contact: PACIFIC GAS & ELECTRIC  
 Telephone: (415) 973-5682  
 Mailing Address: 4636 MISSOURI FLAT RD  
 PLACERVILLE, CA 95667 - 6823  
 County: 9

Gepaid: CAD981373319  
 Tepaid: CAD088504881  
 Gen County: 9  
 Tsd County: Orange  
 Tons: 0750  
 Category: Liquids with pH <UN> 2  
 Disposal Method: Recycler  
 Contact: PACIFIC GAS & ELECTRIC  
 Telephone: (415) 973-5682  
 Mailing Address: 4636 MISSOURI FLAT RD  
 PLACERVILLE, CA 95667 - 6823  
 County: 9

The CA HAZNET database contains 29 additional records for this site.  
Please contact your EDR Account Executive for more information.

PG & E CAMP 5 HYDRO SVC CTR  
 CAMP 5 HWY 50  
 POLLOCK PINES, CA 95726

FINDS 1000137192  
 RCRIS-LGG CAD981373319

DETAILED ORPHAN LISTING

Site	Database(s)	EOR ID Number EPA ID Number
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PG & E CAMP 5 HYDRO SVC CTR (Continued)		1000137192
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RCRIS:

Owner: PG & E  
(415) 555-1212  
EPA ID: CAD981373319  
Contact: ENVIRONMENTAL MANAGER  
(916) 644-1980

Classification: Large Quantity Generator  
Used Oil Recyc: No  
TSDF Activities: Not reported  
Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:  
Facility Registry System (FRS)  
Resource Conservation and Recovery Act Information system (RCRAINFO)

LAYNE CHRISTENSEN INC AT SMUD POWERHOUSE SO FORK OF AMERICAN RIVER POLLOCK PINES, CA 95726	HAZNET	S105065929 N/A
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HAZNET:

Gepaid: CAC002270193  
Tepaid: CAT00033681  
Gen County: 9  
Tsd County: Los Angeles  
Tons: .1500  
Category: Other organic solids  
Disposal Method: Disposal, Land Fill  
Contact: LAYNE CHRISTENSEN INC  
Telephone: (909) 000-0000  
Mailing Address: 6454 PONY EXPRESS TRAIL #33  
POLLOCK PINES, CA 95726  
County: 9

HAZEL CREEK MINE HAZEL CREEK ROAD POLLOCK PINES, CA 95726	Cal-Sites	S101480001 N/A
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CAL-SITES:

Facility ID: 08100002  
Status: PEAR - PRELIMINARY ENDANGERMENT ASSESSMENT (PEA) REQUIRED  
Status Date: 05/15/1995  
Load: Not reported  
Region: 1 - SACRAMENTO  
Branch: CC - CENTRAL CALIFORNIA  
File Name: Not reported  
Status Name: PRELIMINARY ENDANGERMENT ASSESSMENT REQUIRED  
Lead Agency: N/A Not reported  
NPL: Not reported  
SIC: 10 METAL MINING  
Facility Type: N/A  
Type Name: Not reported  
Staff Member Responsible for Site: Not reported  
Supervisor Responsible for Site: Not reported  
Region Water Control Board: CV - CENTRAL VALLEY

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
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HAZEL CREEK MINE (Continued)		S101480001
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Access:	Controlled
Cortese:	C
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Not reported
No. of Contamination Sources:	0
Lat/Long:	0° 0' 0.00" / 0° 0' 0.00"
Lat/Long Method:	Not reported
State Assembly District Code:	Not reported
State Senate District:	Not reported

The CAL-SITES database may contain additional details for this site.  
Please contact your EDR Account Executive for more information.

BLUE GOUGE MINE OFF MORMON EMIGRANT TRAIL POLLOCK PINES, CA	WMUDS/SWAT	S103442021 N/A
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WMUDS:

Region:	SS
Date of Last Facility Edit:	Not reported
Last Facility Editors:	Not reported
Waste Discharge System ID:	5A092014001
Solid Waste Information ID:	Not reported
Waste Discharge System:	True
Solid Waste Assessment Test Program:	False
Facility Name:	Not reported
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act Program:	False
Department of Defense:	False
Open to Public:	False
Number of WMUDS at Facility:	1
Facility Telephone:	Not reported
Primary Standard Industrial Classification:	1041
Secondary Standard Industrial Classification:	Not reported
Solid Waste Assessment Test Program Name:	Not reported
NPID:	Not reported
Tonnage:	0
Regional Board ID:	Not reported
Municipal Solid Waste:	False
Superorder:	False
Sub Chapter 15:	True
Reg. Board Project Officer:	RJB
Section Range:	Not reported
RCRA Facility:	No
Waste Discharge Requirements:	H
Base Meridian:	Not reported
Waste List:	False
Facility Description:	Not reported
Self-Monitoring Rept. Frequency:	No Reporting Requirements
Threat to Water Quality:	

Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not All nurds without a TTWO will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping
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DETAILED ORPHAN LISTING

Site	Database(s)	EOR ID Number EPA ID Number
BLUE GOUGE MINE (Continued)		S103442021
Complexity:	Category B - Any facility having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), or any Class II or III disposal site, or facilities without treatment systems that are complex, such as mannas with petroleum products, solid wastes, and sewage pump out facilities.	
Prime Waste:	Process Waste (Waste produced as part of the industrial/manufacturing process) - Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.	
Agency:	OMNI ENTERPRISES, INC.	
Address:	P O, BOX 543 POLLOCK PINES ,CA 95726	
Department:	Not reported	
Contact:	Not reported	
Telephone:	(916) 644-5235	
Type:	Private	
Landowner:	Not reported	
Address:	Not reported	
Telephone:	Not reported	
Contact:	Not reported	

**ARENS BROTHERS ENTERPRISES** **HAZNET** **S103679560**  
**PARK CREEK RD.** **N/A**  
**POLLOCK PINES, CA 95726**

HAZNET:  
 Gepaid: CAL000159330  
 Tepaid: CAD980887418  
 Gen County: 9  
 Tsd County: 1  
 Tons: .5629  
 Category: Waste oil and mixed oil  
 Disposal Method: Recycler  
 Contact: ARENS BROTHERS ENTERPRISES  
 Telephone: (916) 644-6307  
 Mailing Address: P O, BOX 1142  
 POLLOCK PINES, CA 95726  
 County: 9

**POLLOCK PINES USD/PINEWOOD ELEMENTARY** **HAZNET** **S103687060**  
**6181 PINE ST STE A** **N/A**  
**POLLOCK PINES, CA 95726**

HAZNET:  
 Gepaid: CAC001270448  
 Tepaid: NYD985980233  
 Gen County: 9  
 Tsd County: 99  
 Tons: .0000  
 Category:  
 Disposal Method: Treatment, Incineration  
 Contact: POLLOCK PINES USD  
 Telephone: (916) 644-5418  
 Mailing Address: 6181 PINE ST STE A  
 POLLOCK PINES, CA 95726  
 County: 9

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
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POLLOCK PINES USD/PINEWOOD ELEMENTARY (Continued)		S103667060
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Gepaid: CAC001270448  
 Tepaid: NYD986980233  
 Gen County: 9  
 Tsd County: 99  
 Tons: .0000  
 Category: Polychlorinated biphenyls and material containing PCB's  
 Disposal Method: Recycler  
 Contact: POLLOCK PINES USD  
 Telephone: (916) 644-3416  
 Mailing Address: 6181 PINE ST STE A  
 POLLOCK PINES, CA 95726  
 County: 9

PINEWOOD SCHOOL 6181A PINE ST POLLOCK PINES, CA 95726	HIST UST	U001614818 N/A
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UST HIST:

Facility ID: 53797	Container Num: 02
Tank Num: 1	Year Installed: 1976
Tank Capacity: 1000	
Tank Used for: PRODUCT	Tank Construction: Not reported
Type of Fuel: REGULAR	
Leak Detection: Visual	Telephone: (916) 644-3750
Contact Name: JOAN DELFINO	Region: STATE
Total Tanks: 1	Other Type: BUS STORAGE
Facility Type: 2	

FRESH POND #1 E SIDE OLD CARSON RD ,6 MI FR PARK CR RD POLLOCK PINES, CA 95726	SWFALF	S102359928 N/A
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LF:

Facility ID: 09-CR-0007	
Operator: Not reported	
Operator Phone: Not reported	
Operator Addr:	
Owner: Angelo, James & Wilson, Nadine	
Owner Address: Not reported	566 Long Hill Rd
	Gillette, NJ 07933
Owner Telephone: Not reported	
Activity: Solid Waste Disposal Site	
Operator's Status: Closed	
Regulation Status: Pre-regulations	
Region: STATE	
Lat/Long: 38.76 / -120.53833	
Permit Date: Not reported	
Accepted Waste:	
Restrictions:	
Status:	Not reported
Swisnumber:	Not reported
Site Type:	Not reported
Aka:	Not reported
Type Of Waste:	Not reported
Disposal Area:	Not reported
SWFP Date:	Not reported

DETAILED ORPHAN LISTING

Site	Database(s)	EDR ID Number EPA ID Number
FRESH POND #1 (Continued)		S102359928

WDR Number :	Not reported
Dates Of Operation :	Not reported
Closure Approved :	Not reported
Date Of Field Units :	Not reported
Surface Condition :	Not reported
Landfill Gas :	Not reported
Leachate :	Not reported
Emergency Response :	Not reported
Other Recommendation :	Not reported
Reassess Site :	Not reported
Priority For Site Assessment :	Not reported
Lea Date :	Not reported
Explanation:	Not Reported
No Further Action:	Not Reported
Permitted Throughput with Units:	0
Permitted Throughput with Units:	0
Permitted Throughput with Units:	0
Actual Throughput with Units:	Not reported
Actual Capacity with Units:	0
Permitted Capacity with Units:	0
Remaining Capacity with Units:	Not reported
Permitted Total Acreage:	0
Inspection Frequency:	Annual
Landuse Name:	Not reported
GIS Source:	Map
Permit Status:	Not reported
Category:	Disposal
Unit Number:	01
Last Waste Tire Inspection Count :	0
Last Waste Tire Inspection Date:	0
Original Waste Tire Count:	Not reported
Original Waste Tire Count Date:	Not reported
Closure Date:	01/01/1984
Closure Type:	Actual
Disposal Acreage:	0
Remaining Capacity:	0

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Elapsed ASTM days:** Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

## FEDERAL ASTM STANDARD RECORDS

### **NPL: National Priority List**

Source: EPA  
Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/24/02  
Date Made Active at EDR: 12/09/02  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/04/02  
Elapsed ASTM days: 35  
Date of Last EDR Contact: 11/04/02

### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-614-5416

EPA Region 8  
Telephone: 303-312-6774

EPA Region 4  
Telephone 404-562-8033

### **Proposed NPL: Proposed National Priority List Sites**

Source: EPA  
Telephone: N/A

Date of Government Version: 10/24/02  
Date Made Active at EDR: 12/09/02  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/04/02  
Elapsed ASTM days: 35  
Date of Last EDR Contact: 11/04/02

### **CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System**

Source: EPA  
Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 08/15/02  
Date Made Active at EDR: 10/28/02  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 09/20/02  
Elapsed ASTM days: 35  
Date of Last EDR Contact: 12/26/02

### **CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned**

Source: EPA  
Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/15/02  
Date Made Active at EDR: 10/26/02  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 10/03/02  
Elapsed ASTM days: 25  
Date of Last EDR Contact: 12/26/02

## **CORRACTS:** Corrective Action Report

Source: EPA  
Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/29/02  
Date Made Active at EDR: 12/26/02  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 10/15/02  
Elapsed ASTM days: 72  
Date of Last EDR Contact: 12/09/02

## **RCRIS:** Resource Conservation and Recovery Information System

Source: EPA/NTIS  
Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 09/09/02  
Date Made Active at EDR: 10/28/02  
Database Release Frequency: Varies

Date of Data Arrival at EDR: 09/24/02  
Elapsed ASTM days: 34  
Date of Last EDR Contact: 12/26/02

## **ERNS:** Emergency Response Notification System

Source: EPA/NTIS  
Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/01  
Date Made Active at EDR: 07/15/02  
Database Release Frequency: Varies

Date of Data Arrival at EDR: 07/02/02  
Elapsed ASTM days: 13  
Date of Last EDR Contact: 10/28/02

## **FEDERAL ASTM SUPPLEMENTAL RECORDS**

### **BRS:** Biennial Reporting System

Source: EPA/NTIS  
Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/99  
Database Release Frequency: Biennially

Date of Last EDR Contact: 12/17/02  
Date of Next Scheduled EDR Contact: 03/17/03

### **CONSENT:** Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices  
Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A  
Database Release Frequency: Varies

Date of Last EDR Contact: N/A  
Date of Next Scheduled EDR Contact: N/A

### **ROD:** Records Of Decision

Source: EPA  
Telephone: 703-415-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/21/01  
Database Release Frequency: Annually

Date of Last EDR Contact: 10/07/02  
Date of Next Scheduled EDR Contact: 01/06/03

**DELISTED NPL:** National Priority List Deletions

Source: EPA  
Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(c), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/18/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 11/04/02  
Date of Next Scheduled EDR Contact: 02/03/03

**FINDS:** Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA  
Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/10/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/07/02  
Date of Next Scheduled EDR Contact: 01/06/03

**HMIRS:** Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation  
Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 07/31/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 10/21/02  
Date of Next Scheduled EDR Contact: 01/20/03

**MLTS:** Material Licensing Tracking System

Source: Nuclear Regulatory Commission  
Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/21/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/08/02  
Date of Next Scheduled EDR Contact: 01/06/03

**MINES:** Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959

Date of Government Version: 09/10/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/03/03  
Date of Next Scheduled EDR Contact: 03/31/03

**NPL LIENS:** Federal Superfund Liens

Source: EPA  
Telephone: 205-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/91  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 11/25/02  
Date of Next Scheduled EDR Contact: 02/24/03

**PADS: PCB Activity Database System**

Source: EPA  
Telephone: 202-564-3887

PCB Activity Database. PADS identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/20/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 11/13/02  
Date of Next Scheduled EDR Contact: 02/10/03

**RAATS: RCRA Administrative Action Tracking System**

Source: EPA  
Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 12/10/02  
Date of Next Scheduled EDR Contact: 03/10/03

**TRIS: Toxic Chemical Release Inventory System**

Source: EPA  
Telephone: 202-260-1531

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/00  
Database Release Frequency: Annually

Date of Last EDR Contact: 12/26/02  
Date of Next Scheduled EDR Contact: 03/24/03

**TSCA: Toxic Substances Control Act**

Source: EPA  
Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/88  
Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 12/10/02  
Date of Next Scheduled EDR Contact: 03/10/03

**FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**

Source: EPA  
Telephone: 202-564-2501

Date of Government Version: 10/24/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/26/02  
Date of Next Scheduled EDR Contact: 03/24/03

**SSTS: Section 7 Tracking Systems**

Source: EPA  
Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/00  
Database Release Frequency: Annually

Date of Last EDR Contact: 10/22/02  
Date of Next Scheduled EDR Contact: 01/20/03

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**FTTS: FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
Source: EPA/Office of Prevention, Pesticides and Toxic Substances  
Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/24/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/26/02  
Date of Next Scheduled EDR Contact: 03/24/03

## STATE OF CALIFORNIA ASTM STANDARD RECORDS

### **AWP: Annual Workplan Sites**

Source: California Environmental Protection Agency  
Telephone: 916-323-3400

Known Hazardous Waste Sites. California DTSC's Annual Workplan (AWP), formerly BEP, identifies known hazardous substance sites targeted for cleanup.

Date of Government Version: 10/04/02  
Date Made Active at EDR: 10/23/02  
Database Release Frequency: Annually

Date of Data Arrival at EDR: 10/07/02  
Elapsed ASTM days: 16  
Date of Last EDR Contact: 10/07/02

### **CAL-SITES: Calsites Database**

Source: Department of Toxic Substance Control  
Telephone: 916-323-3400

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database.

Date of Government Version: 10/01/00  
Date Made Active at EDR: 11/22/00  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 10/30/00  
Elapsed ASTM days: 23  
Date of Last EDR Contact: 10/08/02

### **CHMIRS: California Hazardous Material Incident Report System**

Source: Office of Emergency Services  
Telephone: 916-845-8400

California Hazardous Material Incident Reporting System, CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/1/94  
Date Made Active at EDR: 04/24/95  
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 03/13/95  
Elapsed ASTM days: 42  
Date of Last EDR Contact: 11/25/02

### **CORTESE: "Cortese" Hazardous Waste & Substances Sites List**

Source: CAL EPA/Office of Emergency Information  
Telephone: 916-323-9100

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/L.S), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 04/01/01  
Date Made Active at EDR: 07/26/01  
Database Release Frequency: Varies

Date of Data Arrival at EDR: 05/29/01  
Elapsed ASTM days: 58  
Date of Last EDR Contact: 10/28/02

### **NOTIFY 65: Proposition 65 Records**

Source: State Water Resources Control Board  
Telephone: 916-445-3846

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/21/93  
Date Made Active at EDR: 11/19/93  
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 11/01/93  
Elapsed ASTM days: 18  
Date of Last EDR Contact: 10/21/02

## **TOXIC PITS:** Toxic Pits Cleanup Act Sites

Source: State Water Resources Control Board  
Telephone: 916-227-4064

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/95  
Date Made Active at EDR: 09/26/95  
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 08/00/95  
Elapsed ASTM days: 27  
Date of Last EDR Contact: 11/04/02

## **SWF/LF (SWIS):** Solid Waste Information System

Source: Integrated Waste Management Board  
Telephone: 916-341-6320

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/13/02  
Date Made Active at EDR: 10/08/02  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 09/16/02  
Elapsed ASTM days: 22  
Date of Last EDR Contact: 12/17/02

## **WMUDS/SWAT:** Waste Management Unit Database

Source: State Water Resources Control Board  
Telephone: 916-227-4448

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/00  
Date Made Active at EDR: 05/10/00  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 04/10/00  
Elapsed ASTM days: 30  
Date of Last EDR Contact: 12/10/02

## **LUST:** Leaking Underground Storage Tank Information System

Source: State Water Resources Control Board  
Telephone: 916-341-5740

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 07/11/02  
Date Made Active at EDR: 09/03/02  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 07/18/02  
Elapsed ASTM days: 47  
Date of Last EDR Contact: 10/11/02

## **CA BOND EXP. PLAN:** Bond Expenditure Plan

Source: Department of Health Services  
Telephone: 916-255-2118

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/89  
Date Made Active at EDR: 08/02/94  
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 07/27/94  
Elapsed ASTM days: 6  
Date of Last EDR Contact: 05/31/94

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CA UST:

### UST: Active UST Facilities

Source: SWRCB

Telephone: 916-341-5700

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 01/17/02

Date Made Active at EDR: 02/12/02

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 01/21/02

Elapsed ASTM days: 22

Date of Last EDR Contact: 10/16/02

### VCP: Voluntary Cleanup Program Properties

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs

Date of Government Version: 10/10/02

Date Made Active at EDR: 10/23/02

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 10/14/02

Elapsed ASTM days: 9

Date of Last EDR Contact: 10/14/02

### INDIAN UST: Underground Storage Tanks on Indian Land

Source: EPA Region 9

Telephone: 415-972-3368

Date of Government Version: N/A

Date Made Active at EDR: N/A

Database Release Frequency: Varies

Date of Data Arrival at EDR: N/A

Elapsed ASTM days: 0

Date of Last EDR Contact: N/A

### CA FID UST: Facility Inventory Database

Source: California Environmental Protection Agency

Telephone: 916-445-6532

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/94

Date Made Active at EDR: 09/28/95

Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 08/05/95

Elapsed ASTM days: 24

Date of Last EDR Contact: 12/28/98

### HIST UST: Hazardous Substance Storage Container Database

Source: State Water Resources Control Board

Telephone: 916-341-5700

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/90

Date Made Active at EDR: 02/12/91

Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 01/25/91

Elapsed ASTM days: 18

Date of Last EDR Contact: 07/26/01

## STATE OF CALIFORNIA ASTM SUPPLEMENTAL RECORDS

### AST: Aboveground Petroleum Storage Tank Facilities

Source: State Water Resources Control Board

Telephone: 916-227-4382

Registered Aboveground Storage Tanks.

Date of Government Version: 11/20/02

Database Release Frequency: Quarterly

Date of Last EDR Contact: 11/04/02

Date of Next Scheduled EDR Contact: 02/03/03

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **CLEANERS:** Cleaner Facilities

Source: Department of Toxic Substance Control  
Telephone: 916-225-0873

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial laundrers; laundry and garment services.

Date of Government Version: 03/18/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 10/07/02  
Date of Next Scheduled EDR Contact: 01/06/03

## **CA WDS:** Waste Discharge System

Source: State Water Resources Control Board  
Telephone: 916-657-1571

Sites which have been issued waste discharge requirements.

Date of Government Version: 09/16/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/26/02  
Date of Next Scheduled EDR Contact: 03/24/03

## **DEED:** List of Deed Restrictions

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400

The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes.

Date of Government Version: 10/04/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/07/02  
Date of Next Scheduled EDR Contact: 01/06/03

## **HAZNET:** Hazardous Waste Information System

Source: California Environmental Protection Agency  
Telephone: 916-255-1136

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/00  
Database Release Frequency: Annually

Date of Last EDR Contact: 11/12/02  
Date of Next Scheduled EDR Contact: 02/10/03

## **LOCAL RECORDS**

### **ALAMEDA COUNTY:**

#### **Local Oversight Program Listing of UGT Cleanup Sites**

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700

Date of Government Version: 12/02/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/28/02  
Date of Next Scheduled EDR Contact: 01/27/03

#### **Underground Tanks**

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700

Date of Government Version: 11/26/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/28/02  
Date of Next Scheduled EDR Contact: 01/27/03

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CONTRA COSTA COUNTY:

### Site List

Source: Contra Costa Health Services Department

Telephone: 925-646-2286

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 06/05/02

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/02/02

Date of Next Scheduled EDR Contact: 03/03/03

## FRESNO COUNTY:

### CUPA Resources List

Source: Dept. of Community Health

Telephone: 559-445-3271

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/31/02

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 11/12/02

Date of Next Scheduled EDR Contact: 02/10/03

## KERN COUNTY:

### Underground Storage Tank Sites & Tanks Listing

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700

Kern County Sites and Tanks Listing.

Date of Government Version: 06/01/02

Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/02/02

Date of Next Scheduled EDR Contact: 03/03/03

## LOS ANGELES COUNTY:

### List of Solid Waste Facilities

Source: La County Department of Public Works

Telephone: 818-458-5185

Date of Government Version: 10/26/02

Database Release Frequency: Varies

Date of Last EDR Contact: 11/21/02

Date of Next Scheduled EDR Contact: 02/17/03

### City of El Segundo Underground Storage Tank

Source: City of El Segundo Fire Department

Telephone: 310-607-2239

Date of Government Version: 11/01/02

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 11/18/02

Date of Next Scheduled EDR Contact: 02/17/03

### City of Long Beach Underground Storage Tank

Source: City of Long Beach Fire Department

Telephone: 562-570-2543

Date of Government Version: 05/30/02

Database Release Frequency: Annually

Date of Last EDR Contact: 11/25/02

Date of Next Scheduled EDR Contact: 02/24/03

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## City of Torrance Underground Storage Tank

Source: City of Torrance Fire Department  
Telephone: 310-618-2973

Date of Government Version: 08/01/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 11/18/02  
Date of Next Scheduled EDR Contact: 02/17/03

## City of Los Angeles Landfills

Source: Engineering & Construction Division  
Telephone: 213-473-7869

Date of Government Version: 03/01/02  
Database Release Frequency: Varies

Date of Last EDR Contact: 12/17/02  
Date of Next Scheduled EDR Contact: 03/17/03

## HMS: Street Number List

Source: Department of Public Works  
Telephone: 626-458-3517  
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 08/29/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 11/18/02  
Date of Next Scheduled EDR Contact: 02/17/03

## Site Mitigation List

Source: Community Health Services  
Telephone: 323-890-7806  
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/28/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 11/18/02  
Date of Next Scheduled EDR Contact: 02/17/03

## San Gabriel Valley Areas of Concern

Source: EPA Region 9  
Telephone: 415-972-3178  
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/98  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/29/99  
Date of Next Scheduled EDR Contact: N/A

## MARIN COUNTY:

### Underground Storage Tank Sites

Source: Public Works Department Waste Management  
Telephone: 415-499-6647  
Currently permitted USTs in Marin County.

Date of Government Version: 08/06/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 11/04/02  
Date of Next Scheduled EDR Contact: 02/03/03

## NAPA COUNTY:

### Sites With Reported Contamination

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269

Date of Government Version: 09/30/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/30/02  
Date of Next Scheduled EDR Contact: 03/31/03

### Closed and Operating Underground Storage Tank Sites

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/30/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 12/30/02  
Date of Next Scheduled EDR Contact: 03/31/03

## ORANGE COUNTY:

### List of Underground Storage Tank Cleanups

Source: Health Care Agency  
Telephone: 714-834-3446  
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/27/01  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/09/02  
Date of Next Scheduled EDR Contact: 03/10/03

### List of Underground Storage Tank Facilities

Source: Health Care Agency  
Telephone: 714-834-3446  
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/27/01  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/09/02  
Date of Next Scheduled EDR Contact: 03/10/03

### List of Industrial Site Cleanups

Source: Health Care Agency  
Telephone: 714-834-3446  
Petroleum and non-petroleum spills.

Date of Government Version: 10/24/00  
Database Release Frequency: Annually

Date of Last EDR Contact: 12/09/02  
Date of Next Scheduled EDR Contact: 03/10/03

## PLACER COUNTY:

### Master List of Facilities

Source: Placer County Health and Human Services  
Telephone: 530-889-7312  
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 10/22/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/26/02  
Date of Next Scheduled EDR Contact: 03/24/03

## RIVERSIDE COUNTY:

### Listing of Underground Tank Cleanup Sites

Source: Department of Public Health  
Telephone: 909-358-5055  
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 09/26/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/21/02  
Date of Next Scheduled EDR Contact: 01/20/03

### Underground Storage Tank Tank List

Source: Health Services Agency  
Telephone: 909-358-5055  
Date of Government Version: 09/04/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/21/02  
Date of Next Scheduled EDR Contact: 01/20/03

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SACRAMENTO COUNTY:

### CS - Contaminated Sites

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406

Date of Government Version: 06/11/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 11/04/02  
Date of Next Scheduled EDR Contact: 02/03/03

### ML - Regulatory Compliance Master List

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 06/11/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 11/04/02  
Date of Next Scheduled EDR Contact: 02/03/03

## SAN BERNARDINO COUNTY:

### Hazardous Material Permits

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 06/27/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/30/02  
Date of Next Scheduled EDR Contact: 03/10/03

## SAN DIEGO COUNTY:

### Solid Waste Facilities

Source: Department of Health Services  
Telephone: 619-338-2209  
San Diego County Solid Waste Facilities.

Date of Government Version: 08/01/00  
Database Release Frequency: Varies

Date of Last EDR Contact: 11/25/02  
Date of Next Scheduled EDR Contact: 02/24/03

### Hazardous Materials Management Division Database

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/31/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/08/02  
Date of Next Scheduled EDR Contact: 01/06/03

## SAN FRANCISCO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Local Oversight Facilities

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920

Date of Government Version: 09/16/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/09/02  
Date of Next Scheduled EDR Contact: 03/10/03

## Underground Storage Tank Information

Source: Department of Public Health  
Telephone: 415-252-3920

Date of Government Version: 09/16/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/09/02  
Date of Next Scheduled EDR Contact: 03/10/03

## SAN MATEO COUNTY:

### Fuel Leak List

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921

Date of Government Version: 10/28/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/29/02  
Date of Next Scheduled EDR Contact: 01/27/03

### Business Inventory

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 05/01/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 01/14/02  
Date of Next Scheduled EDR Contact: 01/13/03

## SANTA CLARA COUNTY:

### Fuel Leak Site Activity Report

Source: Santa Clara Valley Water District  
Telephone: 408-265-2600

Date of Government Version: 07/23/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/30/02  
Date of Next Scheduled EDR Contact: 03/31/03

### Hazardous Material Facilities

Source: City of San Jose Fire Department  
Telephone: 408-277-4559

Date of Government Version: 01/03/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 12/09/02  
Date of Next Scheduled EDR Contact: 03/10/03

## SOLANO COUNTY:

### Leaking Underground Storage Tanks

Source: Solano County Department of Environmental Management  
Telephone: 707-421-6770

Date of Government Version: 06/01/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/16/02  
Date of Next Scheduled EDR Contact: 03/17/03

### Underground Storage Tanks

Source: Solano County Department of Environmental Management  
Telephone: 707-421-6770

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/01/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/16/02  
Date of Next Scheduled EDR Contact: 03/17/03

## SONOMA COUNTY:

### Leaking Underground Storage Tank Sites

Source: Department of Health Services  
Telephone: 707-565-6665

Date of Government Version: 11/29/01  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/28/02  
Date of Next Scheduled EDR Contact: 01/27/03

## SUTTER COUNTY:

### Underground Storage Tanks

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500

Date of Government Version: 07/01/01  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/21/02  
Date of Next Scheduled EDR Contact: 01/06/03

## VENTURA COUNTY:

### Inventory of Illegal Abandoned and Inactive Sites

Source: Environmental Health Division  
Telephone: 805-654-2813

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 09/01/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 11/25/02  
Date of Next Scheduled EDR Contact: 02/24/03

### Listing of Underground Tank Cleanup Sites

Source: Environmental Health Division  
Telephone: 805-654-2813

Ventura County Underground Storage Tank Cleanup Sites (LUST)

Date of Government Version: 09/04/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/17/02  
Date of Next Scheduled EDR Contact: 03/17/03

### Underground Tank Closed Sites List

Source: Environmental Health Division  
Telephone: 805-654-2813

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 10/21/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/14/02  
Date of Next Scheduled EDR Contact: 01/13/03

### Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/13/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/17/02  
Date of Next Scheduled EDR Contact: 03/17/03

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## YOLO COUNTY:

### Underground Storage Tank Comprehensive Facility Report

Source: Yolo County Department of Health  
Telephone: 530-866-8646

Date of Government Version: 10/28/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 10/21/02  
Date of Next Scheduled EDR Contact: 01/20/03

## California Regional Water Quality Control Board (RWQCB) LUST Records

### LUST REG 1: Active Toxic Site Investigation

Source: California Regional Water Quality Control Board North Coast (1)  
Telephone: 707-576-2220

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/01  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 11/25/02  
Date of Next Scheduled EDR Contact: 02/24/03

### LUST REG 2: Fuel Leak List

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457

Date of Government Version: 07/01/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/14/02  
Date of Next Scheduled EDR Contact: 01/13/03

### LUST REG 3: Leaking Underground Storage Tank Database

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147

Date of Government Version: 11/18/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 11/18/02  
Date of Next Scheduled EDR Contact: 02/17/03

### LUST REG 4: Underground Storage Tank Leak List

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-266-6600

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 08/09/01  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 12/30/02  
Date of Next Scheduled EDR Contact: 03/31/03

### LUST REG 5: Leaking Underground Storage Tank Database

Source: California Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-255-3125

Date of Government Version: 10/01/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/08/02  
Date of Next Scheduled EDR Contact: 01/06/03

### LUST REG 6L: Leaking Underground Storage Tank Case Listing

Source: California Regional Water Quality Control Board Lahontan Region (6)  
Telephone: 916-542-5424

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 01/02/02  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 10/08/02  
Date of Next Scheduled EDR Contact: 01/06/03

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 6V: Leaking Underground Storage Tank Case Listing

Source: California Regional Water Quality Control Board Victorville Branch Office (6)  
Telephone: 760-346-7491

Date of Government Version: 10/25/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/08/02  
Date of Next Scheduled EDR Contact: 01/06/03

## LUST REG 7: Leaking Underground Storage Tank Case Listing

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)  
Telephone: 760-346-7491

Date of Government Version: 07/02/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/30/02  
Date of Next Scheduled EDR Contact: 03/31/03

## LUST REG 8: Leaking Underground Storage Tanks

Source: California Regional Water Quality Control Board Santa Ana Region (8)  
Telephone: 909-782-4498

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 12/02/02  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 11/13/02  
Date of Next Scheduled EDR Contact: 02/10/03

## LUST REG 9: Leaking Underground Storage Tank Report

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/01  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 10/21/02  
Date of Next Scheduled EDR Contact: 01/20/03

## California Regional Water Quality Control Board (RWQCB) SLIC Records

### SLIC REG 1: Active Toxic Site Investigations

Source: California Regional Water Quality Control Board, North Coast Region (1)  
Telephone: 707-576-2220

Date of Government Version: 02/01/01  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 11/25/02  
Date of Next Scheduled EDR Contact: 02/24/03

### SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Source: Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 07/01/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/14/02  
Date of Next Scheduled EDR Contact: 01/13/03

### SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 11/18/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 11/18/02  
Date of Next Scheduled EDR Contact: 02/17/03

### SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Source: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/02  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/28/02  
Date of Next Scheduled EDR Contact: 01/27/03

**SLIC REG 5:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing  
Source: Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-855-3075

Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 10/01/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/06/02  
Date of Next Scheduled EDR Contact: 01/06/03

**SLIC REG 6V:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing  
Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583

Date of Government Version: 07/19/01  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/09/02  
Date of Next Scheduled EDR Contact: 01/06/03

**SLIC REG 8:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing  
Source: California Regional Water Quality Control Board Santa Ana Region (8)  
Telephone: 909-782-3298

Date of Government Version: 08/01/02  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/07/02  
Date of Next Scheduled EDR Contact: 01/06/03

**SLIC REG 9:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing  
Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980

Date of Government Version: 03/01/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 12/02/02  
Date of Next Scheduled EDR Contact: 03/03/03

## EDR PROPRIETARY HISTORICAL DATABASES

**Former Manufactured Gas (Coal Gas) Sites:** The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

**Oil/Gas Pipelines/Electrical Transmission Lines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

### STREET AND ADDRESS INFORMATION

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**APPENDIX B**  
**SITE PHOTOGRAPHS**



Photo 1. Jenkinson Lake looking northeast. Boat docks in foreground and boat ramp to left.



Photo 2. Sly Park Recreation Area entrance sign.



Photo 3. Jenkinson campground.. This campground is typical of the nine campgrounds along the northwest side of Jenkinson Lake. The campgrounds include a total of 196 campsites.



Photo 4 Hiking trail and picnic areas.



Photo 5 RV dump station located near main entrance to Sly Park Recreation Area.



Photo 6. Bilge oil pad recycling station.

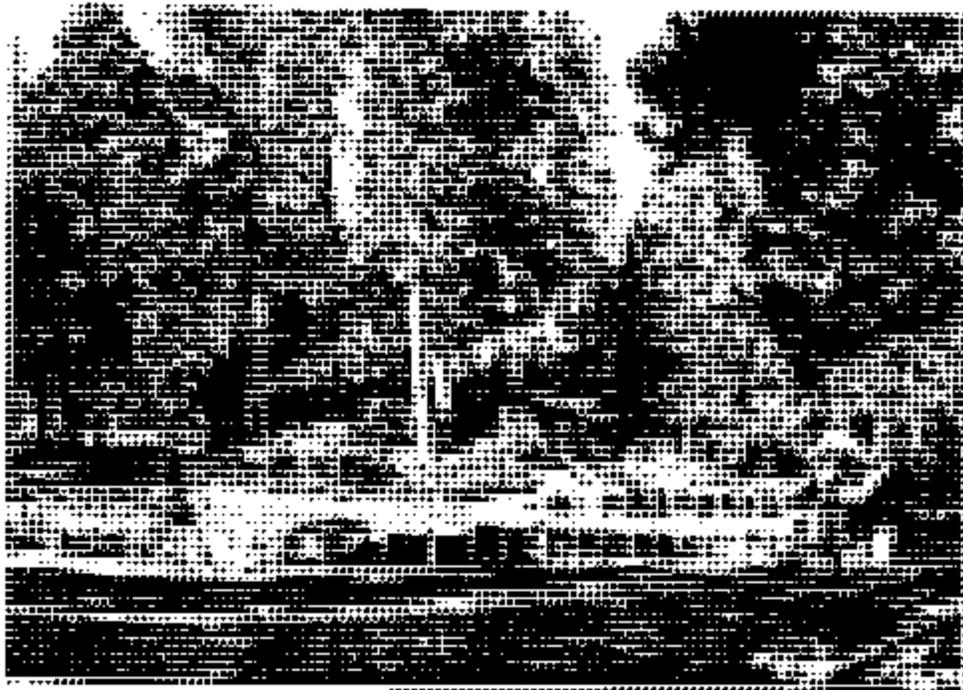


Photo 7. Sly Park entrance station. Headquarters building is behind flag, Red roof structure is RV parking shelter for caretaker.



Photo 8. Shop building in maintenance yard, Maintenance yard is located adjacent to the headquarters building near the park entrance.

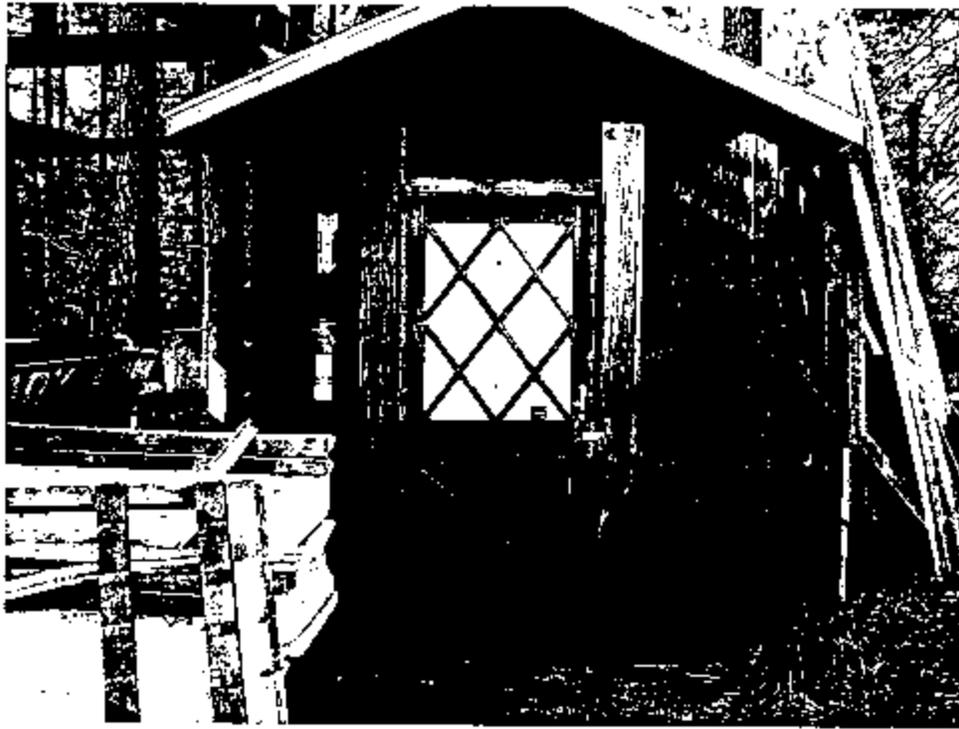


Photo 9. Fuel and lubricant storage building in maintenance yard.

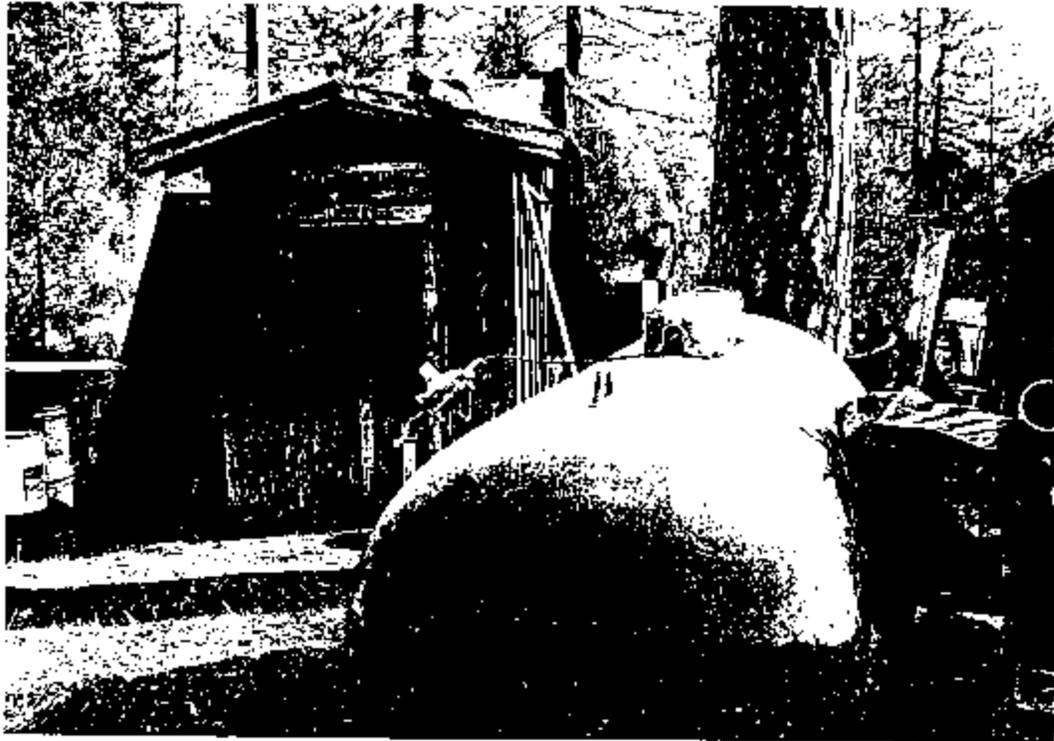


Photo 10. Paint storage shed in maintenance yard. Propane tank in foreground is used for heating of buildings in the maintenance yard. The large tank behind the paint storage shed was formerly used for potable water storage.

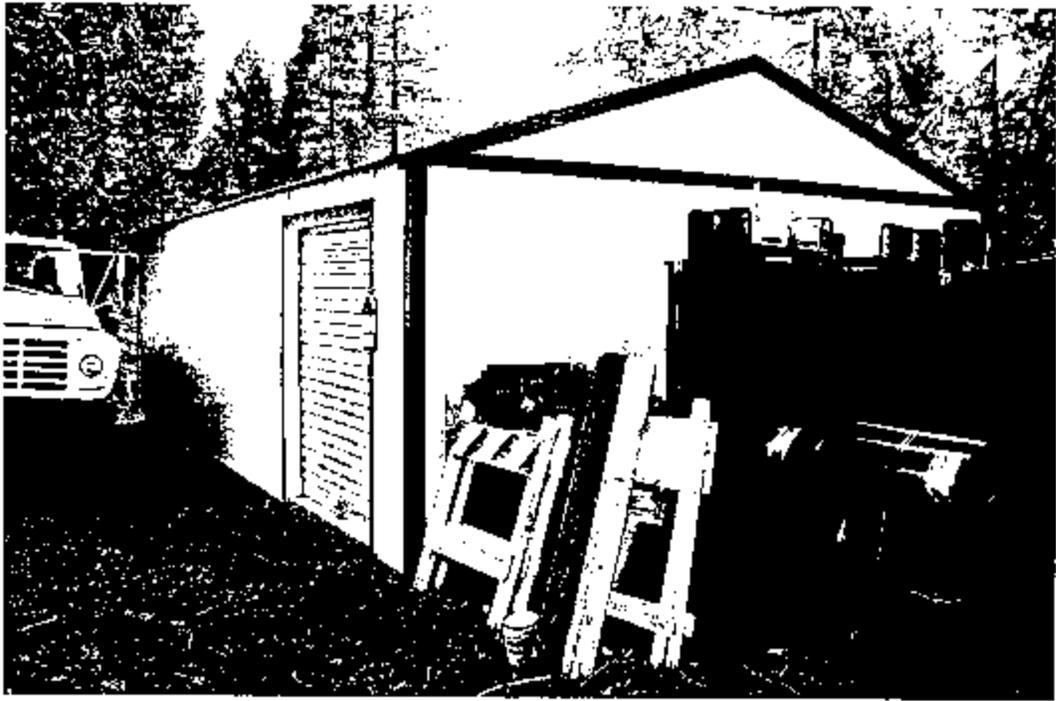


Photo 11. Building used for storage of cleaning supplies, paper products, and equipment located in maintenance yard.

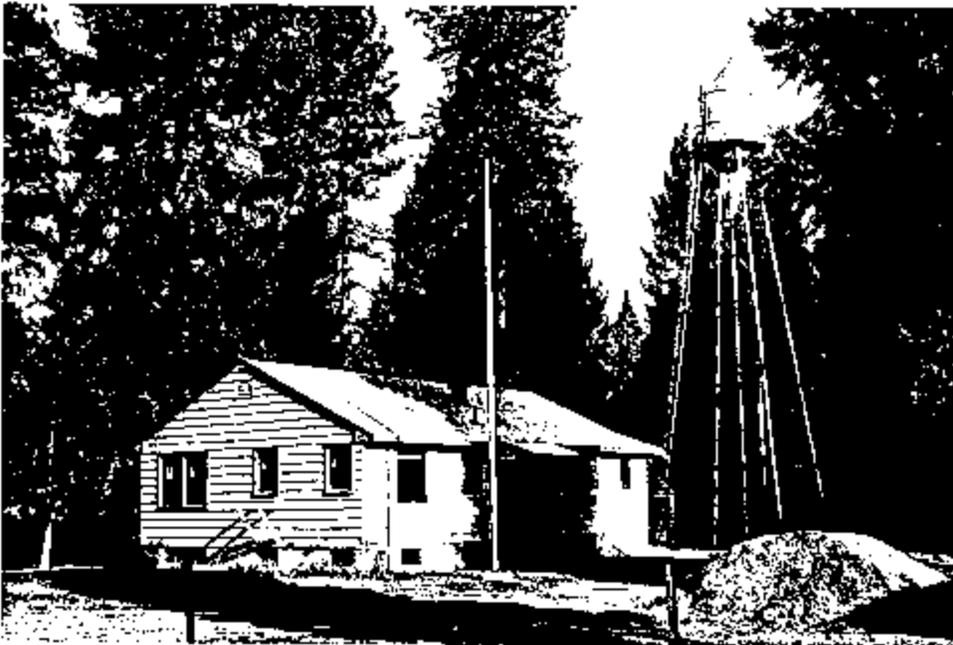


Photo 12. Former staff residence in reservoir shops area. The residence is to be developed into a retreat center.



Photo 13. Lubricants, fuel, and waste oil in wooden storage shed (Photo 9) in maintenance yard.



Photo 14. Containers of 5-gallon capacity or less of disinfectants, deodorants, insecticides, cleaning supplies, and paper products in metal building (Photo 11) in maintenance yard.



Photo 15. Interior of paint storage shed, containing oil-base paints in containers of up to 1-gallon capacity, and latex paints in up to 5-gallon containers



Photo 16. Storage of spray paints, lubricants, and other maintenance materials located within maintenance shop within reservoir shops area.



Photo 17. Diesel and regular unleaded fuel are stored in dual 500-gallon compartments within this double-walled, fiberglass tank located within the maintenance yard. Garbage cans are for receiving trash during refueling of park vehicles.



Photo 18. Propane AST adjacent to headquarters office building.

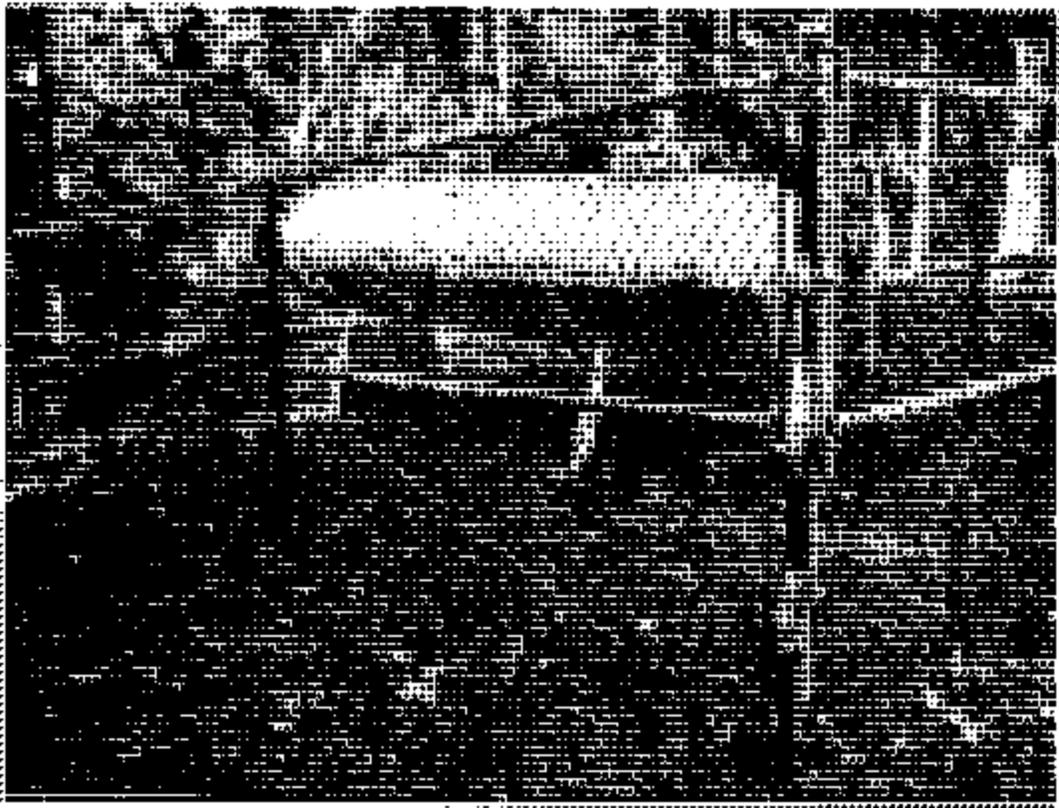


Photo 19. Propane AST located adjacent to maintenance shop in reservoir shops area.



Photo 20. Rusting and disintegrating metal debris in former casual dumping area below (west) of the Sly Park Dam.



Photo 21. These toilet facilities are typical of those serving campgrounds and day use areas. Waste is treated by individual septic systems, and the holding tanks are pumped weekly during the camping and boating season.

**APPENDIX C**  
**URS QUALIFICATIONS**

## AREAS OF EXPERTISE

- Phase I and Phase II Due Diligence
- Brownsfield Evaluations
- Hydrogeologic Characterization

## EDUCATION

Graduate Coursework,  
University of California,  
Berkeley, 1995 – *Chemical,  
Fate & Transport*

B.S., California State  
University, Chico, 1988 –  
*Physical Science-Hydrology  
Option*

## PROFESSIONAL HISTORY

Senior Program Manager,  
URS, Sacramento, CA

Senior Program Manager,  
Versar, Inc., Fair Oaks, CA,  
1998 to 2002

Senior Geoscientist, McLaren/  
Hart Environmental  
Engineering Corporation,  
Alameda, CA, 1988 to 1998

## REPRESENTATIVE EXPERIENCE

Mr. Allin has over 14 years of experience in performing environmental site investigations, hydrologic characterizations, and Brownsfield evaluations.

### Environmental Due Diligence

**Phase I and Phase II Due Diligence and Brownsfield Redevelopment Evaluation, AMB Property Corporation, Pico Rivera, CA** – Mr. Allin provided due diligence and evaluation of Brownsfield redevelopment feasibility for a former aerospace facility. The due diligence activities identified environmental issues that required management and cost allocation during the redevelopment process. Environmental insurance was used to manage risks related to the discovery of unknown conditions during the redevelopment process. The property encompasses more than one million square feet and is currently operating as a warehouse and distribution facility.

**Phase I and Phase II Due Diligence and Brownsfield Evaluation for Former Rail Yard, Majestic Realty Company, Los Angeles, CA** – Provided due diligence for a major former rail yard near the downtown Los Angeles area. Due diligence focused on Brownsfield redevelopment scenarios and provided alternative sampling scenarios for various degrees of risk management. Remedial costs were evaluated for both residential and industrial redevelopment. Accurate assessment of the environmental risks was integral to evaluating the feasibility of redeveloping the property.

**Phase I and Phase II Due Diligence for Former Oil Recycling Facility, AMB Property Corporation, Los Angeles, CA** – Wastes from the oil recycling facility were buried in place during property development. Mr. Allin was the Project Manager. His use of existing data and knowledge of regional groundwater issues resulted in an extremely limited Phase II scope of work, during which data were obtained to show attenuating petroleum contamination and the remote likelihood for groundwater to be impacted. Environmental insurance was used to manage potential risks related to regional groundwater liability and potential regulatory re-openers.

**Phase I and Phase II Due Diligence for a Large Industrial Park, AMB Property Corporation, San Jose, CA** – Mr. Allin was the Project Manager for Phases I and II. During due diligence activities, an alternative address for the site was identified. Historical records for the alternative address revealed violations relative to the direct discharge of flammable liquids at the facility. Subsequent Phase II activities identified actionable contamination of groundwater beneath the property. Remedial estimates were developed for negotiation purposes during property acquisition. Environmental insurance was used to minimize environmental liability. In-situ remediation of VOC-impacted groundwater was initiated on the date the property was acquired to eliminate third party liability. Closure

for the environmental impact was received in slightly over one year at costs significantly less than originally estimated.

**Phase I Due Diligence for 15 Industrial Parks, AMB Property Corporation, FL, IL, and CA** – Mr. Allin managed the implementation of the Phase I due diligence process for the complex industrial portfolio. He implemented a revised due diligence approach that focused on non-environmental issues important to the developer. Follow-up Phase II activities were performed for multiple sites. The expanded due diligence approach focused on evaluating the manageability of the identified environmental issues, potential future use restrictions, and future costs to complete the remedy for the conditions.

#### **Hydrogeologic Characterization Experience**

**Remediation of VOC-Impacted Soil and Groundwater, AMB Property Corporation, Carson, CA** – Mr. Allin was the Project Manager during due diligence activities. Chlorinated solvent-impacted soil and groundwater were identified, quantified, and included in cost allocations for property improvements. Mr. Allin provided project management for the implementation of remedial actions and negotiating alternative cleanup requirements based on regional groundwater impact. The project is ongoing.

**Investigation of Complex DNAPL Site, Lockheed Martin Corporation, Palo Alto, CA** – Mr. Allin was the Lead Geologist during the assessment of a hazardous materials containment pad for a major defense contractor. VOC-contaminated soil and groundwater were discovered during the assessment. Subsequent sampling identified VOCs at concentrations greater than the chemical solubility (DNAPL) migrating through complex geologic units and various discontinuous water-bearing zones. As the lead geologist for the site, Mr. Allin implemented site characterization using BAT sampling techniques in conjunction with a mud-rotary drill rig to cost-effectively characterize VOC migratory pathways. The BAT data were then used to selectively locate monitoring wells, resulting in significant cost savings for site characterization.

**Rapid Remediation of VOC-Impacted Soil and Groundwater, Major Defense Contractor Facility, Lockheed Martin Corporation, Redwood City, CA** – Expedited site characterization during facility closure activities revealed soil and groundwater contaminated with VOCs beneath a leased facility. As the Project Manager, Mr. Allin performed a cost-benefit analysis for long-term monitoring and liability versus aggressive source removal that enabled the client to effectively evaluate remedial alternatives. The selected remedial alternative consisted of remediating approximately 3,000 cubic yards of VOC-impacted soil and aggressively dewatering the excavation area to remove impacted groundwater. These activities enabled the client to receive closure of the facility without installing a groundwater remediation system or monitoring

wells or implementing long-term groundwater monitoring and treatment system operations and maintenance. The project ultimately relieved the client of long-term liability. The total contract value for the project was approximately \$1 million.

**Characterization and Remediation of Multi-Source/Contaminant Site, Lockheed Martin Corporation, Sunnyvale, CA** – As the Lead Hydrogeologist, Mr. Allin was responsible for the characterization of multiple source areas, containing multiple contaminants of concern. The hydrogeologic characterization used aquifer test data and geologic stream channel deposits to identify preferred migratory pathways and accurately design a multi-zone extraction system to remediate groundwater. Subsequent to installation of the groundwater remediation system, Mr. Allin performed an effectiveness evaluation to convince the regulatory agency (RWQCB) to approve significant reductions in monitoring and pumpage requirements; this ultimately reduced long-term monitoring and operation and maintenance costs.

#### **Risk-Based Corrective Action Experience**

**Risk-Based Corrective Action of BTEX- and MTBE-Contaminated Soil and Groundwater, San Jose Mercury News, San Jose, CA** – A fuel release at a major south bay newspaper company resulted in impacts to soil and groundwater by petroleum-related constituents, including methyl-tert-butyl ether (MTBE) and benzene, toluene, ethylbenzene, and xylenes (BTEX). The regulator requested the installation of a groundwater remediation system. As the Project Manager for the site, Mr. Allin compiled data from previous consultants and performed a supplemental investigation focusing on a Risk-Based Corrective Action (RBCA) remedy. The supplemental investigation focused on the collection and analysis of natural attenuation parameters and the performance of a passive remediation pilot study using an oxygen release compound. The characterization effort resulted in obtaining “no further action” from the site regulator without implementation of a groundwater remediation system.

**Risk-Based Corrective Action for VOC-Impacted Groundwater under a Commingled Plume Scenario, Lockheed Martin Corporation, Sunnyvale, CA** – During characterization of VOC-impacted groundwater at a major defense contractor facility, two additional off-site sources were identified, resulting in commingled plumes from three responsible parties. As the Project Manager for the source area further upgradient, Mr. Allin performed a chemical fate and transport analysis for cost allocation purposes. The remedial action plan for the site focused on risk-based corrective action that concluded that the “no action” alternative was the most feasible option, based on the risk analysis. The remedial action plan strategically aligned the client for future containment zone status with the other responsible parties.

**AREAS OF EXPERTISE**

- Hydrogeology
- Geology
- CEQA Compliance

**EDUCATION**

B.A., 1963, Engineering  
Geology, University of  
Nevada, Reno

M.S., 1966, Engineering  
Geology, University of  
Nevada, Reno

**REGISTRATION**

Registered Geologist, State  
of California - 1992

**PROFESSIONAL  
HISTORY**

Research Assistant, Center  
for Water Resources  
Research, University of  
Nevada, Reno - 1966 - 1976

Consulting Hydrogeologist,  
Environmental Impact  
Planning Corp. 1975-1976

Joined Dames & Moore in  
1987

**REPRESENTATIVE EXPERIENCE**

Project management and administration; coordination and supervision of technical staff in field and office work; technical support; development and management of project scope, cost and schedule; Client support in meetings and other agency relationships. Project experience includes hazardous waste site assessment, soil and groundwater remediation, environmental impact evaluations, assessment of remediation alternatives, and computer database support. Groundwater experience includes well design and installation, dewatering analysis, spring assessment and source investigations, hydraulic testing, and downhole geophysical test interpretation. Is knowledgeable of environmental regulations including RCRA, CERCLA, SARA and CEQA, and has prepared RIFS reports, workplans, sampling plans and data management plans. Has contributed to environmental assessments and environmental impact reports, and prepared technical studies related to hazardous materials; groundwater and groundwater quality; geology, soils and seismicity; and utilities and services.

- University of California, Davis Project Manager - Responsible for completing site investigation, developing and implementing remedial alternatives for pesticide and herbicide-impacted groundwater. Responsible for scope development, budget control and regulatory agency interface.
- Several Phase I Environmental Site Assessments for industrial, commercial, federally owned properties. Sites have included cattle ranches of up to 4,000 acres and the six-square-mile Sly Park Recreation Area in El Dorado County California, owned by the Bureau of Land Management.
- Antonio Mountain Ranch Proposed Development, Placer County, Senior Hydrogeologist - Prepared DEIR technical studies relating to geology, soils, seismicity, services and utilities and hazardous wastes. Assessed impacts and developed mitigation plans.
- Bickford Ranch proposed development, Placer County, Senior Hydrogeologist - Prepared DEIR technical studies, assessed impacts and developed mitigations relating to geology, soils, seismicity, groundwater and hazardous wastes. Responded to comments and assisted client in numerous meetings with County and DTSC personnel.
- Atkinson Street Bridge widening for the City of Roseville, Senior Hydrogeologist - Provided technical support for an Environmental Assessment (EA)/Initial Study Negative Declaration. Prepared technical studies, assessed impacts and developed mitigations relating to geology, soils, seismicity and groundwater.

- Fouts Springs Youth Facility Environmental Assessment, Senior Hydrogeologist - Prepared technical studies, assessed impacts and developed mitigations relating to geology, soils, seismicity, hazards and groundwater.
- EIR for flood control improvements, Dry Creek Basin, Roseville, California, Senior Hydrogeologist - Prepared technical studies, assessed impacts and developed mitigations relating to geology and soils.
- Major springwater bottler, California Project Hydrogeologist - Source investigation, spring assessment, and development of reports demonstrating compliance of springwater sources with FDA labeling requirements.
- US Army Corps of Engineers, Tracy, California, Project Manager - Responsible for scope development, budget control, contractor coordination, and geophysical interpretation for abandonment of a 600-foot water supply well.
- Howe bout Arden Shopping Center, Sacramento Project Manager - Responsible for scope development, budget control, agency interface and closure of a solvent-impacted groundwater site.
- Modesto Shopping Center, Modesto, Project Hydrogeologist - Developed scope for soil and groundwater investigation, completed soil vapor extraction cleanup, maintained agency contacts through site closure.
- Union Pacific Railroad Curtis Park Railyard, Sacramento Task Manager - Responsible for budget management and completing quarterly groundwater monitoring requirements.
- Hewlett-Packard Project, Palo Alto, Task Manager - Coordinated database team, technical illustration, and boring log production for Hewlett-Packard Project, Palo Alto, CA., a multi-site RI/FS. Developed site-specific database software for reporting and interpreting electronic data deliverables supplied by analytical laboratories, and for exporting data to spreadsheet and CAD applications. Implemented quality assurance, verification, and validation procedures.
- Geosciences Database Manager - Responsible for maintenance and development of a comprehensive proprietary database system. Tasks included software development in Clipper, FoxPro, dBase, and Microsoft Access languages, scheduling and consultation on database services, and development and marketing of database applications.
- Major agricultural chemical manufacturer, western U.S., Task Manager - Designed and implemented a custom database application to help a client prioritize and coordinate investigations of 90 agricultural chemical sites.

- BAC-Pritchard wood treatment facility, Merced, Project Hydrogeologist - Compiled field investigation results and prepared site characterization report.
- Chevron U.S.A., Richmond Refinery Alkane Plant, Interim Site Investigation Leader - Responsible for planning and carrying out an on-site test and evaluation of a phase-separated hydrocarbon recovery system.
- Consulting Geologist to Environmental Impact Planning Corp., June 1975-June 1976. Contributed to EIR for alternate routes for US 395 Freeway expansion and re-routing, Reno to Carson City, Nevada. Responsible for technical studies and impact assessment relating to geology, seismicity, soils, and groundwater.
- As Research Assistant with Desert Research Institute, Center for Water Resources Research, University of Nevada, Reno, 1966-1976 - Led or participated in grant-funded hydrogeological research projects involving computer modeling and analysis of groundwater flow systems, land subsidence due to groundwater withdrawal, stability of a reservoir as affected by land subsidence, satellite remote sensing applications in geology and hydrogeology, water resources decision making, and affect of groundwater pumping on freeway construction.
- Project manager for various sites with solvent, pesticide and herbicide impacted soil, soil vapor and groundwater. Planned investigations leading to remediation and closure.
- Project management for groundwater remediation of a pesticide applicator facility. Responsibility for investigation, feasibility, remedial design and remediation phases.
- Task Manager coordinating database team, technical illustration, and boring log production for Hewlett-Packard Project, Palo Alto, CA., a multi-site RI/FS. Developed site-specific database software for reporting and interpreting electronic data deliverables supplied by analytical laboratories, and for exporting data to spreadsheet and CAD applications. Implemented quality assurance, verification, and validation procedures.
- Compiled data and developed reports demonstrating compliance of springwater sources with FDA labeling requirements for a major springwater company.
- Managed a well abandonment of a 600-foot water supply well for the Army Corps of Engineers.
- Managed quarterly monitoring and reporting tasks for several projects.

- Coordinated geosciences data management, including package tracking, software needs assessment, and development of data management plans.
- Designed and implemented a custom database application to help a client prioritize and coordinate investigations of 90 agricultural chemical sites.
- Database management for various projects nationwide involving maintenance and development of a comprehensive proprietary database system. Tasks include software development in Clipper, FoxPro, dBase, and Microsoft Access languages, scheduling and consultation on database services, and development and marketing of database applications.
- Database management for large U.S. Department of Energy project in Davis, CA. Developed database software for handling agricultural chemicals and radionuclides.
- Database management and statistical analysis of soil and groundwater chemical analysis data from major railroad yards and a Superfund site in Oroville, CA.
- Project Manager for BAC-Pritchard, Inc., a 40-acre wood treatment facility in Merced, CA., designated as a TPCA site.
- Set up, ran, and interpreted results of a HELP (hydrologic evaluation of landfill performance) model for a landfill in Modesto, CA.
- Interim Site Investigation Leader, Chevron U.S.A., Richmond Refinery Alkane Plant. Responsible for planning and carrying out an on-site test and evaluation of a phase-separated hydrocarbon recovery system.
- Design, conduct, analyze, and interpret aquifer characterization tests for groundwater investigations and de-watering studies.
- Numerical and analytical modeling of groundwater flow.
- Participation in grant funded hydrogeological research projects involving computer modeling and analysis of groundwater flow systems, land subsidence due to groundwater withdrawal, stability of a reservoir as affected by land subsidence, satellite remote sensing applications in geology and hydrogeology, water resources decision making, and effect of groundwater pumping on freeway construction.
- Contributor to Environmental Impact Report for alternate routes of US-395 freeway between Reno and Carson City, Nevada. Responsible for technical sections, impacts and mitigations relating to geology, seismicity, soils, and groundwater.

APPENDIX D  
SLY PARK RESORT UST DOCUMENTATION

DOKUMAI  
COUNTY



ENVIRONMENTAL  
MANAGEMENT  
DEPARTMENT

A. Morgan  
Director

Environmental  
Health Division

Water Pollution  
Control District

Solid Waste &  
Hazardous  
Materials  
Division

Waste Control  
Division



LACERVILLE  
OFFICE

1650 Fairlane Ct.,  
Building 'C'  
Lacerville, CA 95667

☎ 530.621.5300  
☎ 530.642.1531  
☎ 530.626.7130

SOUTH  
LAKE TAHOE  
OFFICE

100 Lake Tahoe Blvd.,  
Box 303  
South Lake Tahoe, CA  
96150

☎ 530.573.3450  
☎ 530.542.3364

ENVIRONMENTAL MANAGEMENT DEPARTMENT

March 22, 2001

Ms. Shirley Brummer  
3341 Candlewood Road  
Torrance, Ca. 90505

RE: Sky Park Resort  
Underground Storage Tanks Facility

Dear Ms. Brummer:

An inspection of the underground storage tanks (UST) at the Sky Park Resort facility was conducted on March 16, 2001. The USTs at this facility should be routine maintenance, and the following items were noted during the inspection. Employees that must be brought to your attention:

Apparently, due to a fuel leak, the secondary containment area under the UST tank sounded the alarm. The water that sounded the alarm, and the fact that the employees, the alarm was activated. It is recommended to determine the cause of the fuel leak and to ensure that it has been a fuel leak it may have occurred. The secondary containment area should be inspected.

Several items require immediate attention. The UST tank must be made waterproof to prevent water from entering the UST tank area. Routine maintenance (cleaning) should be performed on the UST tank area. There is a minor amount of fuel in the interior space of the UST tank. There should be no fuel in this area unless the tank is leaking. As much of the remaining fuel as possible must be removed.

You will find several forms enclosed that must be completed and returned to this office. The most important forms are the monitoring and response plans, which when completed, should be read and understood by the store employees. A copy must be kept at the store. The monitoring system for your tank systems is required for a purpose. You should make sure that your employees understand their responsibility if the alarm is activated.

If you have any questions please contact me at 530-621-6654.

Very truly yours,

Jeffrey A. Rusert  
Senior Environmental Health Specialist  
Solid Waste and Hazardous Materials Division



ENVIRONMENTAL  
MANAGEMENT  
DEPARTMENT

January 18, 2007

Mrs. Shirley Brunner  
3541 Candlewood Road  
Yorba Linda, CA 92693

RE: NOTICE OF VIOLATION

SA Park Resurf  
1720 Granada Street, Yorba Linda, CA 92693

Jon A. Morgan  
Director

Environmental  
Health Division

Air Pollution  
Control District

Solid Waste &  
Hazardous  
Materials  
Division

Vector Control  
Division



PLACERVILLE  
OFFICE  
2850 Fairway Cr.  
Building C  
Placerville, CA 95667

Ph. 530.621.5300  
Fax 530.642.1531  
Fax 530.626.7130

SOUTH  
LAKE TAHOE  
OFFICE  
1366 Lake Tahoe Blvd.  
Box 201  
South Lake Tahoe, CA  
96150

Ph. 530.573.3450  
Fax 530.542.3364

Dear Mrs. Brunner,

An inspection of the air permit monitoring system at your facility revealed that no attempt has been made to maintain the monitoring system components in accordance with the permit conditions.

You must be in full compliance with the permit conditions by the end of this year. Failure to do so may result in severe environmental consequences, including the possibility of secondary containment cleanup.

Your monitoring system is due for an annual inspection. We have sent a letter describing the requirements for this inspection at the end of this year. We may want to discuss this with you.

If you have any questions or need assistance, please contact me at the phone number listed below.

Very truly yours,

*Jeffery A. Rosen*  
Jeffery A. Rosen

Senior Environmental Health Specialist  
Solid Waste and Hazardous Materials Division

CA Cert. No. 01658

DATE ISSUED: December 22, 1998



SLY PARK RESORT  
4780 SLY PARK RD.  
POLLOCK PINES, CA 95726

FACILITY #365  
OWNER/OPERATOR:  
CHRISTINSON

An upgrade compliance certificate has been issued in connection with the operating permit for the facility indicated below. The certificate number on this facsimile matches the number on the certificate displayed at the facility.

Instructions to the issuing agency. Use the space below to enter the following information in the format of your choice: name of owner; name of operator; name of facility; street address, city, and zip code of facility; facility identification number (from Form A); name of issuing agency, and date of issue. Other identifying information may be added as deemed necessary by the local agency.

COMPLIANCE CERTIFICATE  
ISSUED BY  
EL DORADO COUNTY  
ENVIRONMENTAL MANAGEMENT DEPARTMENT  
SOLID WASTE AND HAZARDOUS MATERIALS DIVISION  
2850 FAIRLANE COURT, PLACERVILLE, CA 95667

COMPLIANCE VERIFICATION BY: Jeffery A. Rusert  
Jeffery A. Rusert, REHS

# MONITORING SYSTEM CERTIFICATION

For Use By All Jurisdictions Within the State of California

Authority Cited: Chapter 6.7, Health and Safety Code, Chapter 16, Division 3, Title 23, California Code of Regulations

This form must be used to document testing and servicing of monitoring equipment. A separate certification or report must be prepared for each monitoring system control panel by the technician who performs the work. A copy of this form must be provided to the tank system owner/operator. The owner/operator must submit a copy of this form to the local agency regulating UST systems within 30 days of test date.

## A. General Information

Facility Name: SLY PARK RESORT Bldg No. 12/E  
 Site Address: 4782 SLY PARK RD City/State/Zip LA JOLLA CA 92036  
 Facility Contact Person: PATRICIA E. ... Contact Phone No. (619) 494-1113  
 Make/Model of Monitoring System: INSULOC Date of Testing/Servicing: 3/18/00

## B. Inventory of Equipment Tested/Certified

Check the appropriate boxes to indicate specific equipment inspected/serviced.

<p>Tank ID: <u># 1 / 1000 GAL</u></p> <input type="checkbox"/> In-Tank Gauging Probe Model: _____ <input checked="" type="checkbox"/> Annular Space or Vault Sensor Model: _____ <input checked="" type="checkbox"/> Piping Sump - Trench Sensor(s) Model: _____ <input type="checkbox"/> Fill Sump Sensor(s) Model: _____ <input type="checkbox"/> Mechanical Line Leak Detector Model: _____ <input type="checkbox"/> Electronic Line Leak Detector Model: _____ <input type="checkbox"/> Tank Overfill - High-Level Sensor Model: _____ <input type="checkbox"/> Other (specify equipment type and model in Section I on Page 2): _____	<p>Tank ID: _____</p> <input type="checkbox"/> In-Tank Gauging Probe Model: _____ <input type="checkbox"/> Annular Space or Vault Sensor Model: _____ <input type="checkbox"/> Piping Sump - Trench Sensor(s) Model: _____ <input type="checkbox"/> Fill Sump Sensor(s) Model: _____ <input type="checkbox"/> Mechanical Line Leak Detector Model: _____ <input type="checkbox"/> Electronic Line Leak Detector Model: _____ <input type="checkbox"/> Tank Overfill - High-Level Sensor Model: _____ <input type="checkbox"/> Other (specify equipment type and model in Section I on Page 2): _____
<p>Dispenser ID: <u>PUMP # 1</u></p> <input checked="" type="checkbox"/> Dispenser Containment Sensor(s) Model: <u>10000</u> <input type="checkbox"/> Shear Valve(s) <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s)	<p>Dispenser ID: _____</p> <input type="checkbox"/> Dispenser Containment Sensor(s) Model: _____ <input type="checkbox"/> Shear Valve(s) <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s)
<p>Dispenser ID: <u>PUMP # 2</u></p> <input checked="" type="checkbox"/> Dispenser Containment Sensor(s) Model: <u>10000</u> <input type="checkbox"/> Shear Valve(s) <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s)	<p>Dispenser ID: _____</p> <input type="checkbox"/> Dispenser Containment Sensor(s) Model: _____ <input type="checkbox"/> Shear Valve(s) <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s)
<p>Dispenser ID: _____</p> <input type="checkbox"/> Dispenser Containment Sensor(s) Model: _____ <input type="checkbox"/> Shear Valve(s) <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s)	<p>Dispenser ID: _____</p> <input type="checkbox"/> Dispenser Containment Sensor(s) Model: _____ <input type="checkbox"/> Shear Valve(s) <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s)

\*If the facility contains more tanks or dispensers, copy this form. Include information for every tank and dispenser at the facility.

**C. Certification** - I certify that the equipment identified in this document was inspected/serviced in accordance with the manufacturers' guidelines. Attached to this Certification is information (e.g. manufacturers' checklists) necessary to verify that this information is correct and a Plot Plan showing the layout of monitoring equipment. For any equipment capable of generating such reports, I have also attached a copy of the report; (check all that apply):  System set-up  Alarm history report

Technician Name (print): GERARD KIS Y ... Signature: \_\_\_\_\_  
 Certification No.: 561-92-2787 License No.: CA 393326  
 Testing Company Name: GERARD KIS Y ... Phone No.: (619) 494-6126  
 Site Address: 4782 SLY PARK ROAD Date of Testing/Servicing: 3/18/00

**COUNTY OF  
EL DORADO**

**ENVIRONMENTAL MANAGEMENT DEPARTMENT**  
ENVIRONMENTAL HEALTH DIVISION  
AIR POLLUTION CONTROL DISTRICT  
SOLID WASTE & HAZARDOUS MATERIALS DIVISION



MAIN OFFICE  
2450 Parkland Court  
Yuba City, CA 95967  
409-821-2200

MR. JEFF RUSERT, SUPERVISOR  
1000 Lake Street, Bldg. 2000  
Sacramento, CA 95811  
916-445-1100

**PERMIT**  
**THIS PERMIT IS HEREBY GRANTED TO**

**GERONDAKIS AND SONS**  
5705 SUGAR BUSH CIR., POLLOCK PINES, CA 95726

**FOR**

**REMOVAL UNDERGROUND STORAGE TANK**  
**INSTALLATION UNDERGROUND STORAGE TANK**  
**UPGRADE UNDERGROUND STORAGE TANK**

**LOCATION**

**SENY PARK RESORT**  
4780 SENY PARK RD  
POLLOCK PINES, CA 95726

This permit is NOT TRANSFERABLE and may be suspended or revoked for failure to comply with the State and local laws and County Ordinances that govern underground storage tanks. Failure to renew permit and to complete the required monitoring including the annual tank tests, where applicable, will result in the assessment of a late renewal permit fee/penalty. The Department shall be notified within thirty (30) days of any change of name, ownership or operator.

**FEES PAID: \$450.00**  
**STATE SURCHARGE**  
**TOTAL FEES PAID: \$450.00**

**FACILITY: 365**  
**NO. OF TANKS ONSITE: 2**  
**RECEIPT # 25147**

**THIS PERMIT EXPIRES 12-03/99**

Handwritten signature of Jeffrey A. Rusert in black ink.

Jeffrey A. Rusert,  
Senior Environmental Health Specialist

**POST IN A CONSPICUOUS PLACE**

**Analysis Report: EPA 8020, NIXE and NIBE  
Purge and Trap, EPA Method 5030**

**Client: Gerondakis & Sons  
5705 Sugarbush Circle  
Pollock Pines, CA 95726**

**Project No.:  
Contact: NIXE GERONDAKIS  
Phone: (530) 644-0510**

**Project: SLT PARK RESORT**

**Date Sampled: 12/04/78  
Date Received: 12/08/78  
Date Extracted: 12/09/78  
Date Analyzed: 12/09/78  
Date Reported: 12/22/78  
Client ID No.: SAMPLE #1**

**Lab Contact: JAMES LIRANG  
Lab ID No.: 78542-1A  
Job No.: 818642  
CDC Log No.: 54131  
Batch No.: 24857  
Instrument ID: GC807  
Analyst ID: SCOTT  
Matrix: SOIL**

**SAMPLE #1**

<b>Analyte</b>	<b>CAS No.</b>	<b>Results (ug/kg)</b>	<b>Rep. Limit (ug/kg)</b>	<b>Dilution (factor)</b>
Methyl t-butyl ether	1634-04-4	ND	25	1.0
Benzene	71-43-2	ND	5.0	1.0
Toluene	100-82-3	ND	5.0	1.0
Ethylbenzene	100-41-4	ND	5.0	1.0
Xylenes, total	1330-20-7	ND	10	1.0

ND = Not detected at or above Indicated Reporting Limit

Analysis Report: Total Petroleum Hydrocarbons, EPA Method 8015,  
Furge and Trap, EPA Method 8030

Client: Gerondakis & Sons  
5705 Sugarbush Circle  
Pollock Pines, CA 95726

Project No.:

Contact: MIKE GERONDAKIS  
Phone: (530)644-8518

Project: SLY PARK RESORT

Date Sampled: 12/04/98  
Date Received: 12/08/98  
Date Extracted: 12/09/98  
Date Analyzed: 12/09/98  
Date Reported: 12/22/98  
Client ID No.: SAMPLE #1

Lab Contact: JAMES LIANG  
Lab ID No: PB642-1A  
Job No: 010642  
COC Log No.: 54131  
Batch No.: 24057  
Instrument ID: GC087  
Analyst ID: SCOTTY  
Matrix: SOIL

SAMPLE #1

Analyte	CAS No.	Results (mg/kg)	Rep. Limit (mg/kg)	Dilution (factor)
TPH as Gasoline	N/A	ND	10	10

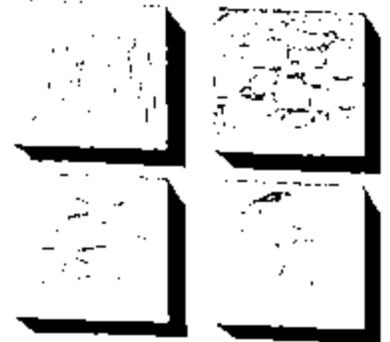
ND = Not detected at or above Indicated Reporting Limit

WHEELDON  
and ASSOCIATES

Consulting Geologists  
Environmental Assessors

621 PLACERVILLE DRIVE • PLACERVILLE  
956 422-4574 • FAX

Jeff  
Rusert.



Jeffrey A. Rusert,  
Senior Environmental Health Specialist  
Environmental Management Department  
El Dorado County  
2850 Fairlane Court,  
Placerville, CA 95667

RECEIVED

SEP 1996

ENVIRONMENTAL  
MANAGEMENT

SUBJECT UNDERGROUND FUEL STORAGE TANK (UST)  
TESTING AT THE SLY PARK RESORT, 4782 SLY PARK RD.,  
POLLOCK PINES, CA 95762

Dear Jeff:

This letter report is submitted to you as a summary report on the results of a soil sampling project at the Sly Park Resort located at 4782 Sly Park Road, in Pollock Pines, California.

The soil sampling was to determine if a single walled 1000 gallon gasoline tank had leaked into the surrounding soil. Typically, these tanks are about 4 feet in diameter and buried between 2 to 3 feet beneath the surface. Two (2) sample hole sites were chosen, one at either end of the tank (see sample location map for location of these holes). At the request of Jeff Rusert, Senior Environmental Health Specialist for the El Dorado County Environmental Management Department, Hole location #2 was selected so as to determine if any piping leaks had occurred in the vicinity of the tank.

Standard protocol dictates that soil samples be collected at a minimum of one (1) foot below the bottom of the tank. With 2 to 3 feet of cover over the tank and a 4 foot diameter tank, coupled with the fact that the tanks were excavated into very porous Mehrten formation andesite soils, I selected a soil depth for sampling at 8 1/2 feet.

Two six inch diameter holes were excavated with a power auger to a depth of 8 feet, the holes cleaned out and a stainless steel hand auger was bored to a total depth of 8 1/2 feet where a sample was collected in each hole. Using standard protocol, the samples were placed in a glass jar, sealed, labeled and sent under strict chain of custody in a chilled container to Potech Analytical Labs, Inc.

The samples (Sly Park #1 and #2) were analyzed for TPH-CAS BTEX by EPA method 8015M and 8020. Total lead was determined by EPA method 7420.

Sample Sly Park #1 and #2 were non detect (ND) for TPH-CAS BTEX, and had levels of 15 ppm lead and 13 ppm lead respectively. These lead levels are well below levels of regulatory concern and could probably be accounted for as natural occurring background in these soils.

As a result of the low levels of lead and the non detect for TPH-CAS BTEX, it appears that the tanks have not leaked up to this time.

If you have any questions in regards to the above information, please feel free to contact me at any time.

Sincerely yours,



George A. Wheelton, R.G., R.E.A.

cc: Robert Miller  
Attachments

# ENVIRONMENTAL MANAGEMENT DEPARTMENT

COUNTY OF  
EL DORADO

ENVIRONMENTAL HEALTH DIVISION  
AIR POLLUTION CONTROL DISTRICT  
SOLID WASTE & HAZARDOUS MATERIALS DIVISION



MAIN OFFICE  
2550 Lumber Street  
Placerville, CA 95667  
(916) 261-1111

SOUTH LAKE TAHOE OFFICE  
5400 Lake Tahoe Blvd. #101  
South Lake Tahoe, CA 96150  
(530) 937-1111

## PERMIT

THIS PERMIT IS HEREBY GRANTED TO:

WHEELDON GEOLOGY  
621 PLACERVILLE DR., PLACERVILLE, CA 95667

FOR

SITE ASSESSMENT  
ASSESSOR'S PARCEL NO: 042-5-0-08  
4782 SLY PARK RD., POLLOCK PINES, CA 95762

### PROPERTY OWNER:

ROBERT MILLER  
SLY PARK RESORT  
4782 SLY PARK RD., POLLOCK PINES, CA 95762

This permit is NOT TRANSFERABLE and may be suspended or revoked if it is found to be in violation of the State Federal, State and County Ordinances that govern underground storage tanks. Failure to comply with the conditions and requirements of this permit, including the annual site tests, where applicable, will result in the assessment of a "double permit" or penalty by the Department and the permit will be voided within thirty (30) days of any change of name, ownership or operator.

### FEES PAID:

Site investigation	\$100.00
<b>TOTAL PAID</b>	<b>\$100.00</b>
<b>RECEIPT #</b>	<b>17375</b>

THIS PERMIT EXPIRES 09/11/97

\_\_\_\_\_  
Jeffrey A. Rusert,  
Senior Environmental Health Specialist

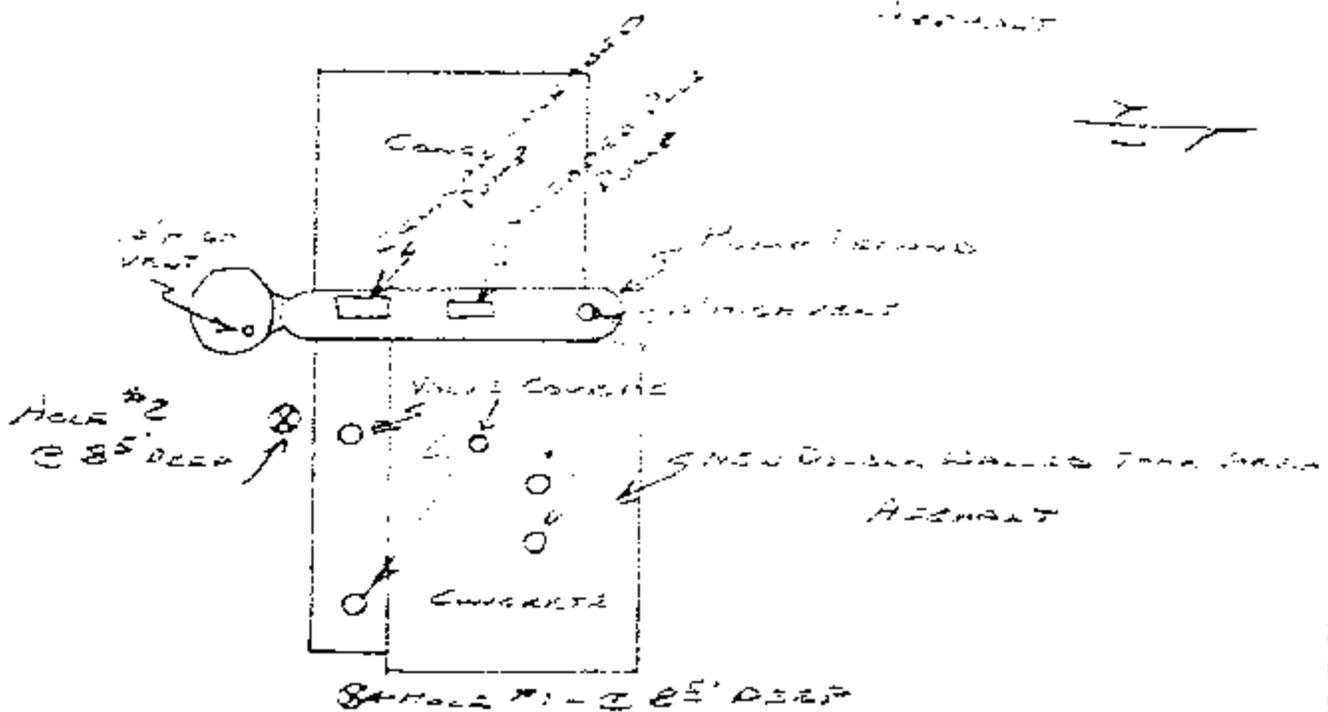
**POST IN A CONSPICUOUS PLACE**

WHEELDON & ASSOCIATES  
Geological Consultants  
621 Placerville Drive  
PLACERVILLE, CALIFORNIA 95367  
(916) 622-9579

9-13-76

# SAMPLE LOCATION MAP - SLY PARK RESORT FOR DEE POWER

RESORT BUILDING



AIR &  
UTILITY  
SHED



SLY PARK ROAD

# Entech Analytical Labs, Inc.

CA ELAP# 1369

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Attn: George Wheeldon  
Wheeldon & Associates  
621 Placerville Drive  
Placerville, CA 95667

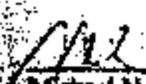
Date	9/24/96
Date Received	9/17/96
Date Analyzed	9/18-9/23/96
Project	Six Park Resort
Sampled By	Client

## Certified Analytical Report

### Soil Sample Analysis:

Test	SlyPark #1	SlyPark #2	Units	PQL	EPA Method #
Sample Matrix	Soil	Soil			
Sample Date	9/13/96	9/13/96			
Sample Time	12 Noon	12:30 pm			
Lab #	C12320	C12321			
Total Lead	15	13	mg/kg	0.5 mg/kg	7420
DF-Gas/BTEX	1	1			
TPH-Gas	ND	ND	mg/kg	1.0 mg/kg	8015M
Benzene	ND	ND	mg/kg	0.005 mg/kg	8020
Toluene	ND	ND	mg/kg	0.005 mg/kg	8020
Ethyl Benzene	ND	ND	mg/kg	0.005 mg/kg	8020
Xylenes	ND	ND	mg/kg	0.005 mg/kg	8020

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #1369)

  
Michael N. Golden, Lab Director

DF-Dilution Factor  
DLR-Detection Reporting Limit

PQL-Practical Quantitation Limit  
ND-None Detected at or above DLR

Environmental Analysis Since 1983