



SNFCI News

Sierra Nevada Forest and Community Initiative

JUNE 1, 2012

VOLUME 4, NUMBER 4



Grapple Loader

Placer County Moving Forward with Combined Heat and Power Biomass Facility in the Sierra

Guest Contributor, Brett Storey

In October 2011, the Placer County Board of Supervisors approved a proposal from County Staff and the Biomass Policy Team to move forward with a small wood biomass to energy facility at the county-owned Cabin Creek property in Eastern Placer County. Cabin Creek, the site of a former landfill now used for other County functions, is located between Squaw Valley and Truckee.

The proposal calls for construction of a two-megawatt wood-to-energy biomass facility that uses highly efficient gasification technology. The facility would utilize wood chips from wildfire hazard reduction and forest management projects. The chips would be processed (ground and screened) at the site of specified projects and would be hauled by trucks to the Cabin Creek site. The proposed size of the facility was determined by a study that identified the amount of biomass available on a long-term sustainable manner within 30 miles of the proposed site. This study was one of several economic, technical and scientific studies undertaken by the county and the Air Pollution Control District to determine the optimum size of a biomass energy facility and to ensure there are no unacceptable effects.

The county is now completing a formal Environmental Impact Review (EIR) for the proposed site and facility and has developed a preliminary site drawing. There are numerous documents located on their website: <http://www.placer.ca.gov/Departments/CommunityDevelopment/Planning/Biomass.aspx>. These documents contain information regarding air & water emissions, carbon studies, logistics, biomass availability assessments, technology, public health risks and various in-the-field projects that have been completed to help assess feasibility of a biomass energy facility. The EIR will be completed this spring and will lead to a decision on permitting by the Placer County Planning Commission and Air Pollution Control Board potentially this summer and fall. Several new reports regarding economics, air permitting, technology integration and formal building designs along with the environmental report to the public are also coming this spring.

Woody biomass supplying the facility will come primarily from projects that reduce wildfire hazard and improve forest health. This woody biomass is excess material that would otherwise normally be open-burned, so utilizing the biomass for energy production will help reduce emissions that negatively affect air and water quality. If the biomass facility is approved, the county will work closely with federal, state and local agencies and organizations involved with projects that produce woody biomass in order to maximize the efficient utilization of excess biomass and increase environmental benefits.

*Sierra Nevada
Conservancy*

*11521 Blocker Drive,
Suite 205
Auburn, CA
95603*

*(530) 823-4670 p
(530) 823-4665 f*

SNFCI@sierranevada.ca.gov

www.sierranevada.ca.gov

Supervisor Jennifer Montgomery, representing the 5th District of Placer County states "this facility, which will be clean and green, supports State, Federal and County policies for fire protection and clean air. Additionally, the benefits to the local community in jobs created and a safer place to live are an added bonus. This is the renewable energy of the future. "If environmental studies are positive and permits are approved, timeline for the facility calls for construction in 2013 through 2014 with operations beginning late in 2014. This facility would be the Tahoe region's only local area-generated power facility and it would use fuel from 100% local green sources. Currently, most Tahoe Basin area electricity is generated using fossil fuels, mainly coal.

Placer County hopes that this project (and all of the associated analyses) can be utilized for development of additional small, distributed generation facilities in other areas in the Sierras. Placer County Supervisor Jim Holmes, representing the 3rd District, understands the importance of this project and states, "The key to sustaining the protection of our forested county and lowering the air pollution in the region is vested in this project and we intend to build and operate it with our business partner". The staff is available for discussions to support others who wish to pursue a similar approach. You can reach the Program Manager, Brett Storey at (530) 745-3011 or bstorey@placer.ca.gov

SNFCI Council Discusses Oregon Policies and Demonstration Projects

Staff Contributor

On April 25th, the SNFCI Regional Coordinating Council met for the second time this calendar year. Among the priorities for this meeting were discussions on both biomass utilization and demonstration projects. The biomass utilization discussion centered on an insightful presentation by Lynn Jungwirth from the Watershed Center in Hayfork, California. Lynn discussed the successes and lessons learned from Oregon, where biomass utilization occurs on a much broader scale than California. For biomass, thermal efficiency is much greater than electrical efficiency. In rural Oregon, 25 schools have converted from diesel or propane boilers to wood chip or wood pellet boilers, which cost approximately \$130,000 less per year to operate.

The Coordinating Council discussed California needing to do an analysis on biomass potential within the state, as well as with the Federal Trade Commission (FTC) for international opportunities. The initiatives need to focus on tying economic development and ecological restoration together to have the greatest impact. Identifying the appropriate incentive suite is critical and should follow Oregon's example, such as tax credits, efficiency rebates, and property tax incentives for both businesses and residences. Any change may need to start slowly, beginning with smaller 1 Megawatt plants to help gain public acceptance before larger plants are proposed. At the same time, capacity within both the rural communities and the relevant agencies needs to be increased in order to meet the needs of the initiatives and incentives.

In the second half of the meeting, the Coordinating Council continued to further hone the idea of demonstration projects and its role within them. This discussion yielded a number of primary roles, including:

- Problem solving and facilitation
- Policy and incentive advocating
- Education and promotion of lessons learned
- Supporting replicating demonstration projects elsewhere



*Enterprise School
Heating System,
Oregon*

*Sierra Nevada
Conservancy*

*11521 Blocker Drive,
Suite 205
Auburn, CA
95603*

*(530) 823-4670 p
(530) 823-4665 f*

SNFCI@sierranevada.ca.gov

www.sierranevada.ca.gov

As a next step, the Coordinating Council Working Group will meet to frame the discussion on demonstration project objectives and locations. Their recommendations will be reviewed by the full Coordinating Council at the next meeting July 25, 2012, potentially at Sagehen Research Station.

Burney-Hat Creek Basins Project Awarded Federal Grant

Staff Contributor



The Burney-Hat Creek Community Forest and Watershed Group (Burney-Hat Creek Group) recently received a Collaborative Forest Landscape Restoration Program (CFLRP) grant award in the amount of \$605,000 for the first year, with potential funding for the next 10 years, to implement the Burney-Hat Creek Basins Project (Basins Project). The goal of the project is to restore fire resiliency to the landscape thereby creating socioeconomic development opportunities for communities within the area. The project includes treatment of approximately 69,000 acres of federal land and 34,000 acres of non-federal land.

This project is focused on a 400,000 acre landscape and the communities dependent on it, and involves federal and private land and a dynamic and diverse collaborative partnership group. Restoration of national forests and wetlands in the project area will protect public and private assets (e.g., timber products, homes), provide a sustainable supply of raw material to local mills and co-generation plants, sustain and increase needed jobs, improve local community health and well-being, and reduce future fire and management costs by \$11 million. The Basins Project is located around the community of Burney which possesses two sawmills and three co-generation plants that produce energy from wood biomass. Treatments associated with this project will help maintain a sustainable flow of materials including saw logs and wood biomass for bio-energy totaling 950,000 ccf over ten years.

The Burney-Hat Creek Group has representatives from the U.S. Forest Service, private timber companies, recreation enthusiasts, environmental groups, Pacific Gas and Electric, ranchers, timber contractors, Pit River Tribe, Burney Fire District, and Hat Creek Valley Fire Safe Council. The discussions held by the participants of the Burney-Hat Creek Group have encouraged the multiple stakeholders to share their thoughts regarding the development of the various planning documents and to comment on treatment locations and practices.

ACCG Collaborative Receives Funding

Staff Contributor

The Amador–Calaveras Consensus Group Cornerstone Project on the Eldorado and Stanislaus National Forests will receive \$730,000 in Collaborative Forest Restoration Landscape Restoration Program funds this fiscal year from the U.S. Forest Service. The project was one of 10 projects selected for inclusion in the competitive, national program. Each project is expected to receive program funds annually for a decade.

Over the next 10 years, the Cornerstone Project is anticipated to bring in more than \$43 million in federal and partner funds. The funding will be used to restore forest health, reduce fire risk and create local economic and social benefits. Implementation will generate 204 jobs, harvest 1.7 million board feet of timber, restore 32 acres of waterways remove 66,400 tons of biomass and small-diameter trees, reduce sedimentation from 787 miles of road, and restore 400 acres of Native American cultural sites while making local communities safer from damaging and costly

*Sierra Nevada
Conservancy*

*11521 Blocker Drive,
Suite 205
Auburn, CA
95603*

*(530) 823-4670 p
(530) 823-4665 f*

SNFCI@sierranevada.ca.gov

www.sierranevada.ca.gov



Mokelumne River

Sierra Nevada
Conservancy

11521 Blocker Drive,
Suite 205
Auburn, CA
95603

(530) 823-4670 p
(530) 823-4665 f

SNFCI@sierranevada.ca.gov

www.sierranevada.ca.gov

fires. The project will take place on the Amador and Calaveras Ranger Districts in Alpine, Amador, Calaveras and El Dorado counties. The project planning area encompasses nearly 400,000 acres of federal lands.

“With this recognition and funding, our local national forests have moved to the forefront of community-based forest restoration,” said Calaveras County Supervisor Steve Wilensky. “It’s a great day for Amador and Calaveras. This is the result of a tremendous amount of work by a very broad coalition of dedicated people from both counties and beyond. While the project has yet to begin, we’re ready to roll up our sleeves and put people to work in the forest.”

The Cornerstone Project was developed in early 2011 by the Amador-Calaveras Consensus Group (ACCG), a community-based forest collaborative group that works to create fire-safe communities, healthy forests and watersheds, and sustainable local economies. The ACCG was originally convened in December 2008 by Calaveras County Supervisor Steve Wilensky and Sierra Nevada Conservancy Executive Officer Jim Branham. The group’s diverse membership includes forest contractors and other businesses, resource agencies from all levels of government, social service agencies, Native Americans, Fire Safe Councils, conservation organizations and individuals.

Next steps toward implementation of the Cornerstone Project entail the development of a workplan that will more specifically identify projects and provide a schedule for completion. The workplan, developed in cooperation with ACCG partners and the Stanislaus and Eldorado National Forests, will then be transmitted to the U.S. Forest Service Region 5 leadership for review and approval. ACCG has adopted a set of principles which will ensure projects provide maximum benefits to the community, local economy, and natural environment where the projects are taking place. The ACCG anticipates that work will begin under Cornerstone this year, with the NEPA process for out-year projects beginning as well.

For more information, please visit

<http://www.acconsensus.wordpress.com>

Mokelumne Avoided Cost Analysis: The True Savings From Active Management

Staff Contributor

A combination of factors, including a century of fire suppression, has resulted in a buildup of tree debris, fire-prone tree species, and dense tree groves in many parts of the Sierra Nevada. These are the perfect conditions for uncharacteristically large high-severity fires, the impacts of which are devastating to the forest, including over 90 percent plant mortality and bare and hardened soils.

In Colorado, two predominately high-severity fires, the Buffalo Creek fire (1996) and the Hayman fire (2002), scorched approximately 150,000 acres combined in the watershed that is the primary source of water for Denver. The rains that followed the fires washed 15 acres of debris and over 1 million cubic yards of sediment into a vital reservoir, which has cost Denver Water over \$30 million in cleanup costs, with 380,000 cubic yards of sediment still to be dredged from the primary reservoir. As a result, Denver Water has entered into a partnership with the U.S. Forest Service, providing matching funding to restore over 30,000 acres over the next 5 years.

The Mokelumne River Watershed, located in the central Sierra Nevada, provides water for millions of users including agriculture, industry and over 1.3 million East Bay residents via the East Bay Municipal Utility District and provides hydropower to Pacific Gas and Electric. Similar to Denver, the Mokelumne Watershed is at great risk from high-severity fires



Sierra Nevada
Conservancy

11521 Blocker Drive,
Suite 205
Auburn, CA
95603

(530) 823-4670 p
(530) 823-4665 f

SNFCI@sierranevada.ca.gov

www.sierranevada.ca.gov

with likely impacts to the water and energy infrastructure and numerous ecosystem services (e.g. wildlife habitat, water quality).

An avoided cost analysis (what will be the projected savings to the utilities and the public) will be conducted to analyze how upper watershed restoration treatments, primarily fuel hazard reduction and forest health management, benefit downstream beneficiaries and reduce operational costs of energy and water delivery agencies. The project committee is comprised of members from local government, environmental and conservation groups, industry, state and federal agencies, utility companies and Native American representatives. In addition to fire risk, the committee is also considering other potential threats to water quality, including degraded roads and meadows. Through the initial analysis, new stakeholders that will benefit from restoration practices will be identified. The Sierra Nevada Conservancy is managing the project, contributing funding and staff time, and co-convening the group with The Nature Conservancy. It is hoped that the analysis in the Mokelumne will prove useful for other watersheds in the Region.

Sierra Cascade Dialog Sessions #4 and #5 Staff Contributor

The Sierra Cascade Dialogs are quarterly meetings attended by stakeholders across the Sierra Nevada and the Cascades that address a range of issues. The dialogs are convened by the U.S. Forest Service and are open to any individual or organization that has a direct interest in public lands. The goal of the dialogs is to create shared understanding among participants with diverse opinions. The outcomes from the sessions will inform future U.S. Forest Service decisions.

The most recent dialog sessions in December 2011 and March 2012 focused on components of the new Forest Plan Revision. The December session - *Preparing for Forest Planning: Synthesizing Science* – explained the role of science synthesis in forest planning and identified key questions for the science synthesis teams to address in order to support the upcoming bioregional assessments and Forest Plan Revisions. Science synthesis distills recent advances in scientific knowledge that affect forest management, considering multiple themes that cut across traditional disciplines to help managers address key challenges more holistically. General Technical Report (GTR) 220 “An Ecosystem Management Strategy for Sierran Mixed-Conifer Forests” is an example. Participants suggested additional topics for science synthesis papers, from fire dynamics to wildlife ecology to socioeconomic factors in ecosystem restoration.

Participants at the March dialog session explored how to maximize the effectiveness of collaborative planning related to Forest Plan Revisions. Their suggestions are being captured in a Collaboration Handbook that will be distributed to the Sierra, Sequoia and Inyo/Mono National Forests – three Sierra region forests that will be the first to go through the Forest Plan Revision process.

Future Sierra Cascade dialog topics include adaptive management, all lands approaches, utilization of wood waste, monitoring, and climate change. Detailed reports on the sessions can be found on the Dialog website:

<http://www.fs.fed.us/r5/SierraCascadesDialog/>

Mountain Meadows Conservancy releases new Guide "Reusing Former Lumber Mill Sites: A guide on how to redevelop or conserve former lumber mill sites"

The Mountain Meadows Conservancy (MMC) has recently released for public use a *Guide* to help others work through the potential reuse of old lumber mills in the Sierra Nevada and other locations. The Guide is available at the Mountain Meadows Conservancy website www.mtmeadows.org or hard copies may be obtained from the conservancy located in Westwood, California.

Often located near a river or in the heart of a small community, these mill sites can be contaminated from historical milling activities. Many Sierra communities are affected by these abandoned facilities and have shown an interest in the redevelopment of these properties. In order to assist others with what can be a complicated and confusing endeavor; the Guide provides a step-by-step strategy that communities and stakeholders can undertake to navigate the process. The MMC has included a "Lessons Learned" section that is based on their experiences in rehabilitating the Robbers Creek Mill Site in Westwood.

The Guide was made possible in part by funding from the Sierra Nevada Conservancy through a grant to MMC.



Sierra Nevada
Conservancy

11521 Blocker Drive,
Suite 205
Auburn, CA
95603

(530) 823-4670 p
(530) 823-4665 f

SNFCI@sierranevada.ca.gov

www.sierranevada.ca.gov