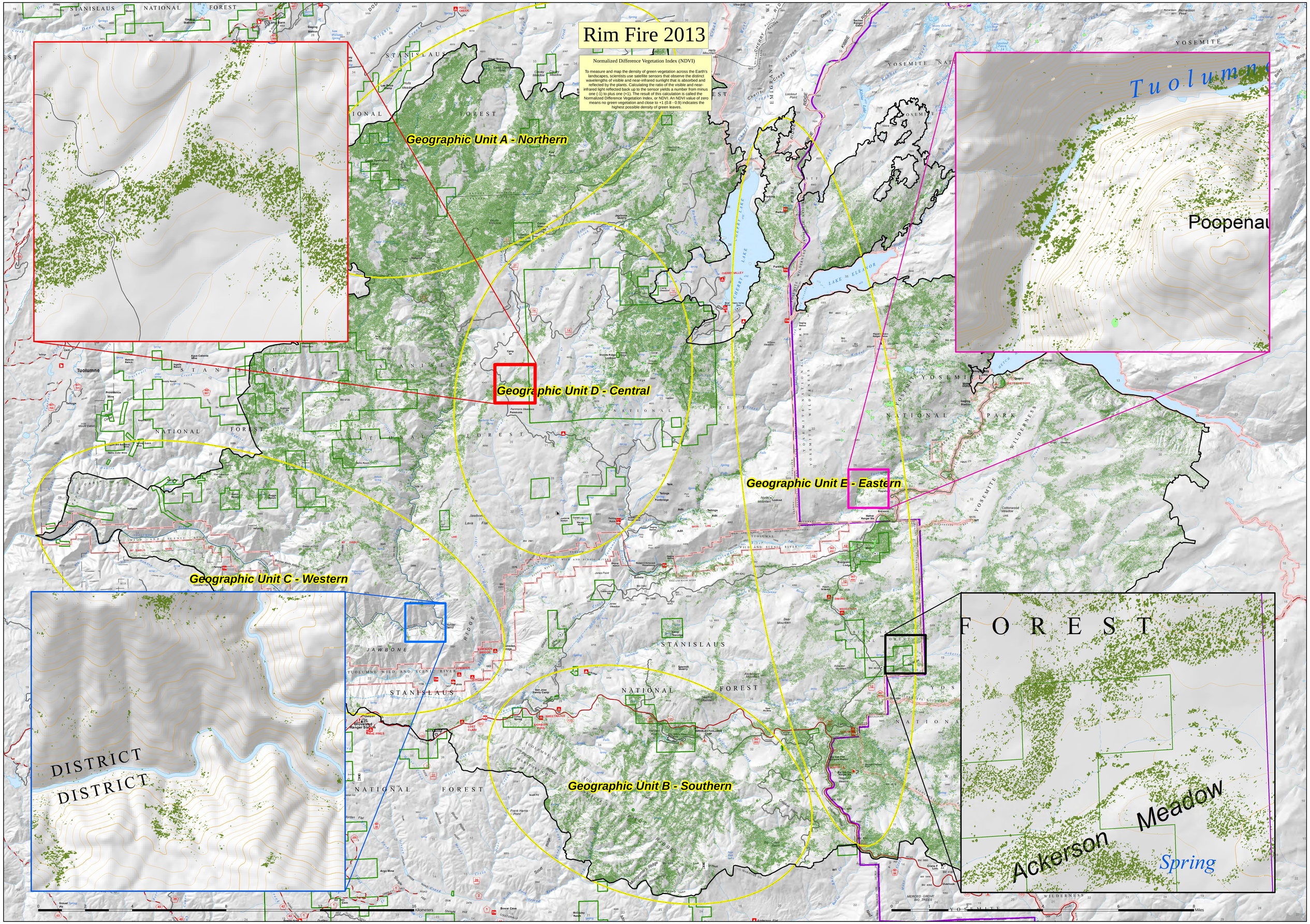
Rim Fire 2013

Normalized Difference Vegetation Index (NDVI)

To measure and map the density of green vegetation across the Earth's landscapes, scientists use satellite sensors that observe the distinct wavelengths of visible and near-infrared sunlight that is absorbed and reflected by the plants. Calculating the ratio of the visible and near-infrared light reflected back up to the sensor yields a number from minus one (-1) to plus one (+1). The result of this calculation is called the Normalized Difference Vegetation Index, or NDVI. An NDVI value of zero means no green vegetation and close to +1 (0.8 - 0.9) indicates the highest possible density of green leaves.