



Northwest Gateway Forest Restoration



In the absence of fire, white fir has formed dense thickets in the northwest corner of the park. View in 1925 (left), same view in 1995 (right).

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One hundred years of fire exclusion in Lassen Volcanic National Park has resulted in overly dense and unhealthy forest areas. In the absence of surface fires, shade-tolerant young white fir have formed dense thickets crowding out old growth pines, aspen stands, and understory shrub and grass vegetation. Lassen Volcanic will implement a forest restoration strategy to remove unhealthy fuel loads. The process will reduce old-growth mortality rates, promote a more varied stand structure, and restore and protect wildlife habitat.

Selecting the Strategy

Forest areas in the northwest corner of Lassen Volcanic National Park, referred to as Northwest Gateway, present a severe risk of high intensity fire. In partnership with Lassen National Forest, park staff has selected to use a mechanical treatment strategy in this popular recreation area.

Research and experience suggest other fire management strategies such as prescribed fire or hand thinning are inadequate tools for the specific needs of this project. Prescribed fire applications in similar conditions have resulted

in high intensity fires causing loss of old-growth and excessive understory mortality. A recent small scale mechanical treatment project in the Manzanita Lake Campground area proved successful at restoring the area forest structure.

A onetime entry with mechanized equipment will be used to reduce live understory and ladder fuels. These activities will specifically focus on the reduction of excessive understory tree densities and surface fuel loads previously managed with prescribed fire.



Manzanita Lake Campground area before restoration



Manzanita Lake Campground area after restoration



Forest stand with varied forest structure and species diversity



Grapple skidder removes fuels



A feller buncher cuts live fuel

Mechanical Thinning Process

The Northwest Gateway Forest Restoration project is composed of six areas. Mechanical thinning will begin in approximately 500 acres in two of these areas. Forest Service and Park Service fire and natural resource specialists have developed restoration prescriptions for each unit specifying the type and location of fuel loads to be removed and the location of retention areas for wildlife habitat. Fuel load removal will focus on areas near old-growth pine, aspen groves, and healthy pine stands.

With thinning prescriptions in place for each unit, a local contractor will utilize mechanized equipment to collect and remove live fuel loads.

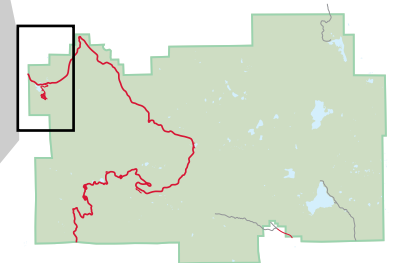
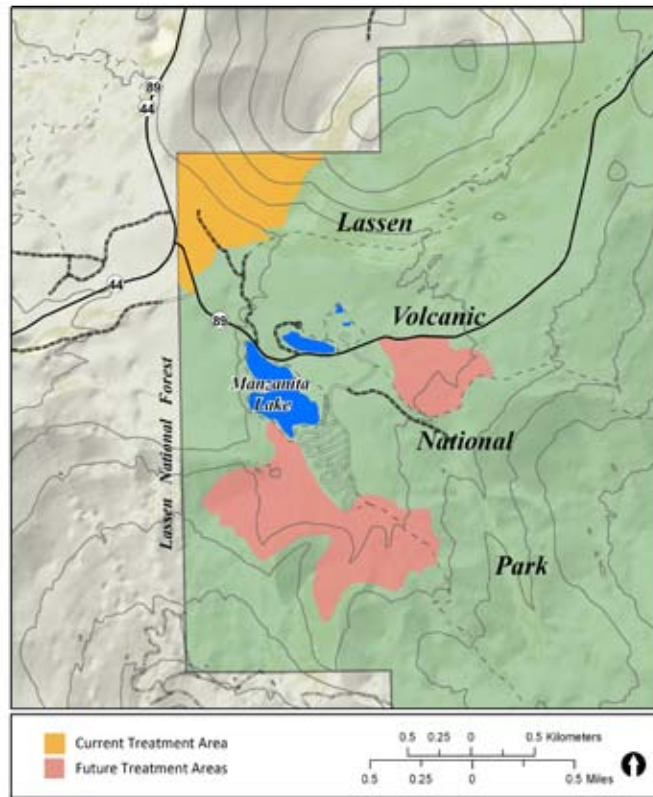
Once the forest structures in the treatment areas have been restored, fire will be utilized to maintain and restore the areas without further use of mechanical equipment.

Restoration Goals

The overall goal of this treatment strategy is to reestablish a fire adapted forest landscape by restoring a more resilient, diverse forest structure. Specifically, the treatment will maintain a multi-

aged forest with significant old-growth elements, promote a more varied stand structure, promote stand species diversity, and restore and protect wildlife habitat.

Project Map



Information

For more information about the Northwest Forest Gateway Restoration project, please call (530) 595-4480 or visit go.nps.gov/nwg.