**Lassen Volcanic National Park** 





The human story of Warner Valley is well-reflected in its devoted visitors and caretakers who have preserved the Drakesbad experience since the 1880s. To protect both the area's unique cultural and natural resources, Lassen implemented the Warner Valley Comprehensive Site Plan in 2011. The plan outlines various natural and cultural resource improvement projects such as Drakesbad fen restoration, improvements to Drakesbad facilities, and restoration of Dream Lake basin. Through improvement and restoration, the plan serves to protect the area's unique resources for the enjoyment of all visitors.

## Drakesbad Fen Restoration

During the early part of the 19th century, the Drakesbad fen was drained to provide better pasturage for domestic livestock. This was accomplished by digging ditches (thousands of linear feet) throughout the wetter portions of the meadow to route spring meltwaters into Hot Springs Creek more rapidly. This effectively dewatered (and degraded) an uncommon montane fen ecosystem. In the fall of 2012, assisted by volunteers from American Conservation Experience and restoration specialists affiliated with the University of Colorado, the park

identified the deepest ditches and carefully filled them with a soil mixture prepared for the project. The fill area was then revegetated using special techniques to slow and spread the flow of water at the surface. Within just a few days, the water table began to rise. To further permit natural water flow across the area, park staff installed a new boardwalk connecting Drakesbad Lodge and the area trail network. The wooden boardwalk provides safe passage for hikers and horseback riders while minimizing impact on the restored fen.



Locating hidden ditches



Cutting overhanging walls



Staff fill, shape, compact, and replant downstream



Salvaged vegetation replanted as check-dams





A hiker crosses a new section of boardwalk on the Pacific Crest Trail

Dream Lake basin following its full restoration

### **Dream Lake Basin**

Following the breach of Dream Lake dam in 2011, park staff has continued to monitor the restoration area. Ongoing monitoring reveals that the area has nearly returned to a naturally vegetated meadow frequented by black-tailed deer and other native species, indicating full restoration of the area that has been a man-made lake for 80 years.

A new wayside exhibit interpreting the restoration of Dream Lake basin will be installed this spring. As restoration monitoring continues, access to the lake basin is not permitted. Visitors are encouraged to safely view the area from the former lakeshore. Your cooperation will help to protect sensitive restoration areas.

# Trail Maintenance and Structural Improvements

Park trail crews completed a new 120-foot section of boardwalk at the intersection of the Pacific Crest Trail (PCT) and Warner Valley day use parking area. Crews also installed a new 20-foot section of boardwalk to prevent erosion and stabilize soils near the Warner Valley trailhead. Improvements to the ranch included installation

of a drainage system behind the root cellar to prevent flooding in the area and re-siding of the south and east sides of the dining hall. Additionally, a number of new culverts were installed on the access road between the lodge and the water tank to improve waterflow into the Drakesbad fen.

# Comprehensive Site Plan

The Record of Decision for the Warner Valley Comprehensive Site Plan (CSP) / Final Environmental Impact Statement was signed in March 2011. This document includes a description of the natural and cultural resource improvement projects included in the CSP.

Lassen Volcanic National Park will continue to implement the projects identified in the CSP as funding, personnel and other resources become available. The CSP and additional information regarding this project can be viewed online at www.nps.gov/lavo/parkmgmt/wvcsp.htm.

### 2013 Plan Implementation

Plan implementation in 2013 includes improvements to the Drakesbad Guest Ranch. Staff will continue with replacement of the dining hall siding and begin upgrading the outdoor dining area to improve accessibility and appearance. Additional work will be completed to improve drainage around the dining hall. Park

staff will continue work in the Dream Lake basin with additional lowering of the former dam area, clean-up of the north outlet, and ongoing vegetation monitoring. Following the restoration of Drakesbad fen to its natural condition, water levels will be monitored throughout the summer to evaluate the hydrologic effects of ditch filling.

## **Future Projects**

The Warner Valley CSP outlines many projects to preserve the historic character of the Drakesbad Guest Ranch. The integrity of the historic district will be restored by re-configuring the loop road and parking, and by moving employee housing and storage to a new service area outside the district.

Changes to the Warner Valley area will improve the visitor experience and reduce impacts on natural resources. This includes expansion of the upper campground, conversion of the lower campground to a new trailhead parking and picnic area, restoration of the day use parking area, and improvements to roads for water flow and dust management.

### **More Information**

To learn more about the Warner Valley CSP or to view the complete CSP Environmental Impact

Statement visit the park website at www.nps.gov/lavo/parkmgmt/wvcsp.htm.