

Donner Summit

Conservation Priorities

July 2009





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Donner Summit Conservation Priorities Summary

Donner Summit's conservation values are innumerable and interconnected.

At the crest of the Sierra, the region ranges in elevation from 6,500 to 8,000 feet, characterized ecologically as upper montane forests and meadows transitioning to subalpine at its highest elevations.

The high mountain peaks – Mt. Lincoln, Mt. Disney, Castle Peak, Donner Peak, Mt. Judah, Devils Peak – provide a magnificent backdrop to the lakes, streams, meadows, and forests.

Donner Summit includes the highest ranked forests in the Northern Sierra. The region plays an important role in the surrounding Sierra ecology as a bridge between wilderness areas. And it serves incredibly important functions in two critical Sierra watersheds, serving as the headwaters of the South Yuba River and upper reaches of the North Fork American River.

Each of these values provides a strong case for conservation investment in the future of Donner Summit. Together, they combine to make an overwhelming affirmation: Donner Summit is worth protecting.

Introduction

This report serves as an explanation for the *Donner Summit Conservation Priorities* map, which focuses on three important conservation values:

- Forest Health
- Wildlife and Habitat
- Watersheds and Water Quality

Data for each was compiled and mapped in digitized layers to designate land for permanent protection.

The conclusion is clear: Donner Summit has tremendous conservation value, and the region deserves responsible planning and financial investment to ensure its ecological role in the Sierra Nevada – and beyond.

This report focuses on 38,000 acres of land at the crest of the Sierra extending south, east, and west from the town of Soda Springs, thereby including important headwaters of the American and Yuba river systems, as well as existing communities, cultural crossroads, and recreational resources.

The Sierra Watch *Donner Summit Conservation Priorities* are based on research conducted by a consultant team consisting of Terrell Watt, Planning Consultant; Michael White, Conservation Biology Institute; and Jared Ikeda, Ikeda Consulting. The consultant team gathered available data and conducted a series of interviews and site visits. Tom Mooers and Peter Van Zant of Sierra Watch assembled their findings into this final report.

Their research distills decades of ongoing assessments in the Sierra, notably the Sierra Nevada

Ecosystem Project (1996); the *Sierra Checkerboard Initiative Scientific Assessment* (2005), commissioned by the Trust for Public Land; and the *Donner Summit Conservation Assessment* (2007).

Note also that the report's findings reinforce key regional values on the local level, as expressed in a series of community planning workshops and a comprehensive survey conducted by the Donner Summit Area Association.

Its purpose is not to include specific plans for development on Donner, but it does note areas of existing development opportunities: Soda Springs and the Highway 40 corridor are best suited for mixed-use development; Sugar Bowl demonstrates a good model of limited, sustained growth.

Our mapping and assessment work is ongoing. We encourage you to contact Sierra Watch directly with any information that might better shape a healthy future for Donner Summit and its irreplaceable resources.

Forest Health

To capture forest resource values, the consultant team layered a composite map of forest maturity and carnivore networks to designate Conservation Priorities.

Outside our National Parks, one of the only remaining large stands of virgin, oldgrowth forests in California is found in the Donner Summit region. These forests have developed over centuries to include oldgrowth trees, snags, and downed logs. Increasingly rare in the Northern Sierra, they provide essential habitat for important species such as the California Spotted Owl, Northern Goshawk, and Pine Marten.

The value of Donner Summit forests is welldocumented. In 1996, the Sierra Nevada Ecosystem Project mapped and ranked the integrity of forests on public lands; Donner Summit forests earned a rank of 4 – the highest ranking in the Northern Sierra region.

The United States Forest Service recognizes the importance of Donner Summit forests and manages the resources accordingly. Much of the public land in the region is designated as an *Area of Late Successional Emphasis*; over 3,000 acres of old growth fir and incense cedar are protected as the *Onion Creek Experimental Forest*, including old growth cedars dating back to the 13th Century.

Wildlife Habitat

The consultant team collected known habitat data and identified opportunities for connectivity to create habitat resources layers of the Conservation Priorities map. The landscape of Donner Summit provides an incredible array of wildlife habitat, including mountain meadows, creeks and lakes, old growth forests, and important wildlife corridors.

No complete field study exists, but initial assessments reveal a wealth of Sierra wildlife, from the Mountain Yellow-legged frog to the Pine Marten. Donner Summit is home to sixteen species of amphibians, twenty species of mammals, and at least 100 species of birds.

Important species of birds include Northern Goshawks, Bald Eagles, Golden Eagles, and Spotted Owls. Notably, the native willows and meadows of Summit Valley and along McKay Creek provide habitat for the state-listed endangered Willow Flycatcher.

Other special-status animals that are known to occur in the Donner Summit region include: Harlequin Duck, Black Swift, Yellow Warbler, and probably Wolverine, Pacific Fisher, and Sierra Nevada Red Fox. Remarkably, the harsh Donner climate provides habitat for 115 different species of butterflies, one of the richest butterfly faunas on the continent.

A variety of vegetation communities including montane meadows, riparian habitats, montane chaparral, Sierran mixed conifer forest, lodgepole pine forest, white fir forest, and red fir forest occur at the Summit. Diverse flowering perennials, many of which are considered sensitive, can be found scattered through these habitats, particularly in open areas.

More than 500 species of vascular plants, representing more than one third of all plant families in California, are known to occur in the Donner Summit region. According to the California Native Plant Society, at least twenty rare and sensitive plant species are found in the Donner Summit area, including the starved daisy, long-petaled lewisia, and the Donner Pass buckwheat. Perhaps the region's most important role in maintaining biodiversity is in providing connectivity of diverse habitat. Donner Summit plays an important role in the surrounding Sierra environment as a bridge between existing and proposed wilderness areas – Granite Chief and Castle Peak – and as the headwaters for the American and Yuba Rivers.

Water Quality and Watersheds

The Conservation Priorities map includes layers of wetlands, lakes, water courses, and stream buffers – as well as a layer of steep (20%) slopes – to protect the quality of Donner Summit waters.

The clear seasonal streams and subalpine lakes of Donner Summit are some of its most appreciated resources. And the importance of the region's water resources extends well beyond the summit itself – these are the headwaters and upper reaches of some of California's most important river systems: the South Yuba and North Fork American Rivers.

Sierra river systems are incredibly important resources. Riparian corridors sustain high levels of biodiversity, and they play an important hydrological role in each watershed.

The high mountain meadows of Donner Summit provide water quality protection, flood regulation, and species habitat. Van Norden Meadow is the largest wetland above an elevation of 6700 feet in Placer or Nevada counties. Other important wet meadow areas include those along McKay Creek in the American River watershed.

For many Californians, Donner Summit – its meadows, creeks, and streams – is most important as the source of our water. And state and federal law make a substantial commitment to the integrity of both the North Fork of the American and the South Yuba River; their aesthetic, scenic, historic, archeological, and scientific features are protected under Wild and Scenic status.

Slope is an important hydrological factor on Donner Summit. Especially on steep

slopes, loss of vegetative cover and increase in area of impervious surfaces would contribute to an increase in runoff and pollutants loading into waterways.

Commitment to Conservation

Fortunately, when it comes to protecting priority conservation lands on Donner Summit, we can further existing commitments to conservation and connect a mosaic of protected public and private lands.

Local and regional efforts to preserve Donner Summit include the *North Fork American River Research and Management Agreement,* a unique commitment by private landowners, the Forest Service, and the University of California to protect more than 19,000 acres – including the *Onion Creek Experimental Forest* – on the south side of Donner Summit.

Parcel ownership southeast of Donner Summit fits into the familiar 'checkerboard' pattern of the Sierra. When Congress offered land to entice construction of the transcontinental railroad, it offered every-other square mile of ownership throughout the Central Sierra. By investing in conservation on the Summit, we can reconnect fragmented ownership and protect entire forest ecosystems.

By layering digitized maps based on conservation values, a clear vision for Donner Summit presents itself, illustrating one grand priority: conservation of Donner Summit itself.

Sierra Watch is a non-profit organization working to protect the incomparable natural resources and unparalleled quality of life in the Sierra Nevada mountain range. For more information, call (530) 265-2849 or visit www.sierrawatch.org.