Donner Memorial State Park



Preliminary General Plan/ Draft EIR

August 2002



General Plan Inquires

The Donner Memorial State Park General Plan was prepared by the Department of Parks and Recreation Northern Service Center and Sierra District staff. For general information regarding this document, or to request additional copies, please contact:

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PRELIMINARY GENERAL PLAN/ DRAFT EIR

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Summary of the Plan

SUMMARY OF THE PLAN

Donner Memorial State Park has been in existence for as long as there has been a California state agency to manage public parklands. In 1928, the newly-formed California Division of Parks acquired eleven acres of land containing remnants of the Donner Party camps. This small parcel was deeded into public ownership for the purpose of preserving and perpetuating the memory of the ill-fated Donner Party and the experiences of other pioneers heading west in the mid-19th century. The park has grown over time to include portions of the shore of Donner Lake as well as land in Coldstream Canyon and more recent acquisitions farther south and west. Although resource management programs and facility development have taken place over the years, a general plan has not been prepared until now to guide long-range management programs and facility development in the park.

As the population of California and the size of the park have grown, Donner Memorial State Park has experienced a major increase in visitor attendance. The Department of Parks and Recreation has attempted to keep pace with increasing demand for facilities and interpretive programs by adding day and overnight use facilities and expanding visitor programs. However, a major component of the interpretive program at the park, the Emigrant Trail Museum, does not have adequate space for the number of visitors, essential interpretive programs, or critical artifact and natural history displays. Built in the early 1960s, the museum does not serve today's needs for a facility to accommodate the numerous school groups and other visitors present during frequent heavy use periods. Park staff have heard many comments from the public over the last few years concerning deficiencies in the Emigrant Trail Museum. In addition, traffic congestion and conflicts between museum and other park users at the park's entrance on Donner Pass Road have created the need to improve and simplify traffic circulation at the entrance area.

Recognizing the need for a park-wide planning document and museum facility expansion, the Department began a general plan process in the spring of 2001. The focus of the General Plan is to identify park-wide goals and guidelines to guide the future development, management, and protection of park resources and visitor facilities, as well as to determine the best location for a new museum/visitor center for the park and to alleviate existing traffic conflicts in the park's entrance area. Several of the park-wide planning goals included in the General Plan are:

 Cultural Resources. Ensure the highest level of appropriate protection, stabilization, preservation, and interpretation of the park's significant cultural resources, focusing in areas of exceptional archaeological and historical significance.

- Interpretive Resources. Interpret the park's natural, cultural, and recreational resources to the public to help promote enjoyment, protection, and understanding of those resources. Present contexts for interpretation through the development of a unifying and primary and supporting themes.
- **Natural Resources.** Preserve and enhance the form and function of the park's ecosystems in order to protect its physical and natural features and biological processes, while providing for sustained public enjoyment of these resources.

Vegetation:

- Promote and achieve improvement in the quality and function of the park's aquatic and wetland ecosystems.
- Develop protective measures for sensitive habitats, microhabitats, and individual specimen plants.
- Incorporate habitat restoration activities, including project planning and implementation, as a component of natural resources management.

Wildlife:

- Rehabilitate, protect, and ensure the perpetuation of native fish and wildlife populations at the park.
- Preserve, rehabilitate and, as appropriate, establish new effective habitat linkages between the park and other protected lands in order to maintain or increase species abundance and diversity.

Buffers:

- Establish, maintain, and preserve buffers around existing significant park resources as protection against adverse environmental impacts.

Watershed:

- Restore geomorphic function to the watershed to the extent possible, thereby significantly reducing or eliminating unnatural soil and streambank erosion, stream sedimentation and habitat degradation.

Water Quality:

- Identify the beneficial uses and the surface water quality objectives for Donner Lake, Donner Creek, and Cold Creek.

<u>Geology:</u>

- Identify areas of geological or other natural sensitivities to insure that any planned projects will not negatively impact the park's natural environment or expose people and property to geologic hazards.
- **Recreation.** Provide a multitude of recreational opportunities that will allow California's diverse population to visit, enjoy, and better understand the significance of the park's resources.
- Aesthetics. Identify, preserve, and perpetuate the distinctive landscape qualities that give Donner Memorial State Park its special "spirit of place," and guide appropriate design for the renovation of existing facilities or future construction.

- Visitor Use Impacts. Apply professional processes and methods for identifying, analyzing, and managing visitor activities in order to minimize resource impacts, while maintaining appropriate types and levels of visitor use.
- **Sustainable Design.** Use sustainable design in the siting and construction of any future facilities and, as much as possible, in the maintenance of facilities in the park, including buildings, parking lots, campgrounds, day use areas, and trails. Design park facilities that recognize that a primary goal for recreation (re-creation) is the need for human connection with the park's natural systems and cultural resources.

The General Plan recommends future studies and appropriate planning to guide further facility development, major resource management programs, or different types of recreational use in other areas of the park. These future studies would include:

- Site specific studies of soil, geologic, and hydrologic conditions;
- Archaeological investigations in areas of potential facility development;
- Surveys to determine demand for existing or new types of recreational activities in the park;
- Evaluation of existing data and collection of new information to determine existing and potential value of habitats to wildlife in the park.

This General Plan is presented in four major sections. The first is a brief Introduction to the park - its resources and history. The second is a **Park Summary** of existing natural, cultural and recreation resources. The third, **The Plan**, presents future goals and guidelines for museum/visitor center planning alternatives and resource management programs. The fourth section is a first tier **Environmental Analysis** of the entire General Plan.

For planning purposes, the park was divided into three "Planning Zones" to help draw distinctions between several areas of the park with potential for similar land uses and resource management strategies (see Map 8). Within this framework, goals and guidelines have been proposed for facility development and resource management. The primary goals for each planning zone are:

- Planning Zone #1 Cultural Resources, Recreation Use, Museum/Visitor Center: Enhance park entrance, administrative, and interpretive facilities for improved access and public enjoyment, balanced with an appropriate level of protection and preservation of cultural and natural resources.
- **Planning Zone #2 Recreation Use, Natural Resources:** Provide safe, convenient recreational and interpretive opportunities for visitors, consistent with the protection of cultural resources and the restoration of the vitality and health of natural ecosystems.

• **Planning Zone #3 - Future Study Zone:** Provide for public access and use of this area. Continue resource studies and best management practices for protection and preservation of significant natural and cultural resources.

Zone management guidelines also propose the continuation and completion of resource studies during the planning and design for construction of new facilities or implementation of major resource management programs.

New Museum/Visitor Center Alternatives

Through the general plan process, the Planning Team evaluated alternatives for a new museum/visitor center for the park, including an expansion of the museum at its current location. A preferred alternative was selected from an analysis of these alternatives. The preferred alternative includes two potential museum sites: 1) a site on property adjacent to the park's eastern boundary and currently owned by A. Teichert and Son, Inc. (Teichert); and 2) an in-park location near the east end of Donner Lake (Lakeside Area).

The Department, along with Teichert, has applied for a federal Transportation Enhancement Activities (TEA) grant to work in partnership to build a new museum/visitor center on a portion of Teichert's land. Under the terms of the grant proposal, a portion of Teichert's property would be deeded to the Department for development of a new "High Sierra Crossings Museum." The focus of this new museum would expand beyond the experiences of the pioneers to include the role that transportation has played in the development of California, interpreting road and railroad development through the Donner Pass area as well as human and natural resource history there through time. The proposed land donation would also include a large pond that is in the process of reclamation to support wildlife and native vegetation and open space recreation.

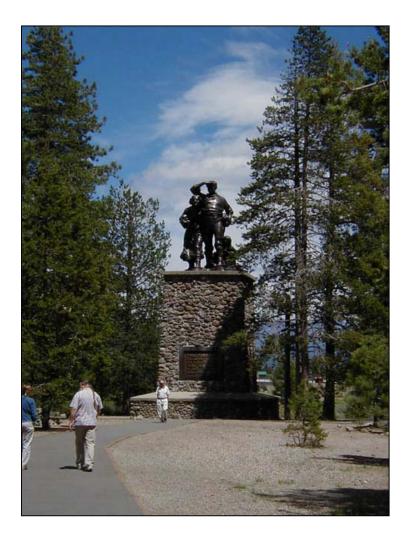
This alternative site's open quality, the existing views of emigrant and transportation routes through surrounding mountain passes, and the placement of a heavily-used facility away from existing overnight, day use, and archaeologically-sensitive areas in the park make it the best of all planning alternatives evaluated in this general plan process.

If the TEA proposal is infeasible, the General Plan also identifies the best in-park alternative site for a new museum/visitor center at the east end of Donner Lake, in a place that was identified as a potential park museum site in the early 1960s. (The building was not constructed here because acquisition of that parcel of land had not been completed at the time funds were available for construction of a new museum). This site is within a designated archaeologically sensitive area, but it is the least sensitive portion within this area as the previous owner had conducted extensive land cleanup efforts prior to Department ownership. The site affords simple year-round access from Donner Pass Road, and has views of Donner Lake and the peaks of Donner Pass, through which the Donner Party traveled.

Proposals have been made in this General Plan to alleviate traffic conflicts as well as to improve "first impressions" of the park at the entrance area. With the two appropriate sites for a new museum/visitor center being away from the existing park entrance, conflicts between museum users and other park visitors will be eliminated. In both the preferred and in-park alternatives, the existing entrance will be utilized for public access to day and overnight use areas. The existing Emigrant Trail Museum will be converted into offices for park administration and maintenance staff, and the existing museum parking lot will be reduced in size to allow for disabled and short-term parking for the Pioneer Monument/Murphy Cabin trail areas.

For a quick reference, maps are located at the end of this report, which describe park ownership, existing resources, and land uses. Planning zones and preferred alternatives are presented with a matrix of plan proposals and guidelines.





Introduction

INTRODUCTION

Donner Memorial State Park lies just east of the crest of the Sierra Nevada mountain range, in a great valley of granitic rocks shaped by faulting and sculptured by glaciers thousands of years ago. In the time since its beginning, this valley with its abundant water has been home to complex plant and animal communities that are well adapted to this harsh environment. Evidence shows that humans have been here at least 6,000 years, no doubt due to the diverse biological resources in the valley, as well as the landforms around the park that made it a logical place to cross the mighty Sierra Nevada. Native peoples with camps in adjacent lowlands have been in the valley seasonally for thousands of years.

At Donner Memorial State Park, one can learn a dramatic story of human perseverance, suffering, and loss within a larger context: the great migration across our continent. California owes its beginnings to these pioneers, and we can take from their stories a deeper sense of human potential.

The park is located in a valley that, for thousands of years, offered an easier route than others for migration and travel across the mountains. Through time, people lived seasonally in this valley, traveling to lower elevations in winter. Euro-Americans arriving from the East used long-worn paths in their efforts to pass through these mountains, the last great barrier to their dreams of settlement in California. Later, railroads were carved out of the mountains and old trails were paved. Today, a picture of transmigration and of settlement can be seen in the town of Truckee and the vacation cabins around Donner Lake.

As Euro-Americans arrived in the mid-nineteenth century, attempting to move through the Sierra Nevada to settle in California, the native populations were displaced by the newcomers and suffered diseases brought by the emigrants. One of the earliest eastern arrivals was a small company of pioneers, weakened by months of travel in hostile environments and unprepared for the imminence of winter in the mountains. Almost half of this party perished in the snows of the severe winter of 1846-1847. This was the Donner Party, named for the expedition leader. Seventy years later, their sacrifices and hardships were commemorated by state acquisition of the land where they had camped. This land became Donner Memorial State Park.

The park consists of approximately 1,750 acres today. Recently 750 acres have been added to the park, mostly south and west of the existing park area. The park is situated in the Town of Truckee, 12 miles west of North Lake Tahoe and 100 miles east of Sacramento. Interstate 80 (I-80), along the north side of the park, brings millions of vehicles through the area annually. The original Donner Party trail is the basic alignment of Donner Pass Road, also known as Old Highway 40, the access road into the park. After the pioneer era, the old alignment became the primary wagon and motor vehicle route through this part of the mountain range and on to the eastern United States.

This valley has seen much change since the Donner Party met its fate. Thousands of pioneers from the eastern United States stopped here to rest up for the push across the highest peaks. With the settlement of California, wagon roads were improved and the railroad built through the valley, creating the need for timber to provide for mining, railroad structures and fuel, and ice for cooling fruits and vegetables when transported. Some of the Chinese people involved with the railroad and its construction camped at the east end of Donner Lake. Sawmills and ice ponds once existed along Donner Creek, on what is now park land.

Today, tens of thousands of visitors arrive annually at the Emigrant Trail Museum to learn about the pioneers whose diaries have left us a sense of the difficulty of those early journeys. They take a short walk to visit the Pioneer Monument, dedicated in 1918, and the Murphy Cabin site used by families in the Donner Party. Visitors also enjoy the park's campgrounds and day use areas along Donner Lake. Wonderful vistas of the lake and mountainous surroundings delight people both in summer and in winter, when cross-country skiers glide on groomed trails through the forest. Winter snowfall is relatively abundant, although the heaviest snowfalls are west of the summit. Interpretive programs highlight both cultural and natural resources at the park. Coldstream Canyon and the Emigrant Trail alignment to the south, through which most post-Donner Party pioneer wagon trains traveled to the summit, is easily accessed from the park's campgrounds and day use areas. Numerous trails criss-cross the uplands south of Donner Lake; some traverse newly-acquired properties.

PURPOSE FOR ACQUISITION

Soon after the Donner Party met with tragedy, the pioneers' story became well known to citizens across the United States. Around 1880, Truckee journalist Charles F. McGlashan began to advocate permanently marking of the cabin sites in order to preserve the history of the Donner Party. In 1894, the owner of the Breen Cabin site deeded one acre to Mr. McGlashan for this purpose. The cabin location became the site of the existing Donner/Pioneer Monument, built from 1910 to 1918 and dedicated on June 6, 1918. This one-acre parcel was conveyed to The Native Sons of the Golden West in 1910. The Native Sons then gave it, along with ten additional acres, to the State of California, Division of Parks, in 1928 with the provision that it "be known and designated as the Donner State Monument and shall be a memorial to the California Pioneers of the Overland Trail." It became a California Historical Landmark (No. 134) in 1934.

After the pioneers began settling California, a new trans-Sierra Dutch Flat-Donner Lake Wagon Road brought not only business interests but also vacationers from the west into the valley. This road was later connected to Reno and points east and became the heavily traveled route, U.S. Highway 40, through this section of the Sierra Nevada.

In 1930, a Division of Beaches and Parks landscape architect recommended to the State Park Commission that areas around the shore of Donner Lake be preserved for scenic and recreational values. In 1948, 344 acres were added to the park, joining the Pioneer Monument to Donner Lake on the west. A plan was completed in 1949 allowing development of picnic and campsite areas to provide the vacationing public facilities they needed to enjoy recreational opportunities at the park. Since then, more land and recreational and support facilities have been added to the park, and cultural and natural resources have been preserved, enhanced, and interpreted for future generations.

PURPOSE OF GENERAL PLANS

This General Plan was developed to serve as a long-range management tool that provides guidelines for achieving the purpose of the park. This document does not attempt to provide detailed management recommendations, but rather provides conceptual parameters for future management actions.

Specifics, such as the exact location and design of the visitor center, will be determined by future management and project plans. These subsequent management or project plans will require additional data collection and Departmental/public reviews to ensure adherence to the goals and guidelines established within this General Plan.

The General Plan serves as a first-tier Environmental Impact Report (EIR), as defined in Section 15166 of the California Environmental Quality Act (CEQA) Guidelines. The analysis of broad potential environmental impacts discussed in the Environmental Analysis will provide the basis for future second level environmental review, which will provide more detailed information and analysis for site-specific developments and projects.

This General Plan, partnered with future management plans, endeavors to restore, maintain and interpret Donner Memorial State Park's natural and cultural resources, while providing opportunities for continued public use and enjoyment of this most valuable national treasure. It is a job that will require the ability of management to respond appropriately as new challenges to the overall goals of this General Plan present themselves. The plan allows for a creative, yet strategic framework for responses to problems that otherwise would be difficult to address effectively or at best could not be resolved within a critical timeframe.





Park Summary

PARK SUMMARY

The following section summarizes the significant natural and cultural resources, existing land uses, recreational and aesthetic resources, and existing interpretation at Donner Memorial State Park. The information was adapted from the Resource Inventory that was initiated for the general plan process and provides the baseline data for developing the planning zones and goals and guidelines found within The Plan section of this document. Further detail is available on all topics from the Department of Parks and Recreation (Department) at the Northern Service Center in Sacramento and the Sierra District Office.

EXISTING LAND USE AND FACILITIES

There are several types of land use at Donner Memorial State Park. These include recreation areas with both day and overnight visitor facilities, park administrative, maintenance, operations, and staff housing areas, an Emigrant Trail Museum, and undeveloped areas in Coldstream Canyon and Schallenberger Ridge that currently receive minimal day use. New and potential acquisitions include lands with steep terrain and canyons in the uplands southwest of the existing park.

Recreational Land Uses

Donner Memorial State Park offers both camping and day use opportunities for park visitors. There are 154 campsites in three separate campground loops, equipped with six comfort stations or combination restroom/shower buildings. Seven camping sites are adapted for full accessibility and have paved restroom and shower access.

Seventy-eight picnic sites are spread throughout the park, mostly along the edge of Donner Lake in the day use areas. The day use areas along the lake have two comfort stations for visitor use, and a third will be built soon, adjacent to the 15car parking lot at the end of China Cove Road. One picnic site and restroom are accessible for visitors in wheelchairs. There is a sandy beach along the shore. An interpretive trail along the lakeshore offers informational signs.

A campfire center sits at the base of Schallenberger Ridge, south of the Ridge Campground. It is centrally located to all three campground loops for ease of access.

At the park entrance, a 45-car parking area adjacent to Donner Pass Road serves the Emigrant Trail Museum and Pioneer Monument. The museum contains interpretive exhibits and an audiovisual room, as well as a bookstore/gift

shop and restrooms. For visitors with disabilities, there is paved access to the Pioneer Monument. Scripted video and audio programs are also available.

An interpretive nature loop trail allows access from the museum to the Murphy Cabin site to the south and returns to the museum through a wetland area along Donner Creek. There are a total of 1.7 miles of existing trails in the park, 1.5 of which are interpretive trails. Within the park are four bridges (three vehicle, one pedestrian) over Donner Creek, 4.4 miles of paved roads, and 24 miles of unpaved roads.

Administrative Land Uses

Southwest of the museum are two residential duplexes, two residences, and two mobile home sites that offer housing for park staff. In addition, there are two utility/maintenance buildings and a gas/oil house in this complex. Some of the land just south of the residential structures is used for storage and other maintenance activities.

Existing Utilities, Easements, and Encumbrances

There are several types of utility alignments in the park, most with easements and a few with other encumbrances. In addition, a 60-foot wide Nevada County road easement for Coldstream Road runs along the east side of the park. In the same area, there is a 30-foot wide Nevada County pipeline easement that crosses Donner Pass Road and extends along the eastern boundary of the park to meet Coldstream Road. This pipeline easement also runs through the wetland on the east side of the park.

The Sierra Pacific Power Company owns and operates the dam on Donner Creek and maintains a 25-foot easement (12.5 feet from the creek centerline on each side) along Donner Creek, plus room for any maintenance or construction activity along the creek.

Several utilities run alongside China Cove Road to service day use facilities with water, sewer, electricity and telephone service. Water and electricity are provided by the Truckee-Donner Public Utility District. Park sewer lines extend from the day use areas through the campgrounds, then to a connection with mainlines provided by the Tahoe-Truckee Sanitation Agency at Donner Pass Road near its intersection with Coldstream Road. There is also a private fuel line running through the park that extends from Donner Pass Road near the kiosk along China Cove Road and out of the park at its western boundary.

Lahontan Regional Water Quality Control Board requires permitting for any future construction in the park. Of particular concern to the Board are wetlands and 100-year floodplains.

The one-acre parcel at the Pioneer Monument that was one of the first pieces of park property has deed restrictions requiring this land to be used for "park purposes only." Water rights within this parcel remain with the Native Sons of the Golden West, the previous owner.

Recent Land Acquisition

The Department considers land acquisitions from willing sellers that would increase access to recreational lands and important cultural resources, and that would offer connections to wildlife habitat and provide natural resource linkages to help achieve resource management objectives. A recent land acquisition west of Coldstream Canyon has added 750 acres of undeveloped land to the park, in two separate parcels. Existing park trails will access one of these parcels; future studies will determine appropriate recreational uses and natural and cultural resources management programs for this land.

Adjacent Land Uses

Donner Memorial State Park sits in a deep, glacier-formed valley, surrounded by the peaks of the Sierra Nevada. Land adjacent to the park represents a checkerboard of owners and uses, from other public agencies' open space lands on the south to the commercial extraction of construction gravels on property just east of the park. There are commercial establishments on the northeast side of the park serving the Interstate 80 Donner Pass Road exit just south of the park's current entrance. The California Department of Transportation has jurisdiction of Interstate 80, just north of the park.

Southwest of the park is U.S. Forest Service land where management of timber and habitat resources is a priority. Public trails are also there for public enjoyment of the high Sierra Nevada environment. The Donner Rim Trail extends through the eastern side of Donner Memorial State Park, up the mouth of Coldstream Canyon, and onto land soon to be acquired by the Department on Schallenberger Ridge. It connects with the Pacific Crest Trail (PCT) at Donner Summit, crosses I-80 on the PCT alignment and continues east along ridges on the north side of the freeway to the I-80 Donner Pass Road overcrossing next to the park, and back into the park.

The Union Pacific Railroad owns a 400-foot wide right-of-way for its main east/west line on the south side of the park through lowlands, up around the perimeter of park property in Coldstream Canyon, and through areas of potential new acquisition on Schallenberger Ridge. This railroad alignment has been there since the 1860s, when it was built as part of the route connecting California with the rest of the continental United States.

There are privately-owned parcels south of the railroad bend at the end of the park's Coldstream Canyon property and within the Canyon itself, abutting park

property. The property owners have put these parcels to a variety of uses, including mining and sites for second homes.

Private cabins abut the southwest corner of the park, next to the park's China Cove day use area, with some forest buffer between the day use area and the private parcels. Many of the owners of cabins and residences around Donner Lake are members of the Donner Lake Homeowner's Association.

East of the park, land owned by A. Teichert and Son, Inc. has been extensively mined for aggregates over many years, removing many tons of alluvial material. This mining created low areas that are now ponds with standing water. Mining has stopped, and recent land reclamation efforts by the company have allowed improvement of natural resource values on parts of the property, especially around the ponds. Wildlife and vegetation are slowly reestablishing in these areas. Spectacular views of the routes traveled by the pioneers constitute a significant aesthetic resource for this land.

The Tahoe-Donner subdivision across I-80 from the park encompasses 4,000 acres with10,000 privately-owned lots, many of them containing residences or second homes. There are commercial establishments within the area to serve Tahoe-Donner Association members, as well as the public.

The central portion of the Town of Truckee sits three miles to the east of Donner Memorial State Park. With a population of approximately 14,000, it serves the area with a variety of commercial, residential and recreational land uses. The Town of Truckee General Plan, adopted in 1996, addresses this multitude of land uses with zoning requirements and long-range recommendations.

SIGNIFICANT RESOURCES VALUES

Natural Resources Summary and Evaluation

<u>Climatology</u>

The climate of today's mid-elevation Sierra Nevada can be considered a shortterm fluctuation within the context of widely variable and pronounced climatic shifts over the past 10,000 years. Juxtaposed against a climatic history that includes periods of prolonged drought, the more recent pattern in the Sierra has been one of relatively warm and wet conditions. The brief history of Euro-American settlement has been substantially influenced by this recent trend towards abundant precipitation and mild temperatures, yet these conditions are certain to change. Emerging information on long-term climatic patterns provides opportunities to manage landscapes for both ecological and evolutionary sustainability - for the perceptible, present spatial diversity as well as for longterm variations resulting from climate change. Located at mid-elevation in the northern Sierra Nevada, Donner Memorial State Park is influenced by both Mediterranean-type and continental climates. The prevailing procession of weather systems from west to east produces cool, snowy winters and warm, dry summers. However, the park's location adjacent to the Great Basin, east of the Sierran crest, has a secondary influence on the park's hydrology, soils, vegetation, and wildlife, resulting in conditions of relative cold and drought compared with locations not far to the west. Within the park, higher elevations tend to be cooler, wetter, and windier, although local atmospheric conditions and microclimates vary widely with location and in time.

Based on information recorded from 1948 through 2000 at the U.S. Forest Service Truckee Ranger Station, mean daily temperatures range from a maximum/minimum of 82/42°F in July, to a mean of 39/15°F in January. Truckee's recorded maximum temperature during that time was 99°F on 27 July 1975. and the minimum was -23°F on 27 February 1962. Over the same time period, annual precipitation averaged 32.10 inches, from a peak of 54.62 inches in 1996 to a low of 16.04 inches in 1976. Monthly precipitation amounts indicate that January tends to be the wettest month, with a mean of 6.4 inches, and July the driest, at 0.37 inches. December 1955 had the single greatest recorded monthly precipitation with 23.65 inches. Annual precipitation falls chiefly as snow from November through April, with occasional convectional rainfall during the warm season. The greatest recorded seasonal snowfall was 444 inches in 1951-52, and the least snowy winter was 1991-92, with 73.5 inches. Snow accumulations are usually the deepest during late winter, with three to four feet on the ground. Snow accumulation is generally lacking from May to early November.

Air Quality

Donner Memorial State Park is located within the Mountain Counties Air Basin, which includes both Nevada County and a portion of Placer County. Nevada County is part of the Northern Sierra Air Quality Management District, and Placer County is part of the Placer County Air Pollution Control District. The Districts are required by state law to achieve and maintain the federal and state ambient air quality standards. Ambient air quality standards are levels of air pollutants that are considered unhealthy if exceeded.

The Mountain Counties Air Basin exceeds the state standard for particulate matter less than 10 microns diameter (PM10) and exceeds both the state and federal standards for ozone. Nonattainment for PM10 occurs primarily in the winter months. The main sources of particulate matter causing violations in the Truckee area are attributed to the use of wood-burning stoves and dust generated by road sand. The nonattainment designation for ozone is thought to be due to the transport of ozone by prevailing wind from the greater Sacramento Area and the San Francisco Bay Area.

Development proposals are reviewed by the local air quality management districts to ensure that mitigation measures are included in development plans if necessary to avoid air quality degradation.

<u>Geology</u>

Geologic History

Donner Memorial State Park is located near the crest of the Sierra Nevada in the Sierra Nevada Geomorphic Province. In the Jurassic period (205-138 million years ago) the subduction of the Farallon tectonic plate beneath the North American Plate created a chain of volcanoes called the Sierran Arc volcanoes. Over time, as subduction and volcanic eruptions ceased, erosion removed the volcanic rocks to expose the now crystallized magma chambers of the old volcanoes. These crystalline igneous rocks, consisting of predominately granite and granodiorite, form the core of the Sierra Nevada.

A more recent period of intense volcanic activity in the Pliocene to Pleistocene (1 to 5 million years ago) has covered portions of the granitic rocks with a variety of volcanic rocks, including mudflows, andesite, basalt, and tuff and ash flows. Contemporaneous with the renewed volcanism, approximately 4 million years ago, faulting along the Frontal Fault System has uplifted and tilted the Sierra Nevada block westward, creating the steep eastern escarpment and more gentle western slope. Smaller scale faulting and downwarping created the Truckee Basin, containing Donner Lake. The Sierra Nevada is still rising along the Frontal Fault System, at a rate of approximately 1 mm/year. This movement is indicated by the numerous micro-earthquakes (magnitude 2 to 3) that occur periodically in the Truckee-Donner area. Occasional larger earthquakes, as high as magnitude 6.3, have also been recorded in the area.

During the Pleistocene (8,000 years to 1.6 million years ago), at least four major periods of glaciation have occurred in the Sierra Nevada. Valley glaciers have carved the Donner Creek valley into its existing U-shape. Deposition of glacial sediments includes the recessional moraines, which have dammed Donner Creek to form Donner Lake. Four of the recessional moraines can be found in the core area, the areas of lowest elevation in the park.

Geologic Hazards

Several potential geologic hazards must be considered when planning new buildings, campsites, roads, or trails within the park. Site-specific investigations should be conducted in any areas where new development is planned. The investigations may consist of reconnaissance geologic mapping, aerial photo surveys, and geotechnical investigations. While no known major landslides have been mapped in the park, the potential for landslides exists in the steeper terrain of Schallenberger Ridge, and Lakeview and Coldstream canyons. Special attention must be shown to areas that have been previously logged or subject to forest fires.

Impacts from avalanches are not expected in the core area of the park. The north-facing slope of Schallenberger Ridge may be subject to avalanches, as indicated by the construction of snowsheds along the Union Pacific Railroad alignment. Areas of potential avalanche danger have been identified within the Donner Timber Harvest Plan area. This information should be obtained for future planning purposes.

Micro-earthquakes are a common occurrence in the Donner-Truckee area, due to the continued uplift of the Sierra Nevada. Occasional larger earthquakes, up to magnitude 6.3, have occurred in historic time. Since no known earthquake faults traverse the park, the possibility of ground rupture is considered negligible. Liquefaction during an earthquake could occur in loose, granular materials (alluvium) below the water table, such as along stream channels and in unconsolidated, disturbed materials.

Flooding is possible along Donner Creek and Cold Creek during significant storm events. The flow from Donner Creek is controlled by the dam at the downstream end of Donner Lake. The potential for overtopping exists and flooding of the lowlying areas in the core of the park could occur. This information is based on Federal Emergency Management Agency (FEMA) floodplain maps and not on a site-specific hydrologic study.

Soil and groundwater contamination may exist in the park. Any planned excavations may encounter contamination from groundwater, the soil, and any gases present in the soil above the water table. Other areas of contamination may exist in new or planned acquisitions. Investigations of prior land use are recommended to determine if contamination may be encountered.

Topography

The core area of the park is characterized by relatively flat topography of the Donner Creek and Cold Creek valleys. Four low ridges, 10-20 feet high and spaced 600 to 1500 feet apart, extend on a northeast trend across the core area of the park. These ridges are the remnants of recessional moraines left by the retreating Pleistocene glaciers. Between the ridges are low areas with small drainages and some marshy areas. The lowest elevation of approximately 5,880 feet occurs where Donner Creek exits the park to the east. The highest point within the existing park is in excess of 7,400 feet at the top of Schallenberger Ridge.

Slopes are gentle within the core area of the park, ranging from 0% to 9%. To the south, Schallenberger Ridge rises abruptly, with slopes up to 88%. Some slopes within Coldstream Canyon range from 36% to 88% on Schallenberger and parallel ridges.

Any future development in areas of steeper topography on Schallenberger and other ridges must take into account the possibility of landslide and avalanche hazards. Soils in many areas of the park are classified as highly erodible. Site specific studies of soil and geologic conditions will be needed for any future development of buildings, campsites, roads, and trails.

Hydrology

Surface Water

The Donner Lake area is located within the North Lahontan Hydrologic Basin, as defined by the California Department of Water Resources. This hydrologic unit has not been subdivided into smaller hydrologic areas. The main watershed is the Truckee River, of which Donner Creek is an important tributary. Donner Creek and Summit Creek were naturally dammed by a recessional moraine to create Donner Lake, approximately 2.6 miles long, 0.75 miles wide, with a maximum depth of about 220 feet. The lake level is now controlled by a manmade dam constructed in 1928. The flow is regulated by a Federal watermaster. The maximum water surface area is 960 acres and the active storage is 10,000 acre-feet.

The Donner Creek watershed encompasses an area of approximately 14 square miles (8,960 acres). It includes Summit Creek, which flows into Donner Lake. Other intermittent streams and springs also contribute inflow. Cold Creek, a tributary to Donner Creek, drains a watershed of approximately 12 square miles (7,680 acres). Portions of the Cold Creek watershed are within the park, but much of the watershed is privately owned.

Surface water and groundwater quality is an important issue in the Tahoe and Truckee basins. Most of the water quality problems are related to nonpoint sources such as soil erosion from timber harvest areas, stormwater runoff (soil and chemicals), and individual wastewater disposal systems. The Department should strive to comply with water quality objectives established in the Water Quality Control Plan for the Lahontan Region (Basin Plan) from the Regional Water Quality Control Board (RWQCB). A Nondegradation Policy has also been established by the RWQCB to protect all waters (surface, wetlands, and groundwater) in the Lahontan Basin. This policy requires continued maintenance of existing high quality waters.

New projects or new/increased visitor use within the park must be evaluated to insure that they do not contribute to degradation of surface and groundwater

quality. Water quality protection standards and control measures are necessary to insure that water quality does not become degraded. Water quality standards are available in the RWQCB Basin Plan. Control measures are needed for erosion control and surface runoff (stormwater). Principal control measures would include: 1) remedial erosion and drainage control, and SEZ (Stream Environment Zone) restoration; 2) installation and maintenance of erosion and surface runoff control measures for all new and existing development; 3) controls on nonpoint source discharges from new development (i.e. impervious surface coverage); and 4) controls on discharges from other activities, (i.e. recreational facilities).

Groundwater

Limited information exists on the groundwater resources in the park. Within the park, the principal aquifer consists of glacial till and alluvial materials along streams and rivers. The surrounding upland areas consist of a variety of volcanic and granitic rocks, which may also contain groundwater in permeable zones.

As discussed above, the water quality protection standards and control measures established by the RWQCB must be followed to protect the quality of groundwater in the Truckee-Donner area.

Flood-Prone Areas

The potential for flooding exists in the low-lying areas of the park along Donner Creek and Cold Creek. There are two flow gages on Donner Creek; one located at the outlet of Donner Lake, and the other a mile downstream at Highway 89. These gages show the major flood years over the past 50 years occurring in December 1955, December 1964, March 1986, and January 1997. These were all regional floods, caused by rain on snow events. The Federal Emergency Management Agency (FEMA) has mapped the park as Zone D, an area of undetermined, but possible flood hazard. The 100-year and 500-year floodplains have been delineated along Donner Creek east of the park, but the mapped zone was not extended into the park. Site-specific hydrologic analysis should be conducted within the park boundaries to determine the 100-year flood zone.

<u>Soils</u>

Most of the soils in the park are of granitic or volcanic parent material, are geologically young, and poorly developed. Most soils are shallow, coarse-textured, have low cohesion, and contain small amounts of organic material. This accounts for the high erosion potential of most of the soil types described (AQB, Celio, Gefo, Jorge, Meiss, Waca, and Windy). Soils in the newly acquired areas may also be subject to erosion problems. The duff layer helps to slow erosion, as well as provide nutrients to encourage growth of plants and trees. Disturbing the duff layer and the soil can increase the chance for erosion.

The properties of certain alluvial materials within the park may cause constraints for new construction. Loose soil, such as unconsolidated native material or uncompacted fill, has low soil strength and may not be suitable for a conventional building foundation. Glacial till material is an unstratified mixture of grain sizes, including cobbles and boulders. The boulders and cobbles would have to be removed within the footprint of the building.

Vegetation

Donner Memorial State Park's vegetation features coniferous forests and woodlands characteristic of the mid-elevation Sierra Nevada. White fir (*Abies concolor*), lodgepole pine (*Pinus contorta* ssp. *murrayana*), and Jeffrey pine (*Pinus jeffreyi*) dominate the park's wooded areas. Interspersed within the woodlands and forests are extensive areas of shrubs, populated by a diversity of species including huckleberry oak (*Quercus vaccinifolia*), gooseberries and currants (*Ribes* spp.), greenleaf manzanita (*Arctostaphylos patula*), chinquapin (*Chrysolepis sempervirens*), ceanothus (*Ceanothus* spp.), serviceberry (*Amelanchier alnifolia*), and bitter cherry (*Prunus emarginata*). On drier sites and at lower elevations among Jeffrey pines, big sagebrush (*Artemisia tridentata*) and antelope bitterbrush (*Purshia tridentata*) are common.

The park's vegetation mosaic also features a range of meadow types, typically found in low-lying sites with relatively poorly drained soils. Grasses, sedges (*Carex* spp.), rushes (*Juncus* spp.), and numerous other herbaceous plants, many producing colorful flowers, dominate these areas. Along streams and the shore of Donner Lake, deciduous trees and shrubs - willows (*Salix* spp.), cottonwood (*Populus balsamifera* ssp. *trichocarpa*), quaking aspen (*Populus tremuloides*), mountain alder (*Alnus incana* ssp. *tenuifolia*), red osier dogwood (*Cornus sericea* ssp. *sericea*), and twinberry (*Lonicera involucrata*) - are common. Marshes and ponds support stands of pondweed (*Potamogeton* spp.), cattails (*Typha latifolia*), bulrushes (*Scirpus* spp.), and spikerushes (*Eleocharis* spp.).

Rocky outcrops and forest clearings are a prominent feature throughout the park, contributing an aesthetic dimension to the landscape, as well as providing habitat for lichens, woody and herbaceous plants, and wildlife species. These areas represent ecological islands – more or less isolated areas within the otherwise closed forest canopy that are more open to sunlight, and often have thinner soils with less organic matter. As a result, these outcrops provide habitat for species that do not grow well under the forest canopy.

Appendix A, Vegetation Types at Donner Memorial State Park, provides a crossreference for terrestrial vegetation types in the park, according to four classification systems. The vegetation map in this plan is a synthesis of the Calveg and the Sawyer and Keeler-Wolf systems. The wildlife habitat descriptions refer to names provided in Wildlife Habitat Relationships (WHR) (Mayer and Laudenslayer 1988), while the 1991 Donner Resource Inventory names have been added to provide continuity for the purpose of future inventories and planning. Only WHR includes strictly aquatic habitat types.

Vegetation History

The appearance and composition of vegetation is the culmination of hundreds or thousands of years of complex interactions among the species present (and their predecessors), the physical environment, and the history of disturbance at the site. A disturbance is a short-lived event or a longer-term change in the physical environment that has the potential to impact a biological species or population thereof, a plant or animal community, or an entire ecosystem. The Sierra Nevada has experienced numerous naturally occurring disturbances, including fire, avalanche, windthrow of trees, flood, and drought. More recently, human activities have altered and augmented this disturbance regime with additional impacts, including habitat fragmentation, fire exclusion, logging, non-native species introductions, and air pollution. Human activities have also precipitated indirect impacts on forest ecosystems, such as downstream sedimentation or massive infestations of bark beetles. Physical distance or the passage of time often obscures the precipitating factors that predispose organisms or ecosystems to more direct impacts.

The human activities that have altered the vegetation in Donner Memorial State Park vary from one-time events through ongoing and sustained uses. The construction and maintenance of buildings, roads, trails, and campgrounds, as well as logging, fire prevention and control, channeling and damming creeks, mining, and a myriad of off-site conditions continue to affect vegetation and soil. A detailed assessment of the impacts on natural resources created by these activities has not been documented to date. An assessment of impacts and disturbance factors, past and current, can facilitate the management and restoration of ecosystems.

Sensitive Vegetation

The California Department of Fish and Game's California Natural Diversity Database (CNDDB) lists no vegetation types or plant communities as special status for either the Norden or the Truckee 7.5' quadrangles. However, the Ecological Evaluation for the Donner Land Trust (Lonsdorf 1998) and the U.S. Forest Service's Forest Plan Amendment (USDA 2001) identify several habitat or community types that are considered threatened, of special concern, or with less than 25% of distributions occurring on lands managed for conservation in the Sierra Nevada (Sierra Nevada Ecosystem Project Report to Congress 1996). Additionally, all wetland areas in the United States are afforded special protection under provisions of the federal Clean Water Act of 1970 and regulations adopted by the Environmental Protection Agency. Additional considerations are also due habitats that support sensitive or special status wildlife species. Further information on the global distribution and rarity of, and threats to, California's vegetation types is available through The Nature Conservancy's Heritage Program, and published in Sawyer and Keeler-Wolf (1995).

Ecologists have identified several sensitive vegetation types within the park's current boundaries, as follows:

- <u>Wetlands</u>, including seasonally or permanently wet areas supporting wetland vegetation, such as marshes, bogs, seeps, springs, lakeshore, transitional ponds, wet meadows, and streambanks, are protected as noted above. These habitats support a diversity of plant and wildlife species, especially invertebrates that comprise fundamental lower trophic (food) levels in the Sierran ecosystem. In addition, some wetlands support soil processes and microorganisms that facilitate the decomposition of organic wastes, or otherwise improve water quality. Wetlands also provide aesthetic relief as open areas within the forest, and provide opportunities for nature study.
- <u>Trees</u> of all ages and sizes are valuable features of the forest, providing habitat or resources for other species, and are important individually as components in forest stands for their contributions to age, structural, and compositional diversity. Trees and shrubs are also important components of forests and woodlands because of their roles in hydrological and soil dynamics.
- <u>Rock outcrops</u>, such as areas of boulders, rocks, or gravelly soils, represent ecological "islands" within forests and woodlands, and provide habitat for plants and wildlife that would not otherwise exist there. The substrate (rocks or soils), as well as the sunlight available through these gaps in the forest canopy, result in ecological conditions, such as elevated soil temperatures and altered hydrological conditions, that contrast sharply with those of the adjacent forest. Species that live in these rocky habitats may be sensitive because they can only grow under the conditions present there.

Lonsdorf (1998) identifies several sensitive vegetation types, some of which are generally included in the discussion above. The specific types that potentially occur within Donner Memorial State Park or possible park acquisitions on Schallenberger Ridge and in Emigrant and Lakeview Canyons are as follows:

- old-growth/late successional coniferous forest
- wet montane meadow
- dry montane meadow
- subalpine meadow
- aspen forest
- aspen riparian forest
- montane black cottonwood riparian forest

Sensitive Flora

The diversity of plant species in California is without equal among geographical areas of similar size in the United States, in part due to the state's diverse topography and climate types. Over time, recognition of this diversity has resulted in legislation protecting individual species and habitats. Among state laws that provide for protection of plants are the California Endangered Species Act, the Native Plant Protection Act, the California Environmental Quality Act, and the Natural Community Conservation Planning Act (California Native Plant Society Inventory 2001). The federal Endangered Species Act also provides protection for some species. In California, the Department of Fish and Game (DFG) is responsible for the listing and enforcement of the legal provisions for protection of plant species.

Special status species, often referred to as "sensitive", are those listed at the federal level as threatened or endangered, or proposed for such listing. At the state level, special status species include those listed by DFG as rare, threatened, or endangered. In addition, other land management agencies have developed criteria for the designation of species to be afforded protection. The California Native Plant Society (CNPS) further expands on the concept of special status species to include any plants that can be shown to be rare, threatened, or endangered, based upon CNPS definitions of these terms. Many plant species have been added to special status lists since previous inventories at Donner Memorial State Park were completed, and potential acquisitions have not been formally surveyed for any listed species.

Appendix B, Special Status Plants Potentially Occurring at Donner Memorial State Park, has been compiled from four sources – the California Natural Diversity Database (Department of Fish and Game), the Ecological Evaluation for the Truckee Donner Land Trust (Lonsdorf 1998), the Sierra Nevada Forest Plan Amendment, Appendices, Volume 4 of 6 (U.S. Forest Service 2001), and the California Native Plant Society's Inventory (2001). This list includes special status plants for which suitable habitat may exist in the Donner Memorial State Park area.

Future surveys for any special status species should be conducted according to protocols recommended by the California Native Plant Society and the California Department of Fish and Game. Surveys must be conducted for all special status plant species prior to project development or management plans that would affect potential habitats. These provisions are mandated under the federal and California Endangered Species Acts, and required for compliance with the California Environmental Quality Act.

Invasive Non-Native Plants

Non-native (exotic, alien, non-indigenous) species are those that have not evolved in a particular area, and have been introduced through human activities, either incidentally or deliberately. Most non-native species are not invasive and do not exert impacts on native species, plant or animal communities, or ecosystems. However, some non-native species have demonstrated the capacity to affect the composition of native plant communities or alter ecosystem processes such as nutrient cycling, water availability, or fire frequency. Awareness of these species is important in avoiding or minimizing the potential ecological impacts of these non-native plants.

In general, sites subjected to disturbance are more likely to be infested with nonnative invasive plants than sites with intact soil and native vegetation. Disturbance generally involves the disruption of soil or vegetative cover (terrestrial habitats), of nutrient regimes (terrestrial and aquatic habitats), or of other ambient conditions, resulting from either environmental circumstances, like fire, flood, and landslides, or human activities such as grading, logging, and soil compaction. Examples of disturbed areas in Donner Memorial State Park include roadsides, trails, campgrounds, timber harvest sites, and streambanks. While these sites may be more prone to invasion, they are also more easily monitored due to the predictability of potential plant invasions and to their relative accessibility. At greater risk, perhaps, are remote, relatively undisturbed areas that nevertheless are potential dispersal sites for seed or vegetative propagules (roots, stems, rhizomes, etc.).

About two dozen non-native species – approximately 10% of the total flora – have been documented at Donner Memorial State Park. Substantial populations of reputedly invasive species do not appear to exist in the park; those present are primarily herbaceous. Annual or perennial grasses (*Bromus tectorum, Dactylis glomerata, Phleum pratense, Poa palustris*) are the most prevalent, by sheer numbers of plants, of the non-native flora. The most prominent invasive species present include poison-hemlock (*Conium maculatum*), Klamath weed (*Hypericum perforatum*), and woolly mullein (*Verbascum thapsus*). Cheatgrass, poisonhemlock, woolly mullein, and Klamath weed are listed by the California Exotic Pest Plant Council (CalEPPC) on its Exotic Pest Plants of Greatest Ecological Concern in California (1996). This suggests that these species should be considered of higher priority for management than others.

Cheatgrass is so widespread and pervasive that attempts at management would require disproportionately great expenditures for the benefit to be gained. Poisonhemlock currently grows in patches, adjacent to the wetland meadow at the eastern end of the park, between the visitor center and Donner Creek; this species can rapidly become dominant in wetland areas, although the relatively cold climate may limit its spread here. Klamath weed is relatively rare in the park, although it has been invasive in rangelands and forests of northern California for about one hundred years. Woolly mullein is an aggressive invader of gravelly, open, disturbed sites, particularly in riparian areas and along roadsides, railroad tracks, or trails.

Appendix C, Potentially Occurring Non-Native Invasive Plant Species, lists the non-native invasive species that are known in Donner Memorial State Park, or have a reasonable potential to be found in northern Sierran ecosystems, and are currently listed as invasive plants by either CalEPPC or the California Department of Food and Agriculture (CDFA).

Animal Life

Habitats

Sixteen wildlife habitat types are found at Donner Memorial State Park, according to the Calveg (U.S. Forest Service) classification system (see Map 6). Combining these commercial timber management designations with information from aerial photos, topographic maps, and timber harvest treatments provides a general picture of wildlife habitats in the park. Appendix D, Vegetation Types at Donner Memorial State Park, shows Calveg vegetation types and corresponding WHR habitat types that are approximately equivalent. "Wildlife habitat" in this text refers to the Calveg vegetation type and provides only a general indication of actual wildlife use. Evaluation of current aerial photos, existing data bases, wildlife surveys, and field habitat assessment will be needed to understand the existing and potential value of the park habitats to wildlife.

Wildlife habitats at the park are characteristic of the middle elevations in the Sierra Nevada, and include coniferous forest in younger successional stages, montane chaparral, riparian zones, exposed rock, streams, and lacustrine (i.e., Donner Lake). Habitats in the northern part of the park have been modified for visitor and staff use. These areas sustain high levels of disturbance and may have relatively low species diversity. More than half the park is located to the southwest of the campgrounds, and has received different types of use, including timber harvest and gravel mining (prior to State Park ownership).

The legacy of timber harvest and fire suppression has left forest stands with reduced species diversity. During the past century, the lands that now comprise the park were impacted by human activities leaving a patchy, artificial mosaic of even-aged forest stands. The largest trees, especially the Jeffrey pines and sugar pines, were cut down leaving primarily small white firs and lodgepole pines. The result is a younger forest with relatively simple canopy structure and few large snags and downed logs. Such forests provide habitat for a variety of familiar wildlife species found throughout the Sierra Nevada. However, species such as wolverine, Sierra Nevada red fox, spotted owl, and other species that depend on large expanses of mature forest and other undisturbed habitats, may not survive in the young patches of forest that occur within the park today. In the future, as forests mature and recover their diversity and complexity, the park may

provide habitat for mature forest species. Donner Memorial State Park's greatest value to wildlife today may be in its role as a corridor between adjacent habitats and as a protective buffer to urban encroachment.

Clear-cutting at high elevation sites on relatively poor soil may establish a fire driven system in which chaparral species dominate. This may explain the presence of chaparral (with scattered trees and stumps) in the Schallenberger Ridge area.

Sensitive Animal Populations

The park is within the range of at least 27 sensitive animal species, and may provide important habitat for many of them. The group of sensitive species described here refers to animal species identified by the California Department of Fish and Game, U.S. Fish and Wildlife Service, and non-government organizations as "species whose conservation status may be of concern," or that may be imperiled or vulnerable.

Data from a few small scale wildlife surveys conducted since 1990 along with confirmed observations in the vicinity of the park show the presence of 1 threatened species, and 7 sensitive species (Appendix E, Sensitive Terrestrial and Aquatic Vertebrate Species). In addition, 2 endangered species, 2 threatened species, and 14 sensitive species may occur in the park if suitable habitat is present. Future wildlife surveys and habitat assessments can provide complete information on the wildlife at Donner Memorial State Park. The following information on sensitive species was taken from the Sierra Nevada Forest Plan Amendment (2001), and additional references.

<u>Fish</u>

Lahontan mountain sucker (*Catostomus platyrhynchus*) (California species of concern) may occur in Donner Lake and Cold Creek. Suckers occur in a wide variety of habitats, but usually prefer cool, clear streams with clean rubble or sand bottoms, and are occasionally found in lakes. Spawning occurs in late spring/early summer in riffles of clear, swift streams. This is a small sucker, seldom growing larger than 8 inches. The food of this species is composed almost entirely of algae that are scraped off rocks by the cartilaginous sheath on the jaws. Mountain suckers may be prey for trout.

Lahontan cutthroat trout (Oncorhynchus clarki henshawi) (Federal threatened) are native to Donner Lake and streams within the park, but may be present only in very low numbers. Restocking was attempted several times since the 1970's, and efforts to re-establish populations continue by U.S. Fish and Wildlife Service and California Department of Fish and Game.

This species is adapted to the highly variable stream flows found in unregulated river systems. Reproduction and survival may suffer from lowered water tables and increased temperature. Non-native brown trout (*Salmo trutta*) and brook trout (*Salvelinis fontinalis*) probably negatively affect the distribution and abundance of Lahontan cutthroat trout. The present distribution of self-sustaining Lahontan cutthroat trout populations occupy approximately ten percent of its historic streams and less than one percent of its historic lake habitat.

Amphibians

Mountain yellow-legged frog (*Rana muscosa*) (Federal proposed endangered) may be found in lakes, ponds, and streams above 4,500 feet elevation. These frogs prefer stream and lake margins that slope gently to a depth of 5-8 cm, but rarely occur with introduced predatory fishes. Populations have become extirpated from 70% to 90% of its historic range, primarily due to predation by exotic fish. The California Department of Fish and Game participates with the U.S. Forest Service and others to remove exotic game fish from lakes and streams where mountain yellow-legged frog occurs.

Reptiles

No sensitive reptiles are known to occur in the area.

<u>Birds</u>

Northern goshawk (Accipiter gentilis) (Federal and California species of concern) has been observed nesting in the park and adjacent areas since the 1950s. Forest density has been reduced by timber harvest and by natural influences, including drought stress and insect damage. The sites where goshawks previously nested may no longer contain suitable habitat.

Osprey (*Pandion haliaetus*) (California species of concern) occupy large platform nests made of sticks near Donner Lake during the spring and summer. Nests are constructed high in live or dead-topped trees or snags. Ospreys are associated strictly with large fish-bearing waters.

Cooper's Hawk (*Accipiter cooperii*) (California species of concern) uses riparian, deciduous, and other forests near water and hunts near forest edges. It nests in deciduous and coniferous forests near streams.

California spotted owl *(Strix occidentalis occidentalis)* (Federal and California species of concern). Protected habitat areas were designated by the U.S. Forest Service on the south slope of Schallenberger Ridge and in lower Coldstream Canyon. These areas are called Protected Activity Centers (PAC's) and are each 300 acres of the best available habitat, including known and suspected nest stands, in as compact a unit as possible. The activity centers are intended to

provide suitable nesting sites, roost sites, and foraging habitat (U.S. Forest Service Sierra Nevada Forest Plan Amendment 2001).

Olive-sided Flycatcher (*Contopus cooperi*) (CNDDB species of concern) is found in a variety of coniferous forest habitats, uses forest openings such as meadows and rivers, and typically requires tall trees for nesting and foraging. In early successional forests, it appears to be dependent on snags or residual live trees for foraging and singing. These flycatchers defend nesting territories of 25 to 100 acres. "Forest management practices that may degrade flycatcher habitat include stand conversion to younger seral stages, and removal of tall overstory trees and snags, both of which lead to loss of suitable perch sites" (U.S. Forest Service Sierra Nevada Forest Plan Amendment 2001).

<u>Mammals</u>

Pallid bat *(Antrozous pallidus)* (California species of concern) uses a variety of habitats including high elevation coniferous forest, especially open, dry areas with rocks which are used for roosting. They are less abundant but may be present between 6,000 and 10,000 feet. Roosts consist of caves, crevices, and mines, and occasionally hollow trees and buildings. The pallid bat forages over open areas from ground level to 8 feet, also taking prey from the ground. The reduction of hardwoods, by removal and by competition from conifers, reduces foraging habitat for pallid bats. As chaparral stands mature and increase in density, foraging bats do not easily penetrate them.

Townsend's big-eared bat *(Corynorhinus townsendii)* (Federal and California species of concern) uses caves or analogous structures (mines and buildings) for roosting. It roosts colonially and is easily disturbed. If left undisturbed, a colony may occupy the same roost indefinitely. Townsend's big-eared bat forages over a variety of habitats including riparian areas and old forests. This species has declined due to direct killing (these bats hang from ceilings and walls and are easily detected), and because of abandonment of roosts caused by disturbance due to explorers and vandals. Properly installed gates to cave openings often result in bat population increases.

Spotted bat *(Euderma maculatum)* (Federal and California species of concern) is considered one of the rarest mammals in North America. It is found in riparian areas, wetlands, meadows and forest habitats including lodgepole pine, up to 10,600 feet. The spotted bat requires rock cliffs and crevices. It forages within edges of forest stands, and may migrate to lower elevations in autumn. It may be negatively impacted by recreational rock climbing.

Small-footed myotis *(Myotis ciliolabrum)* (Federal species of concern) is found in a variety of arid habitats near water, including coniferous forest up to 8,900 feet. It roosts in caves, mines, crevices, buildings, and under bark. Foraging areas include water bodies and forest with open understory.

Long-eared myotis *(Myotis evotis)* (Federal species of concern) is found in coniferous forests up to 9,000 feet. It roosts in buildings, crevices, snags, and under bark. Long-eared myotis forages along edges, in open habitats, among trees, riparian areas, over water, and over shrubs. This species benefits from vegetation management that results in reduced understory in forests and riparian areas, and mosaic stands of chaparral.

Fringed myotis *(Myotis thysanodes)* (Federal species of concern) uses a variety of habitats including subalpine coniferous forests, and is more abundant around older forests. It forages over water and in riparian areas with open understory. Roost sites include tree cavities, large snags, buildings, and rock crevices. Hibernation sites are found in buildings and mines.

Long-legged myotis *(Myotis volans)* (Federal species of concern) is found in coniferous forests above 4,000 feet. It roosts in cavities in trees and snags, buildings, rock crevices, and under tree bark. Maternal colonies of hundreds of individuals usually occur in hollow trees or under bark. Long-legged myotis commonly forages over water, in forest openings, and over forest canopies. It may migrate to caves and mines for winter hibernation.

Western mastiff bat (*Eumops perotis*) (Federal and California species of concern) is found in open habitats, chaparral, and forests. It forages in chaparral, montane meadows, open Jeffrey pine and riparian forest, and above forest canopies. It roosts in cliff faces, crevices in rocks, high buildings, trees, and tunnels. It requires a vertical drop (9.9 feet) to initiate flight.

Silver-haired bat *(Lasionycteris noctivagans)* (Federal species of concern) uses coniferous forest below 9,000 feet. It forages among trees, over shrubs, water, meadows, and in riparian areas with open understory. The silver-haired bat roosts in hollow snags, under bark, in buildings and crevices. This species is absent where snags fall below 2 per acre.

Yuma myotis *(Myotis yumanensis)* (Federal and California species of concern) is found in a variety of habitats including open forest near water. It forages over water and roosts in buildings, mines, caves, and crevices.

Sierra Nevada snowshoe hare *(Lepus americanus tahoensis)* (Federal and California species of concern) is found at high elevations and in northern latitudes, and typically inhabits riparian communities with thickets of deciduous trees and shrubs, such as willows and alders. Hares also use dense young conifers and chaparral, and at Lake Tahoe, are found near brush adjacent to both meadows and riparian deciduous vegetation. Although a species of special concern (species whose conservation status may be of concern by state or federal regulatory agencies), Sierra Nevada snowshoe hares are also legally harvested in California.

Sierra Nevada mountain beaver *(Aplodontia rufa californica)* (Federal and California species of concern) is not a beaver, but a woodchuck-like rodent. It depends on moist forest habitats, where it constructs a shallow burrow system. Burrows are usually near water and streams may be diverted into the tunnels. Mountain beavers are mostly nocturnal; they feed solely on vegetation, particularly ferns and sometimes young conifer trees. Conservation of riparian areas may be the most important protection for this species.

Lodgepole chipmunk *(Tamias speciosus speciosus)* (Federal species of concern) is restricted to coniferous forests at high elevations. This species has shown declines within local populations that are attributed to pressures from human impacts and the inability of the species to relocate to other suitable habitats.

Sierra Nevada red fox (*Vulpes vulpes necator*) (California threatened) may never have been a common species and its numbers are declining. Timber harvest practices, off-road vehicles, backcountry recreation, and other human activities may be having adverse impacts on this species (California Department of Fish and Game 1990). Suitable habitat (forest, meadows, and other habitats that provide food, water, cover, and other species requirements) may be present within the Schallenberger Ridge or Emigrant Canyon areas. A Sierra Nevada red fox was observed approximately three miles northeast of the park in 1994.

California wolverine *(Gulo gulo luteus)* (California threatened) probably inhabited the park area prior to extensive human disturbance. A wolverine was observed approximately 3 miles north of the park in 1985. Wolverines hunt in open areas and need dense cover for rest and reproduction. They avoid areas of high human activity. General habitats are wet meadows, mixed conifer, Jeffrey pine, red fir, montane riparian, and lodgepole pine forests. Home ranges (the entire area an animal uses throughout the year) may cover many square miles. Population densities have been reduced in the past due to trapping, human disturbance, and grazing. However, their numbers seem to be rebounding within their range in recent years.

Pine marten *(Martes americana)* (California species of concern) is found in coniferous forest with large trees and snags, large downed logs, moderate to high canopy closure, and interspersed riparian areas and meadows. Martens are not found in landscapes with greater than 25 percent of the area in openings. Marten dens are found in cavities of trees, snags, stumps, logs, burrows, caves, rocks, or crevices in rocky areas, within late successional or mature forest. A buffer of approximately 100 acres around a den site provides important protection to reproductive females. Martens require large areas of suitable habitat and are negatively impacted by habitat fragmentation. Roads and recreation (especially use of snowmobiles and hunting dogs) may negatively impact marten survival. Risks to marten habitat include removal of habitat components including overstory, large trees, and coarse woody debris. Although

pine marten is classified as a furbearer and is legally killed outside California, there has been no open trapping season in California since 1954.

Cultural Resources Summary and Evaluation

Donner Memorial State Park is an extremely important park with national importance, for it contains the site of the Murphy and Breen-Keseberg Cabins, which together represent one of three camps established by the Donner Party during the winter of 1846-1847. Due to its national significance, the area that includes the cabins and Donner Memorial/Pioneer Monument (thought to be on top of the Breen-Keseberg Cabin site) was designated a National Historic Landmark in 1966, known as Donner Camp Sites. The Donner Memorial Monument itself has been a California Historical Landmark since 1934. The other two cabin sites (Reed-Graves and Alder Creek) that are part of this National Historic Landmark are on National Forest Land administered by the Tahoe National Forest.

Aside from the significance of Donner Memorial State Park in preserving the site of the Donner Party tragedy, there are a number of other cultural resources that pertain to the prehistoric, ethnographic, and historic use of the park, and, in general, to this region of the Sierra Nevada during the past 11,000 years. These cultural resources are summarized below.

Prehistory

Native Americans are first known in this part of the Sierra Nevada at about 9,000 BC and in the Donner Lake area from about 4,000 BC. Archaeologists frequently use projectile points, spear and arrow tips, to identify prehistoric cultures because they change over time based on a number of factors. Whenever projectile points are found archaeologists attempt to relate them to something that can be dated using techniques such as carbon 14 dating. The projectile point chronology for the Eastern Sierra is well known and dated. There are three periods of occupation in the area around Donner Lake based on the projectile points discovered during archaeological excavations. They are Spooner which began about 5,000 BC and is characterized by Large Pinto Basin and Humboldt points; the subsequent Martis phase, named after Martis Creek, located about eight miles to the east of the park, which began about 2,000 BC and is identified by slightly smaller points called Elko and Martis; and finally, the King's Beach phase which featured even smaller Eastgate and Rose Spring points with the addition of tiny Desert Side Notched points just before Euro-American contact. For a more complete discussion please see Elston 1982, Elston 1986, and Moratto 1984.

The primary prehistoric site extends throughout the core area of the park. Based on artifacts recovered from the site since the 1950s, it has a time depth ranging from early Spooner circa 4,000 BC to the 1920s.

Ethnography

The following brief ethnography is synopsized from a document prepared by Dr. Nancy Evans for inclusion in *Resource Inventory: Ethnography and Ethnohistory, Ward Creek Project* and *The Two Worlds of the Washo* by James Downs.

The Washo are a people of the Great Basin physiographic province. It is believed that there were no more than 3,000 Washo, perhaps fewer, by the mid-19th century. Linguistically, the Washo belong to the Hokan group, one of the oldest groups in the New World. Although there was no complex social organization for all Washo, the family group was more or less the economic group.

The fish of Lake Tahoe, Donner Lake, and the Truckee River and its tributaries provided a large amount of food for the Washo. These fish were available near the end of winter when other food was scarce.

The Washo seemed quite socially flexible. Beyond the family, the "bunch" seemed the prime economic group. Yet, the composition of the bunch was fluid. The bunch, composed of groups of families to accomplish tasks requiring more than a family (e.g., rabbit drive, hunting party), would split apart with both individual families and groups of families going to various gathering areas separately. Washo religion, like their social structural character, seemed flexible and adapted to life's needs.

Native American Related Sites

For over 4,000 years human beings have crossed and recrossed the Sierra through the Donner Pass region. Evidence of these early inhabitants of the Donner Lake area are found throughout the park and adjacent private and U.S. Forest Service managed lands.

<u>History</u>

The following narrative is primarily a synopsis of *An Historical Overview of Donner Memorial State Historic Park* by Susan G. Lindström (August 1987), which was prepared for California State Parks.

Early Explorations

The growing interest in the American far west stimulated the U.S. government, under the catch phrase "Manifest Destiny" to dispatch expeditions to explore the region, produce accurate maps and report back on the region's inhabitants and resources. One of the first of these expeditions to reach the Donner Lake region was that of John C. Frémont. His campaign of 1845-46 moved up the Truckee

River, camped at Coldstream south of the park (now partially within Donner Memorial State Park) on December 3, 1845, crossed Donner Pass and traveled down to Sutter's Fort. The party moved quickly through the area to avoid being caught by winter weather.

Emigrant Travel

Beginning in 1841, overland emigrant travelers entered California on foot or with wagons, crossing the Sierra Nevada as their last major obstacle of the journey. The route up the Truckee River and out of Nevada, along the northern shore of Donner Lake, up and over Donner Pass, and down into the Central Valley was first opened by the Stevens-Murphy-Townsend Party in 1844, the first to use the Donner Pass route and the first to take wagons across the Sierra Nevada. They were pressed to leave 6 of their 11 wagons at the east end of Donner Lake, leaving young Moses Schallenberger to winter alone and guard the wagons at Donner Lake. Schallenberger's abandoned cabin served as a retreat the following year for the Foster and Breen families, members of the Donner Party.

The story of the Donner Party involves an isolated and tragic incident of American history that has been transformed into a major folk epic. This group of emigrants was trapped in the Sierra Nevada mountains of California during the winter of 1846-47. Half of the group perished and some of those that survived supposedly did so by cannibalizing the dead. However, no archaeological evidence of this has ever been recovered.

During the period 1845-1848, it is estimated that about 2600 individuals traveled from the States' to California, with most using the Truckee/Donner Pass gateway.

California Emigrant Trail Related Sites

More than 50,000 people emigrated to California by this route between 1844 and 1925. Nearly all of the emigrants passed through or near what is now Donner Memorial State Park. Segments of the California Emigrant Trail have been identified within or immediately adjacent to the existing and proposed park boundaries. The trail locations are sometimes used for interpretive hikes led by the park staff. Access points to historic trail segments exist on U.S. Forest Service and Bureau of Land Management managed lands throughout the area and around the park, and some are used by the public.

Freight and Stage Roads

During the mid-1850s, there was a flurry of wagon road construction between Sacramento and the eastern boundary of the state. However, none of these routes traversed the Donner region. The first toll road in the Donner Lake area, along the north shore of Donner Lake and over Donner Pass, was operated between 1857 to 1859. This short segment, which was later incorporated into the Dutch Flat and Donner Lake Wagon Road (DF&DLWR), formed the final link in a continuous freight and passenger road from Dutch Flat to Virginia City.

By June 1864, wayside inns and toll stations dotted the route. Three toll gates, at Dutch Flat, Polley's Station (18 miles from Dutch Flat and the second change of horses) and at Donner Lake (approximately 41 miles from Dutch Flat), were established.

The completion of the Central Pacific Railroad (CPRR) from the west to the Nevada state line in June of 1868 captured road travel across California and throughout the Truckee Basin. The DF&DLWR fell into disrepair and its usefulness as a transmontane thoroughfare ended.

In 1909, the California legislature appropriated funds for the location of a state highway over Donner Pass to the west end of Donner Lake. This road was to closely follow the original route of the DF&DLWR. In 1923, major work commenced when a new grade was constructed up the steep east face of the pass. In 1925, cars began to go through the Truckee River Canyon, the same route first taken by the Stevens-Murphy-Townsend Party in 1844. Known as the Victory Highway, it rated as a main thoroughfare, but it was still primitive and largely unpaved. The new road was modified and improved into the road known today as Old Highway 40, Donner Pass Road, or the Old Lincoln Highway. Today, this road bounds the park on the north and provides access into the park. This route was superceded in 1964 by Interstate 80.

Railroad Related Sites

Theodore D. Judah made his first examination of a potential route for the railroad via Donner Pass in the fall of 1860. Judah's first true survey of the Donner Pass route began in March of 1861.

Construction moved ahead in 1864-66. Up to 15,000 Chinese workers were employed to meet the inadequate labor supply. Heavy snow and tunneling through granite rock near Donner Pass presented major obstacles. As early as 1867 advance railroad gangs temporarily settled at Donner Lake's west end. By May of 1868, the railroad was completed between Truckee and Reno. The entire transcontinental route was finished, with the last rail joining the CPRR and the Union Pacific being at Promontory, Utah on May 10, 1869.

The building of the railroad had an immense impact on the region immediately adjacent to it, as well as on the areas that were served by it. Economic activities such as logging, commercial fishing, the ice industry, agriculture, and recreation were all stimulated or expanded by the market provided by the railroad. Its completion brought California into the U.S. economy in a way it had never been before.

The existing railroad grade used by the Union Pacific Railroad is the historic grade built by the Central Pacific in 1867. Before the Central Pacific Railroad was completed, freight wagons, stagecoaches, wagon roads, and turnpikes were the mainstays of the regional transportation network. After the railroad was finished all such activity became ancillary to the railroad.

Lumbering

As the rails reached the summit in 1866-67, a number of lumber mills established operations in the Truckee Basin to supply the railroad with cordwood for fuel, lumber for construction, and ties for the roadbed. Timber was logged from the Donner Lake Basin.

Angus McPherson established a water-powered sawmill at the east end of Donner Lake in 1864. By July of that year, McPherson had erected a hotel complete with rental sailboats and rowboats. The Towle Brothers sawmill at the east end of Donner Lake was allegedly established as early as 1865, and between 1866 to 1880, it was said to have been operating a double mill steam plant with four saws with a 100,000 board feet daily capacity, complete with narrow gauge railroad.

Extensive millponds were usually built at the larger mills and were used in winter for the ice harvest. Skating on the "Donner Mill Pond" was a favorite winter pastime.

Ice Harvesting

The Sierra Nevada ice industry developed greatly after the completion of the railroad across the Sierra. The main center of the industry was located on tributaries of the Truckee River and around Donner Pass. Sierran ice was noted for its crystal purity, and it was served in large hotels throughout the nation. Ice was harvested from artificial ponds and from ponds adjacent to lumber mills that had closed for the winter.

From 1868 through the 1940s, ice harvesting was an important business in the Truckee area. There are reports of ice ponds in Coldstream Canyon near Horseshoe Bend circa 1866. Later operations in Coldstream Canyon included the Coldstream Ice Company near Horseshoe Bend, circa 1900, and the Champion Ice Company, circa 1904.

Commercial Fishing

Two fish hatcheries existed by 1871 near Donner Lake, breeding over 1/2 million trout; both were abandoned within 10 years. As early as 1870-71, the enforcement of conservation measures was begun and the obstruction of fish runs by the Towle Brothers dam, below the lake's outlet, was criticized. Conservation measures were still urged in 1874. The productivity in Donner and Independence Lakes and along the Little Truckee River was such that the State Fish Commissioners ordered that they be stocked in 1878, 1879 and 1880 with eastern trout, salmon and whitefish.

Water Reclamation: Dams, Storage Reservoir, Water Diversion

Donner Lake also played an important role as a potential storage reservoir to supply the growing demands of Nevada's extensive water reclamation program. The earliest evidence of a dam at Donner's outlet is tentatively placed at 1859. Its purpose is unknown but it is unlikely that it was used for water reclamation purposes.

In 1912, Nevada farmers tried to buy Donner Lake water. Sometime in the 1920s a concrete dam replaced the wooden crib dam at the outlet. Between 1928-29, more dredging of the outlet at the head of Donner Creek was done, and Donner Lake was being fully used as a reservoir for irrigation.

In its function as a water storage reservoir, Donner Lake's level has fluctuated widely through the years for which records have been kept. During the fall of 1937, Highway 40 was flooded as the dam was bypassed. The natural lake level, in the absence of any dam, is 5924 feet elevation and the current lake level capacity with the dam is 5936 feet, entailing a normal rise of 12 feet.

Early Settlement

By 1864, the *Dutch Flat Enquirer* reported that at the lower end of Donner Lake there was "quite a settlement . . . two hotels, a store, blacksmith shop, express office and several dwellings . . . ".

Samuel King filed a Declaration of Intent in 1860 for 160 acres in the middle of Section 17, T17N, R16E. On May 3, 1866 he evidently filed a homestead on these four quarter sections but later abandoned the land in 1871. King was thus among the earliest, if not the first, to settle at the east end of Donner Lake. Angus McPherson also operated a hotel along the DF&DLWR. His operations were close to the eastern shore of Donner Lake. McPherson offered row and sail boats for rent. Also, a butcher shop, store and blacksmith shop were located adjacent to McPherson's Hotel.

Other early businesses and residences near Donner Lake's east end were a blacksmith shop on Donner Pass Road at the foot of Donner Lake, a meat market on Donner Pass Road 1/2 mile east of Donner Lake, a house at the foot

of Donner Lake on Donner Pass Road, a house at the east end of Donner Lake that was also used as a saloon, and a store at the foot of Donner Lake on Donner Pass Road.

Communications

A system of communications accompanied the growing settlement at Donner Lake. As early as 1865, a telegraph line ran through Donner Lake's east end. from Sacramento to Virginia City and Austin, Nevada. A correspondent writing for the *Union* also noted a telegraph office at Donner Lake in 1865. There is reference to a post office at Donner Lake prior to the spring of 1868.

Tourism and the Early Resort Era

Small resorts and hotels were established in the 1860s as the DF&DLWR and the CPRR rendered Donner Lake accessible. Mountain people in the early years balanced hard work and living conditions with recreation. Excursions on horseback, fishing, hunting, and relaxation at mountain resorts were favorite activities. With its favored location adjacent to the railroad, the Truckee-Tahoe area became a focal point of early mountain resort development, especially from Northern California's major urban centers. By the late 1910s the Lincoln Highway (Highway 40, which accesses the entrance to the park), passed through Truckee, bringing hundreds of automobile parties for summer camping on the shores of Donner Lake.

The site of the Donner Party tragedy became a "tourist attraction" very early. In 1854, Lola Montez and party made an excursion on horseback from Nevada City to the Truckee River via the summit and Donner Party cabins to collect souvenirs.

Resorts

There was much proposed building activity at the west end of Donner Lake in the spring of 1907. The road along the north shore was oiled, and proprietors fully expected 500 people to camp around the lake that year. To encourage tourism, special excursion rates were offered on the Southern Pacific (previously CPRR) to Truckee. Tourists were also taken to Donner Lake by excursion trains from Truckee and Reno. Cars, sidetracked on the "Donner siding," which ended near the old Towle Mill site, deposited picnickers within 1/4 mile of Donner Lake. The siding referenced here may have been built prior to the one for the Donner Ice Company, built in 1906.

The fear that the large private property interests along Donner Lake's shoreline would prohibit public camping, prompted a movement in 1911 "to make Truckee and Donner Lake the great camping region of the common people of California." A working-man's resort was developed along Donner's north shore by W.B.

Gelatt. Known as "Donner Lake Camp," the area was subdivided into small parcels where tents and summer cottages could be erected.

The Monument

For more than 20 years, the driving force to erect a monument was Charles F. McGlashan, a Truckee journalist who began collecting data on the history of the Donner Party in 1879. In 1920, he was especially concerned about proving that the monument was erected exactly on the site of the Breen Cabin.

Early in the 1880s Joseph Marzen, who owned the ground, promised to donate the acre of land surrounding the Breen Cabin for the purpose of erecting a monument to the Donner Party. Marzen gave the acre to McGlashan on July 21, 1894 "expressly deeded for the purpose of a site for a monument to the Donner Party." Ceremonial ground breaking took place in 1909. The foundation of the monument today is over twenty-three feet square, and the cement foundation covers and completely overlaps the floor of the Breen Cabin. The monument was dedicated on June 6, 1918 jointly by the Native Daughters and Native Sons of the Golden West.

In 1920, the Native Sons signed a lease for a concession next to the monument. The concessionaire maintained a graveled road that provided public access from Highway 40. The road went due south, circled the monument, and ended at an oiled parking area southwest of the monument. A rectangular wood concession building was located just west of the monument, and included a lunchroom and souvenir counters where desert gems, original relics, and Indian goods were sold. This basic land use and development pattern around the monument remained in place until 1949.

The land surrounding the Donner monument was owned by the Donner Ice Company from 1895 to 1907 when it was sold to the Pacific Fruit and Express Corporation. Six years after dedication of the statue, the Pacific Fruit Express Corporation conveyed 10 acres around the monument "to the Native Sons of the Golden West for state park purposes." This brought the total acreage of the prospective state park up to 11 acres.

On January 31, 1934, the "Donner Monument or Pioneer Monument" was officially designated as California Historical Landmark Number 134.

State Park History

The events involving acquisition by the State of California and subsequent park operations are less well known than the preceding history of private use and development. On May 5, 1927, the Governor signed legislation allowing the State Department of Finance to acquire "Donner Monument and lands contiguous thereto." On May 23, 1928, the Grand Parlor of the Native Sons of the Golden West conveyed 11 acres of land to the People of the State of California with very few conditions. The deed was recorded June 28, 1928, for a nearly square parcel adjacent to the Lincoln Highway. Another 5.1 acres was added to the park northeast of the monument.

In 1928, the park was transferred from the Department of Finance to the newly formed Division of Parks. The Division of Parks cancelled the concession in 1930 and converted the building into park headquarters. It was later designated as a "museum."

In August 1947, the Division of Beaches and Parks took steps to acquire the Murphy Cabin site to the southwest, situated on 1.6 acres, for \$1000. On September 28, 1948, an addition of 344 acres was purchased from the Donner Lake Development Company. This acquisition joined the monument area to Donner Lake.

By 1951, the Creek Campground was open with two combination buildings. A vehicular bridge was built across Donner Creek, southwest of the park entrance. This bridge is still in use and provides the primary access to all lands south of Donner Creek. Picnic areas were developed along the lake by 1951. A trail from China Cove to the dam on Donner Creek was completed between the road and lakeshore. The only other trail in the park, about 1200 feet long, connected the Creek Campground with the Murphy Cabin site and the monument. Ridge Campground was in use by 1960 (and perhaps much earlier), bringing the total to 104 campsites. Splitrock Campground was developed and in service by 1965, bringing the total overnight capacity up to 154 campsites.

The Emigrant Trail Museum was dedicated in September 1962. It was built to "honor man's quest to reach the promised land - California." The exhibits tell of the Sierra Nevada trail blazers, the wagon parties, mining in the area, the railroad's influence, the Chinese community, the Town of Truckee, lumber, and the Indians inhabiting the area.

In 1961, Charles DeTurk, Chief of Beaches and Parks, formally applied to the National Park Service (NPS) to designate Donner Memorial State Park as a National Historic Landmark. This designation was approved by NPS on January 20, 1961.

In 1963, the National Historic Landmark form was revised and expanded in detail, except that the focus was entirely on the tragic misfortunes of the Donner Party. The designation included only the two sites already protected within Donner Memorial State Park: the Murphy Cabin site, and the Donner Monument

(on the site of the Schallenberger/Breen-Keseberg cabin) located in the park's northeast corner. The 1963 nomination listed the park's size as 346 acres.

A nature trail was developed south of the museum by 1966. This included two new footbridges over Donner Creek, and subsumed an old trail between the monument and Murphy Cabin site. The China Cove Trail was also in place, about 1/2 mile long, connecting the lake with Splitrock Campground.

In 1980, a "New Office Contact Station" was built, and the 1949 office building was removed. This kiosk-type building was designed to contact campers and visitors to the lake, while museum visitors could directly access a separate parking area.

Privately owned lands in Coldstream Canyon were acquired in 1990 from The Nature Conservancy. In 1992, the trail route used by the Donner Party and other emigrants along a segment of the California Trail that passes through Donner Memorial State Park became known as a part of the California National Historic Trail (established by Congress in 1992 as an amendment to the National Trail System Act [16 U.S.C. 1271-1287]).

Aesthetic Resources

Aesthetic resources abound throughout Donner Memorial State Park. This Sierra Nevada environment brings to mind the words of John Muir, that the Sierras are "a range of light." The rugged granite peaks shining in the sun, the reflection of light off Donner Lake, and the clear mountain air contribute to this apt description.

As the visitor begins to explore the park, all senses become engaged. The snap of the air with its scent of pine and the crunch of needles below bring one back to nature quickly, and with this comes a sense of peace. As the visitor moves from an urban to a natural setting, views of the mountains above and the expanse of Donner Lake with its sailboats and wind-whipped waves give a wonderful sense of place and inspiration, especially in the day use areas along the lakeshore.

The park campgrounds are in more secluded areas but offer no less inspiration for re-creation of the spirit. Pines and firs surround the visitor, the creek gurgles by, birds call and twitter above, and the smell of campfires will recall pleasant and relaxing times past. Donner Creek, running by the Creek Campground, is a small riparian waterway with wonderful scenic qualities. Not too big, not too small, the creek offers campers, especially children, a pleasant diversion of focus that allows for extended relaxation and fun.

Park visitors can hike up Coldstream Canyon to the south and enjoy seeing the historic ice ponds and Cold Creek for a day. Ascending through the trees on the Emigrant Trail alignment creates a deeper understanding of the pioneers'

experience. Views ahead include the daunting peaks that gave the pioneers such hardship in crossing the Sierra divide.

Today, visitors enter the park and encounter a busy area full of vehicles, pavement, and buildings. Even when moving away from the hectic entrance to the park, when hiking the lower trails around the park and using the campgrounds, the noise from I-80 on one side and the railroad, periodically, on the other create a setting that lacks the quiet peacefulness of prehistoric and early historic times. Still, the smell of the pines, the glint of sunlight on water, the glimpses of the powerful granite peaks around, the twitter of birds above and the crunch of pine needles underfoot make the overall experience at Donner Memorial State Park a good one. Campsites are full all summer and locals and traveling visitors take advantage of the many day use and camping facilities available to help enjoy the locale. In winter, cross-country skiers travel groomed trails through the forest and along the lakeshore.

Noise

Donner Memorial State Park sits in a natural bowl surrounded by mountain peaks on three sides. There are major railroad and vehicle transportation corridors through this valley and along the sides of the mountains that create high-levels of sustained and intermittent noise. Traffic on Interstate 80 creates a constant "roar" in the background, especially on the north side of the park; the passing of trains on the south side creates loud periodic noises, having even more impact on the park visitor due to its unpredictability. The sounds of power boats and personal watercraft (jet skis) on the lake also contribute to intermittent background noise in the park.

RECREATIONAL AND INTERPRETIVE PROGRAMS AND FACILITIES

Traffic Circulation

Interstate 80, running east-west across the continental United States, is the primary conduit for public access to the park. From the heavily populated San Francisco Bay and Sacramento areas to the more rural and less populated Reno and its environs, numerous primary and secondary highways connect with I-80. These include major freeways in the Bay Area, and Interstate 5 and Highway 99 in the Central Valley. Highway 49 brings traffic from the western foothills of the Sierra Nevada. Highways 89 and 267 east of Truckee connect to the park along the spine of the mountain range. Donner Pass Road is part of a U.S. Forest Service-designated "Yuba-Donner Scenic Byway" that loops around the Sierra Nevada Crest northwest of the park.

The most frequently used exit for Interstate 80 traffic accessing the park is the Donner Pass Road off-ramp just east of the park's entrance. Park visitors then turn west at a four-way intersection on Donner Pass Road (old U.S. Highway 40) to access the park's entrance area, a distance of less than half a mile. Interstate 80 carries 23,250 non-commercial vehicles per day (8,486,250 per year) through the Donner Pass Road off-ramp. These vehicles may carry potential park visitors. In addition to park visitor traffic, the I-80 off-ramp and Donner Pass Road carry local community traffic from the surrounding areas.

Only one sign exists westbound on Interstate 80 between the agricultural inspection station in Truckee and the Donner Pass Road exit, which reads "Donner Memorial State Park Next Right." The activity of the inspection station and the large commercial trucks merging into traffic in front of it detract from this sign.

Two signs exist eastbound just before the Donner Pass Road exit, announcing "Pioneer Monument Next Right" and "Donner Memorial State Park Next Right." There are no signs anywhere outside the park for the Emigrant Trail Museum.

The Department maintains no major public roadways in the park. Coldstream Canyon Road, within the eastern boundary of the park, is owned and maintained by various agencies: the Town of Truckee between Donner Pass Road and the first gate; between that gate and the Caltrans property, it is a "non-maintained" Nevada County road, but is maintained by Caltrans for access to its property; and farther south, at the county line, it becomes a "non-maintained" Placer County road within State Park property.

The park entrance area off Donner Pass Road consists of a short paved road that splits within a few yards, allowing access to the Emigrant Trail Museum to the east or the park kiosk to the west. At the kiosk, visitors can obtain park information in brochures and by talking with park staff. After stopping at the kiosk, visitors can continue west to the day use areas alongside the lake or south across the bridge at Donner Creek and then turn left to access the three campgrounds. These park roads become ski trails in winter, and the campgrounds are closed by the first snowfall.

The park has one defined entrance point where visitors must stop to pay fees for the camping and day use areas. Fees to visit the museum are collected in the museum. Currently, the entrance area is inadequate to serve visitor needs. Limited stack-up space between Donner Pass Road and the kiosk not only forces waiting vehicles onto the road outside the park on busy days, but vehicles also block access to the museum parking lot at those times. This is a major deterrent to a successful museum and historic site interpretive program.

There is no designated bus parking in the museum parking lot, which can only accommodate 45 automobiles, including one accessible space and four

employee/operations spaces. This lot is also used for the Pioneer Monument, the Murphy Cabin Site and Trail, and the Nature Trail. It also serves both museum visitors and park visitors in the winter months. After parking in the existing lot, cross-country skiers and snowshoers begin their trips from there, continuing on a loop that travels over groomed trails around the shore of Donner Lake and south along the base of Schallenberger Ridge and back. Visitors can also head up Coldstream Canyon to access the uplands around the south side of the park.

Some day use visitors currently park their vehicles at the west end of the park along the Donner Pass Road right-of-way outside the park boundary.

In addition to automobile or bus access, visitors can take advantage of public transportation to the park. The Town of Truckee operates a low-cost "Truckee Trolley," which makes round trips daily through the town, stopping hourly in front of the park entrance on Donner Pass Road.

Recreational Resources

After the completion of the transcontinental railroad in the late 1860s, Donner Lake became a destination for recreational visitors. In those early days it was primarily a summer resort area that offered boating, picnicking, lodging, fishing and other summertime recreational pursuits.

In the early 1900s, the old Dutch Flat-Donner Lake road, which had been built to support construction of the railroad, was improved to allow access to the mountains by automobile. By the 1930s, this road allowed rapid development of the Truckee-Donner region as a year-round recreation area. Construction of the Interstate 80 freeway in the early 1960s made it easier than ever before for recreational users to access the Donner Lake area.

Regional Recreation

The history of highway improvements through the Donner Pass area has supported a steady stream of recreational users to the area during the past several decades. These highways have allowed a proliferation of winter resorts to thrive; the greatest concentration of ski resorts in the country is in the Lake Tahoe area. One of the earliest of these in the Donner Lake region was Sugar Bowl Ski Resort, which is still in operation. Sugar Bowl was built on the west face of Roller Pass just west of Coldstream Canyon, where pioneers hauled their wagons up steep rock faces using log "rollers."

Other local winter sports resorts include Boreal Mountain Resort, Donner Ski Ranch, Soda Springs Winter Resort, Northstar-at-Tahoe, Squaw Valley USA, and Alpine Meadows Snow Ski and Snowboard Resort. These and other facilities offer downhill skiing, snowboarding, snow tubing, sledding, snowshoeing, ice skating, and other activities during the winter. Cross-country skiers can visit the Royal Gorge Cross-Country Ski Resort in the Soda Springs area, which has an extensive ski trail system reaching the tops of the peaks west of the park.

Many of the private resorts also offer summer activities such as mountain bike trail riding, motorcycle hill climbing, nighttime amusement park activities, swimming, rock climbing, horseback riding, and hiking. Dining establishments and lodging facilities support these recreational activities. Other recreation providers offer whitewater rafting opportunities on nearby rivers.

The Emigrant and Pacific Crest Trails (PCT) travel through Coldstream Pass, just north of Roller Pass. The new Donner Rim Trail is a 22-mile loop that uses a portion of the PCT west of the park, on its way around the ridge tops above Donner Lake. This trail passes through Donner Memorial State Park.

Camping in the region occurs mostly in summer. There are more than 30 U.S. Forest Service and private campgrounds in Nevada County and approximately 25 in Placer County. Several are within ten miles of Donner Memorial State Park. With five million annual Tahoe National Forest users, the U.S. Forest Service has provided many trails and facilities in the area to support wilderness use. There is an extensive and heavily used system of free trails on U.S. Forest Service land, some adjacent to the park. A popular 15-mile Pacific Crest Trail hike from a trailhead at Boreal Mountain Resort south to Squaw Valley travels along the ridges and peaks of the passes west of the park.

Tahoe-Donner, a subdivision development north of the park across I-80, has 25 miles of multi-use trails for hiking, equestrian use, bicycling, and cross-country skiing. It operates and maintains a beginners-level ski area within the development. The Tahoe-Donner Association is planning to add paved parking areas at major trailheads for users.

Many private cabin owners around Donner Lake are members of the Donner Lake Association. This association maintains a private beach and beach-related day use facilities on the west end of the lake, as well as boat storage and launching facilities. It also maintains a private beach at the northeast end of the lake adjacent to park property for members of the Tahoe-Donner Association, owners of property in the Tahoe-Donner subdivision north of the lake.

The Town of Truckee, three miles east of Donner Memorial State Park, provides local recreational land uses. The town refers to open space, natural and scenic resources, and trails in its General Plan. Existing and future trails are shown through the park in the plan, connecting with trails around Donner Lake, as well as with trails up Coldstream Canyon.

The Truckee-Donner Recreation and Park District, a special district of Nevada County, encompasses the Town of Truckee and surrounding areas, offering day use areas such as picnic sites for local and traveling visitors. It also provides a

variety of recreational and educational programs for children and adults utilizing local recreational facilities.

Tahoe City, on Lake Tahoe with its myriad recreational opportunities, lies approximately 17 miles to the southeast of the park.

Park Recreational Opportunities

Facilities and programs at Donner Memorial State Park offer many different ways to enjoy and appreciate the natural and cultural resources at the park. In addition, those visitors so inclined are easily able to find ways of appreciating and using the park away from developed park facilities.

Exhibits in the Emigrant Trail Museum offer a glimpse of life in the 1840s and later. A short walk down the interpretive/nature loop trail outside the building brings the visitor to the site of the Murphy Cabin, where 16 members of the Donner Party lived in the winter of 1846. Printed trail guides are available at the museum. The Pioneer Monument to the north of the museum is an important cultural resource that is accessible by a short paved trail.

With more than three miles of frontage on Donner Lake and Donner Creek, day users come for the beaches, for swimming in Donner Lake, and for fishing, sunbathing and picnicking. They can rent a paddleboat or kayak and get out on the lake for a different perspective of the shore and spectacular views of the mountain passes above.

Visitors can extend their stays at the park for longer than a day by using one of the 154 developed campsites at the park. Visitors with disabilities can enjoy the park using accessible camping and picnicking facilities.

Campers can pitch tents, use trailers or motorhomes, or throw sleeping bags down on the duff and enjoy the stars. They can take in an interpretive program at the campfire center, or take advantage of the 1.7 miles of hiking trails in the park. Donner Creek has wonderful areas for water play and contemplation, where children and adults can spend time together having fun and relaxing. Visitors may have their dogs, which must be leashed at all times, only in the developed areas of the park.

The park has a system of trails that connects the campgrounds and day use areas to the museum and Coldstream Canyon. Those interested in history can hike up Coldstream Canyon on the basic alignment of the Emigrant Trail. A commemorative trail marker at the upper end of the canyon points out the trail alignment for visitors wishing to walk farther up the slopes, outside of park property. Hikers can walk up Schallenberger Ridge to gain magnificent views of Donner Lake and the Donner Pass area. The park's trails connect with local trails leading to the Pacific Crest Trail to the west and are also a part of the Donner Rim Trail.

There are opportunities for rock climbing in Coldstream Canyon and within the campground area at Split Rock, a large glacial erratic boulder.

Several times a week throughout the summer, park staff lead hikes that start at the museum. They range from one or two hours in length to more ambitious, all-day hikes.

Mountain bicycling is possible on unpaved park roads up Coldstream Canyon, and bicyclists can also ride the paved park roads in the campgrounds and day use areas. Equestrians also use the unpaved roads in Coldstream Canyon to gain access to U.S. Forest Service trails beyond park boundaries.

Winter recreational opportunities include cross-country skiing on groomed trails, snowshoeing, and snow play near the museum parking lot. There are guided cross-country ski and snowshoe trips offered by staff at the park. Snow removal in the parking lot throughout the winter allows public access to the museum year-round, as well as parking for winter recreational users.

Interpretation

The purpose of interpretation at this state park is to broaden and deepen the visitor's awareness and experience. Interpretation provides lasting benefits not only for individuals, but also through its connection to society in general. Through interpretive services, visitors are introduced to the intrinsic values of a park in a relevant, organized, thematic and provocative way. The interpretive program at Donner Memorial State Park fosters an appreciation of the interrelation of nature and culture. Park interpretation illustrates resources with significant concepts that are presented to the public through various communication techniques and media. The program is focused both inwardly to visitors within the park and outwardly to the public, including schools and potential visitors.

Interpretive Facilities

Emigrant Trail Museum

The Emigrant Trail Museum functions as the park visitor center with visitor and tourism information, visitor restrooms, bookstore/gift shop, theatre, natural and cultural history exhibits and displays, fine art displays, visitor contact desk, visitor convenience area and lobby, park operations, support offices and storage areas,

cultural resource artifact work and storage areas, and interpretive program staging areas. It was designed to accommodate 60 to 70 persons at one time in an open lobby, groups of 30 to 40 persons at one time in an open exhibit space, and up to 100 persons at one time in an open theatre/assembly room.

The museum construction was funded in part through legislation introduced by Senator Harold T. "Bizz" Johnson in 1957. It was completed in 1962 following many years of combined efforts by volunteers, staff and legislators. This was prior to the design and construction of Interstate 80. Park and museum visitation and related impacts are notably higher now than when the facility was originally designed and built.

The existing museum size is inadequate to provide the space required for visitors to interpret park resources to their best advantage, or to provide necessary operational and maintenance space. The intention was to have 45 exhibits based on one central theme and 29 sub-themes. There is currently very limited space allocated for natural history exhibits, one of the interpretive elements most desired by the public.

Interstate 80 carries over 8 million non-commercial vehicles per year through the Donner Pass Road on/off ramp for the park. Annual average visitation to the museum is approximately 80,800 persons. Daily average visitation is over 340 persons between June 1 and September 30 with occasional peaks of up to 500 in a day. Between 11:00 a.m. and 3:00 p.m. it is common to find 100 or more people at one time in the museum. The average length of stay is one hour. School group size during the school year averages 55 persons at one time, and over 125 persons at one time is not uncommon.

There is no designated bus parking in the parking lot, which can only accommodate 45 automobiles, including one ADA space and four employee/operations spaces. This lot is also used for the Pioneer Monument, the Murphy Cabin Site and Trail, and the Nature Trail. Parking often overflows onto the park entry road, where automobiles can back up from the kiosk onto Donner Pass Road beyond the park entrance. This is a major deterrent to a successful museum and historic site interpretive program.

Existing Museum Topics

The museum lobby features exhibits portraying the area's history, winter sports, and limited natural history displays (taxidermy mounts). Because Bizz Johnson originally obtained the funding for the museum, one room is dedicated to him. It features the story of pioneers coming to California in a broader manner, with exhibits illustrating the westward trek, Indian attacks, and other difficulties, including crossing the Sierra Nevada mountains. This room also contains the important McGlashan Butterfly Collection. Other museum displays include Sierra

Nevada geology, Sierra Nevada Spanish place name history, various paintings and sculptures describing the sights and adventures experienced along the California Emigrant Trail, the Donner Party, and Sierra Nevada Native American petroglyphs.

Pioneer Monument and Donner Party Campsites

The Pioneer Monument is located south of Donner Pass Road and west of the northeast park boundary. The 40-foot tall stone and bronze monument is visible from the road and the adjacent Interstate 80. The monument was designed and built between 1901 and 1918, and was erected on what is believed to be the site of the Breen Cabin, one of the Donner Party locations. The fully accessible Pioneer Monument bears a bronze dedication and interpretive message. It is immediately east of a bronze plaque on a stone base commemorating the Moses Schallenberger Cabin Site, occupied in 1844-45 by members of the Donner Party. Several hundred yards to the southwest along a trail is the gigantic glacial erratic boulder that identifies the site of the Murphy Cabin, also occupied by Donner Party members. These sites are among the most heavily visited in the park. Onsite interpretation is minimal, and these sites are austere reminders of a significant human tragedy.

Coldstream Road Land Trust Interpretive Area

A pull-out along Coldstream Road just south of the campground features two interpretive panels. One panel describes the Land Trust efforts to preserve and enlarge the park. On the reverse side is a simple map and text related to the Emigrant Trail and Coldstream and Roller Passes.

Lakeside Interpretive Trail

Running along the lakeshore, east of China Cove, this trail features two orientation map panels, four cultural history thematic interpretive panels, and four natural history thematic interpretive panels. These panels are located in the day use picnic and beach area and provide interpretive messages to visitors that might not otherwise experience an interpretive opportunity. The panels are also designed to enhance interpretive efforts elsewhere in the park and the region.

Nature Trail

This self-guided trail is located along the trail to the Murphy Cabin site. There is an accompanying free self-guiding brochure available in the museum that identifies 16 natural history sites and components. Guided hikes start at the museum several times each week during summer.

Related Interpretive Facilities and Sites Near the Park

Scenic Byway

Donner Pass Road (the historic Highway 40 corridor), Interstate 80, Highway 20, Highway 49, and Highway 89 comprise a loop of interconnected roads designated as the Yuba-Donner Scenic Byway. The park is one of the cultural and natural heritage sites noted in planning and on publications for the scenic byway. The scenic byway designation affects the type of signs permissible along the route.

Other Related Sites

Old Sacramento State Historic Park, the California State Railroad Museum, Sutter's Fort, the State Indian Museum and the California State Archives Golden State Museum, all located in Sacramento, are thematically related to Donner Memorial State Park.

Tourism and Interpretation

Caltrans maintains scenic vistas on Interstate 80 both eastbound and westbound at Donner Lake. No interpretive or informative displays have been available at the scenic vistas. Caltrans also maintains rest areas on Interstate 80 both eastbound and westbound at Donner Summit and at Gold Run west of Truckee. In the past, the Department has displayed interpretive and informative exhibits related to Donner Memorial State Park and Sierra District state parks at the eastbound rest areas both at Gold Run and at Donner Summit. This material is either absent or outdated in all locations.

The Truckee Chamber of Commerce provides information about the park and its programs, as well as leading two significant activities. One is a regularly scheduled walking tour of historic Truckee, and the other a Donner Party hike held once each year. The latter hike is supported by park staff and is an extensive voluntary effort that guides roughly 250 people to the various Donner Camp locations for organized historical interpretation.

In addition, other historic sites are available to tourists near the park. Amtrak passengers travel through the high Sierra and Donner Pass on the historic rail grade via modern passenger trains departing daily from the Truckee Depot. The Pacific Crest Trail is accessible from Donner Pass Road at Donner Pass below Donner Peak. Mounts Judah and Lincoln and Roller Pass are accessible from a trail at Sugar Bowl Alpine Ski Area.

Natural History Related Sites

Staff-led hikes, snowshoe, and ski tours are conducted to Donner Peak, Stephens Peak, the Castle Peak volcanic area, the Pacific Crest Trail, Mounts Judah and Lincoln, Tinkers (Bunkers) Knob, Coldstream Canyon, and other areas.

Park Interpretive Programs

Park history hikes average 30 visitors per 45-minute program and 15 per twohour program. Junior Rangers average 12 children per program. About 3,000 children participate in the Litter Getters program throughout the summer months. Approximately 9,000 (conservatively) visitors view the video program in the theatre each year. Three hundred school groups on average visit the park each year. Additionally, 60 bus tours visit annually with approximately 45 persons per bus.

During the months of January, February, and March the park features interpretive hikes, including beginning and intermediate snowshoe hikes, cross-country ski hikes, survival hikes, peak hikes, full moon ski hikes, and Donner Party history hikes. No interpretive programs are offered in April and May to allow for staff hiring and training.

The park also features a number of special events, some hosted by volunteers, that add to the park's interpretive program. These include California Trail Days, a three-day living history event with 25 volunteers and 1,500 visitors, Operation Challenge, a sports event for disabled persons, Truckee Donner Land Trust hikes, Sutter's Fort Living History Days at Donner with seven volunteers, Turkey Trot annual runs, the Donner Lake Triathalon, the Donner Lake swim, the Donner Dive trash pick up in the lake by volunteer divers, Truckee River Day along Coldstream Creek, Science Camp, a two-week long children's science adventure camp, and the Spirit of the Sierra teacher training intensive workshop.

Museum Collections

The Department acquires and maintains collections for several reasons. The first is to preserve elements of the natural and cultural environment original to the park. Second, collections document the natural features and people who have interacted with the physical features and plant and animal resources in the park area. Third, collections support the interpretation of themes that are important to the park.

Museum collections play an important role at Donner Memorial State Park. Though the park's collection is relatively small, much of it is on display, helping to make the museum one of the area's most appreciated sites.

The collections consist primarily of cultural artifacts and natural history specimens that relate to the history of the park and surrounding area. Collections

include Native American and archaeological artifacts, as well as artifacts and documentary material related to California emigration, artifacts and documentary material, including photographs, related to railroading, logging, and motoring across the Sierra, skiing, recreation and the town of Truckee, California.

Existing resources within the collection of 5600 items include objects from all these categories. Artifacts recovered from archaeological excavations, surveys, and on-site finds include many objects associated with Donner Party campsites and Native American artifacts from the local area. Oil paintings depict both the emigrant experience and the Donner Party tragedy. Ethnographic material includes important Washo baskets and a number of Chinese artifacts. The bulk of the collection, 3000 images and 950 archival items, documents turn-of-the-century Truckee history and construction of the Pioneer Monument.

Some 600 artifacts, selected for interpretive purposes and "of-the-type" rather than original to the site, are on exhibit. As the Emigrant Trail Museum was originally envisioned as a visitor center and exhibit area, interpretive objectives have always been primary. The establishment of a new museum/visitor center will reinforce this emphasis and collections necessary to the museum exhibits will be curated.

Concessions

Visitors to Donner Memorial State Park have access to recreational activities offered by a private concessionaire. Currently, the concessionaire offers boat rentals including kayaks, canoes, and personal watercraft (jet skis) along the south shore of Donner Lake, in the park's day use areas. The concession operates from mid-June through the Labor Day weekend.

Park Support

The Sierra State Parks Foundation (SSPF) provides funding support for Donner Memorial State Park. The SSPF funds seasonal interpreters, park aides and a bookstore manager to operate the Emigrant Trail Museum. Trail Days, an annual living history event, is also funded by SSPF.

Volunteers provide labor to organize, lead and/or assist during several annual events at the park. These events include the Kids Fishing Derby, Truckee River Days and Trail Days. Local school group and Boy Scout Troop projects occur within the park as well. These generally are resource management-oriented.

The Kids Fishing Derby is sponsored and organized by the local Rotary organization. Many volunteers help create this event. Prizes are donated by local businesses and awarded to each participant and to the girl and boy for the largest fish caught. This event is very popular each year with hundreds of young people and their families participating.

Truckee River Days are resource management-oriented projects located in the Truckee River Basin. Volunteer work groups are organized to complete a variety of projects ranging from plant rehabilitation to stream bank stabilization. Trail Days is a living history event that recreates the lifestyles of the emigrants who traveled through the area. Volunteer groups set up encampments and exhibits presenting the traditional cooking, crafts and trail life that typified the emigrant experience.

Individual volunteers at the park have been minimal in number. Currently there is not a docent program for the park.

PLANNING INFLUENCES

Systemwide Planning Influences

Planning for State Parks must be wide-ranging to consider issues that cross regional, local community, and park boundaries. Federal, state, county, and community agencies are responsible for providing oversight and review of various planning-related laws and policies, such as the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), and the Americans with Disabilities Act (ADA), as well as Regional Water Quality Control Board and Air Quality Management District regulations.

Additionally, numerous California State Park Resource Management Directives guide the planning process. A list of planning influences that may affect planning decisions at Donner Memorial State Park can be found in Appendix F.

Sierra Region

The entire Sierra region contains many resorts, recreational opportunities, and associated support services. Donner Memorial State Park is located in both Nevada and Placer counties. These counties comprise one of the fastest growing regions in the State of California. Placer County experienced a 3.5% growth rate between 2000 and 2001, the greatest growth rate of all California counties. Between 1990-2000 the population of Placer County has increased 41%. The population of Nevada County has increased 16% over the same decade.

The Town of Truckee is a recreation-based community with many seasonal residents, some of whom use the state park, especially in the winter to access cross-country ski trails. The important historic resources at the park are also a draw to the tourist population. The Town of Truckee is comprised of approximately 48% permanent residents and 50% seasonal residents. According to the current California Department of Finance census data, the population of Truckee is just under 14,000 permanent residents. The Town of Truckee has

experienced increasing growth in the last decade. The population has increased 22% since 1994 (the highest of all communities within Nevada County), with a 2.9% growth rate between 2000 and 2001. Forty-five percent of the total population of Truckee falls within the 25-44 age group, with a median age of 33 years. Increasing park use is anticipated due to the population growth trends in California, especially in the towns, counties, and closest metropolitan areas to the park (including the Sacramento Valley and the San Francisco Bay Area).

There is an existing commercial and residential community surrounding Donner Lake, primarily on the north and west side of the lake. The Town of Truckee General Plan (February 15, 1996, amended September 21, 2000) has designated this Donner Lake community area a "special community area" to address the unique mix and character of land uses.

Park Visitation

Donner Memorial State Park is located adjacent to Interstate 80, a major Interstate highway, making the park easily accessible and widely used for yearround recreation by nearby residents as well as regional and out-of-state visitors.

Current attendance at Donner Memorial State Park is approximately 200,000 visitors per year (based on current Department of Park and Recreation visitor use statistics). Attendance records from the past three years show an increasing rate of visitors each year. The most significant increase (14%) from 2000 to 2001 is likely to be partially due to an overall decrease in State Park entrance fees. The visitor attendance records reported that the majority of the total visitors to the park are from northern California (49%), with 23% from southern California, and 28% from out-of-state. The visitor surveys indicate that approximately 58% of visitors use the park for day use activities only, with approximately 32% staying overnight.

Attendance during the spring, summer, and fall averages 94% of total visitor use. Summer attendance shows the highest visitor use, at an average of approximately 66% of total annual use. Approximately 6% of total visitor use occurs during the winter (December-February).

Visitor Origination	Area	Miles Distant
Local	North Lake Tahoe	12 miles
Regional	Reno	30 miles
Regional	South Lake Tahoe	50 miles
Distant	Sacramento Area	100 miles
Distant	San Francisco Bay Area	200 miles

Key Origination Points of Park Visitation

Area	Growth Rate	Pop. July/00	Est. July/10	Est. July/20
Truckee	2.9%	12,953	16,753	22,297
Placer County	3.5%	251,800	339,300	406,900
Nevada County	1.8%	93,000	117,300	133,200
Sacramento County	2.3%	1,223,499	1,501,358	1,884,692

Population estimates: (State Department of Finance projections) Annual growth rate from 2000 to 2020

Notes: 1) Italicized numbers inferred and assume an unchanging growth rate.

Visitor Use and Activities

There are many ways in which the visitor to Donner Memorial State Park can enjoy park resources and relax in this beautiful alpine setting. Visitor activities in and around the park include picnicking, fishing, hiking, camping, wildlife viewing, photography, swimming, bicycling, horseback riding, cross-country skiing, rock climbing, visiting historical sites, and viewing interpretive exhibits.

Park staff offer interpretive walks and other programs designed to help increase public understanding and enjoyment of the many different natural and cultural resources in the park.

Public Comments

Over the years, park staff have heard many comments from the public concerning the lack of adequate space and interpretive facilities in the existing museum. A public planning workshop was held on May 30, 2002 to gather public comment on the proposals in The Plan section of this document. The comments received included questions about further public review opportunities for the General Plan, future planning processes, and the integration of a new museum/visitor center with surrounding land uses.

Relevant General Plans

Town of Truckee General Plan

The Town of Truckee General Plan has designated a Planned Community (PC-1) adjacent to Donner Memorial State Park. This area, also referred to as the Teichert Coldstream site, is located east of Coldstream Road and north of the railroad tracks. The plan authorizes mixed use development (open space, housing, commercial, and industrial), which could promote and accommodate tourism in addition to serving local needs.

There is an existing commercial and residential community along the edge of Donner Lake, adjacent to the park. The Town of Truckee General Plan has designated the entire Donner Lake area as a "special community area" to address the unique mix and character of land uses.

The Town of Truckee General Plan Circulation Policy states that Donner Pass Road shall remain at three lanes (two travel lanes, with a center turn lane). Development in this area will be limited to avoid an increased road capacity or major decrease in the level of service of the existing road.

Nevada County General Plan

Nevada County encompasses the Town of Truckee and the northern part of the park. The Nevada County General Plan is supportive of the State Park System's mission and the park's purpose to provide public recreation. Its policies direct the county to coordinate future park and trail planning with federal, state, and local agencies to maximize the benefits from public land and facilities for public use and recreation. The plan also supports implementation, where possible, of an integrated county-wide trail system, as well as preservation and encouragement of water-based recreational opportunities.

The Nevada County General Plan encourages acquisition and management of open space land and easements by the Truckee-Donner Land Trust with a focus on lands with unique, valuable, and sensitive resources.

Plan policies also endorse the importance of protecting Nevada County's rural character and scenic resources.

Placer County General Plan

Placer County includes the southern portion of the park and most of the new acquisitions south of Donner Lake. Its General Plan is supportive of the Department's purpose at the park in many ways. It encourages the preservation and enhancement of natural open space to the maximum extent feasible. It supports cooperation between the county and federal, state, and local agencies in their efforts to acquire and protect important habitat, including wildlife corridors, for rare, threatened, endangered, and/or special status species, as well as acquisition and preservation of significant cultural resources.

In the arena of recreation, the Placer County General Plan encourages other agencies to maintain and improve their current levels of service and to respond to changing trends. It also calls for county coordination with other agencies to develop an inventory of parklands county-wide and proposals for additions. It also supports the development of a county-wide system of interconnected trails for multiple user groups, and the establishment of visual and physical links among open space areas to form a system that, where appropriate, also includes trails.

The Placer County General Plan also supports continued use of prescribed burning on open space lands. This is an important vegetation management tool employed by the Department. In addition, the plan supports cooperation with interested state agencies to provide public interpretive services at select locations on county-owned or managed property. This could conceivably include State Parks interpretive staff.

ISSUES ANALYSIS

The Issues Analysis section summarizes the important issues derived from the Park Summary and from the Planning Influences. Because all the issues are interdependent, the following key issues will be addressed throughout The Plan section.

Park Purpose

Donner Memorial State Park has many cultural, natural, and recreational resources that contribute to its importance as a state park as well as making it a site of national significance. The park's current Declaration of Purpose does not encompass the significance of all resources at the park. In order to more accurately reflect existing park values, the Declaration of Purpose and a Vision Statement for the park's future should be considered and revised.

The Emigrant Trail Museum

Visitor attendance at the Emigrant Trail Museum has risen dramatically over the past few years. The current building and parking facilities are too small to effectively serve the many school groups and other visitors who want to learn about the Donner Party and the pioneers.

The Department, in cooperation with a local private company, has proposed to construct a new museum on adjacent private property (which, under the proposal, would eventually become State Park property). The opportunity also exists to examine land within current park boundaries for an appropriate museum site, and to evaluate and consider the conversion of the existing museum building for use as a different type of facility to serve the park.

Interpretation

The many stories about Donner Memorial State Park's prehistoric and historic past and its natural and recreational resources are the reasons that this park exists. Currently, educational and interpretive opportunities are being missed;

inadequate museum interpretive and support facilities results in visitors leaving with an incomplete picture of the park's natural and cultural history. Ways to connect visitors to these stories and relationships within the park need to be examined.

Park Access, Circulation, and Parking

Currently, there is a problem in the park with regard to adequate traffic circulation and parking, especially at the park entrance. Through the planning process, alternatives will be looked at for museum location and parking. Traffic circulation will be analyzed as well, with the goal of creating a better functioning park entrance and road system.

Natural Resources

Since the park was first established, resource ecologists have prepared various plans to help guide different types of natural resource management activities, such as burn programs and hazardous tree removal work. An overall look at natural resource values, both in the park and regionally, will help park staff effectively manage natural resources for visitor use as well as for protection and enhancement. Identification of core wildlife and sensitive habitats within the park and their linkages to surrounding areas outside the park's boundary is critical to maintaining the Sierra Nevada ecosystem. Understanding, preserving, and creating these linkages, called biocorridors, will help protect the regional ecosystem. Water resources will be looked at for similar reasons.

Cultural Resources

Proposals for the alternative sites for the park's museum/visitor center and other facilities developed during the general plan process will be evaluated for potential impacts to cultural resources, and mitigation measures will be proposed to reduce or eliminate any possible disturbance to those resources. Future studies and programs will be identified to address existing and future impacts to cultural resources through resource management and facility construction programs. Proposals will be made to determine the significance of cultural sites and features located in developed use areas.

Park Summary





THE PLAN

The Plan section establishes the overall long-range purpose and vision for the future of Donner Memorial State Park. Specific goals and supporting guidelines further clarify the vision for the future of the park. The goals and guidelines are designed to rectify the currently identified critical issues described in the last section, while providing a solid foundation for continued resource protection, preservation, and rehabilitation, as well as facility development and resource interpretation at the park. The goals and guidelines serve as the design and implementation guideposts for required subsequent management and development plans.

This General Plan is, by necessity, visionary in nature, although much of its content is driven by currently identified issues. A general plan cannot predict the future with any degree of accuracy. Therefore, it is designed as a dynamic document that allows managers the opportunity to incorporate newly emerging technologies and improved management concepts for resolving current issues, along with the ability to provide adequate direction for resolving issues that may arise in the future.

DECLARATION OF PURPOSE

The impetus for the establishment of Donner Memorial State Park was to preserve the unique and interesting story of the Donner Party at the site, and to commemorate the hardships and successes of the pioneers heading west in the mid-1800s. Subsequent park additions included land along the shore of Donner Lake and in Coldstream Canyon to allow for visitors' recreational use and enjoyment of the high Sierra environment.

The Declaration of Purpose describes the purpose of the park and is the broadest statement of management goals designed to fulfill the vision for the park. A Declaration of Purpose is required by the Public Resources Code, Section 5002.2(b), "setting forth specific long-range management objectives for the park consistent with the park's classification . . .".

In 1959, prior to a major land acquisition along the shore of Donner Lake, a Declaration of Purpose was established for the park:

To commemorate the winter camp of the ill-fated Donner Party and to make available for overnight and day use a portion of the shore of Donner Lake and the surrounding area. This was revised in 1975 to read:

Donner Memorial State Park is established to perpetuate the memory of the pioneers who passed through this area heading west for new futures and opportunities in California, particularly the Donner Party which suffered tragically here in the winter of 1846-47; and to provide for the protection of an important portion of the shoreline and related uplands of Donner Lake as an important scenic natural area, and recreational area; and to provide public use areas and facilities, both in relation to the historical associations and to take advantage of the natural, scenic and recreational attractions.

Through the general plan process, the planning team has examined the two versions of the Declaration of Purpose above. Several revisions have been made in order to recommend a broader scope of interpretation at the park, to include the intensive use of this area through history as a passageway for plant and animal communities, including humans, while still focusing on the Donner Party and their experiences here. The proposed Declaration of Purpose is as follows:

Declaration of Purpose Statement

Donner Memorial State Park is established to commemorate the people who have crossed the Sierra Nevada through time, and the Donner Party tragedy that took place here in the winter of 1846 - 47; to preserve and interpret its natural and cultural resources as part of the Truckee River Basin, a major passageway to the crest of the Sierra Nevada; to manage its landscape in a way that restores biological diversity and provides an important link in the fragmented ecosystem of the Sierra Nevada; and to provide for the public's use and enjoyment of its scenic and recreational features and for the interpretation of its prehistoric, historic, and natural resources.

PARK VISION

Donner Memorial State Park was originally created with the idea of preserving our collective history for the future. As time went on, this "purpose" was extended to include the preservation of both cultural and natural resources, and to provide recreational facilities to allow public enjoyment of these outstanding resources.

The park today offers opportunities for camping, day use, and a variety of recreational activities that increase the visitor's enjoyment of the park experience. With recent and potential future acquisitions, the park is expanding to include uplands to the south. These acquisitions will give visitors increased opportunities to explore the natural world surrounding Donner Lake and the emigrant trails that connect to the historic sites in the park's core. They will facilitate visitor access to regional and statewide trails in the area.

Currently, interpretive programs and facilities at the park do not tell the complete story of the region's geological formation and the plant, animal and human histories there. The park has the potential to tell all these interesting stories, along with the story of the pioneers and the Donner Party, in a way that connects historic events and times with our experience today.

Donner Memorial State Park will be a place where the stories of history coexist comfortably with the spectacular natural setting through which this history has passed and continues. Facilities and programs will be developed to increase understanding of this particular natural environment and how it relates to the park's history and the larger world. With sensitive and comprehensive interpretive programming in an improved interpretive facility, park visitors will have a more complete appreciation of the park and a fuller recreational experience there. The park's history has the potential to help us better understanding of our interactions with the environment, and lead to more satisfactory lives for ourselves and our heirs.

Donner Memorial State Park will continue be a place that will provide expanded opportunities for cultural and natural resource protection and high-quality recreational experiences.

Park Vision Statement

Donner Memorial State Park will be a place where the stories of history coexist comfortably with the spectacular natural setting through which this history has passed and continues. Educational facilities and programs to increase understanding of this particular natural environment and how it relates to the Sierra Nevada and the Great Basin will be developed in tandem with historic interpretation. Visitors can experience a variety of recreational opportunities through the changing seasons: water-oriented activities at Donner Lake, family and group day use and overnight camping, and varied forms of trail access and use in the lower reaches of the mountains, as well as the uplands in Coldstream Canyon, with connections to a greater Tahoe regional trails system. The visitor will gain a rich recreational experience and an expanded knowledge of both the natural and cultural resources of the area.

GENERAL PLAN MANAGEMENT GOALS AND GUIDELINES

Department Mission

Management of Donner Memorial State Park is directed by a hierarchy of mandates. The most general is the Department's Mission, which is to:

Provide for the health, inspiration, and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation.

Classification

Further refining the responsibilities of the Department in its operation of the park is the park unit's classification as a state park. This classification is described in the Public Resources Code, Section 5019.53, as follows:

State parks consist of relatively spacious areas of outstanding scenic or natural character, oftentimes also containing significant historical, archaeological, ecological, geological, or other such values. The purpose of state parks shall be to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora . . .

Each state park shall be managed as a composite whole in order to restore, protect, and maintain its native environmental complexes to the extent compatible with the primary purpose for which the park was established.

PARK-WIDE MANAGEMENT GOALS AND GUIDELINES

This section presents the goals and guidelines that apply park-wide for planning facilities for public access, interpretation, recreation, park administration, and cultural and natural resource management. It addresses planning issues that apply to all geographic areas of the park; in particular, the park core area near Donner Pass Road. These goals and guidelines, as well as those for specific areas of the park, are driven by the Declaration of Purpose and Park Vision.

Park-Wide Goals and Guidelines for Natural Resources

The Department's Mission provides the impetus for the preservation of the state's biological diversity through the protection of its natural resources. The park's Declaration of Purpose specifies goals for restoring biodiversity and maintaining links to the Sierra Nevada bioregion in order to fulfill the Park Vision.

In the spirit of the Mission and the Park Vision, the park's natural resources will benefit from a progressive, pro-active management approach that sets a high standard for environmental protection and advocacy. The natural resource goals described here are also designed to complement those that provide for interpretive and recreational opportunities in the park.

Goal

Preserve and enhance the form and function of the park's ecosystems, in order to protect its physical and natural features and biological processes.

<u>Guidelines</u>

- Compile and update the natural resources inventory for the entire park using trained resource specialists and scientifically valid methods.
- Establish monitoring and adaptive management programs for all species of concern and sensitive habitats within the park.
- Develop a Natural Resources Management Plan that identifies protected areas for sensitive species, habitats, and other resources of concern, while accommodating the need for appropriate facilities and recreational activities.
- Restore damaged or compromised habitats and landscape features through the appropriate application of scientific and technical methods.
- Develop a natural resources interpretive program that fosters increased public understanding and promotes community stewardship.

Vegetation Management

Human management of the land and natural resources in the vicinity of the park has resulted in a vegetation mosaic unlike that which would otherwise exist. Some types of management, such as clear-cut logging, gravel mining, fire suppression, and road construction, have rendered significant impacts on the region's ecosystems. These impacts have influenced the park's features as well the underlying ecological processes that will shape its future. With the knowledge and perspective gained from the results of these historic environmental uses, human intervention and collective commitment will be necessary in order to protect, preserve, and enhance the park's natural and aesthetic values. Providing the public with opportunities to appreciate, participate, and recreate in a diverse and stimulating environment is at the heart of the goals and guidelines proposed here.

Protection of sensitive species and their habitats is mandated in the Department's Resource Management Directives. Conducting a thorough inventory and mapping of the park's sensitive resources is essential for achieving this objective. The preservation of native plant communities is critical for maintaining the park's inherent ecological diversity. Investigating the park's natural history will also provide resource managers with information about longstanding ecological attributes, functions, and processes that should be preserved. Providing for protection and preservation of natural resources will, in turn, require that vegetation management goals incorporate habitat enhancement as a fundamental guiding philosophy. Habitat enhancement can be accomplished through projects and programs that aim to rehabilitate and restore the park's ecosystems. In order to embrace the inclusion of the entire community of park visitors, interpretive programs can provide the educational perspective necessary to encourage the development of environmental stewardship.

<u>Goal</u>

Develop a long-term vegetation management program that promotes protection of native plant species and communities.

Guidelines

- Complete an inventory of the park's plants, fungi, and vegetation that includes sensitive species, habitats, and plant communities.
- Compile information on plants and fungi into a geographical information system (GIS) database with appropriately scaled and detailed maps.
- Develop a comprehensive vegetation management plan, based on inventory, monitoring, and adaptive management, that provides for the sustainability of the form and function of all park ecosystems while providing for continued public enjoyment of the park's environmental attributes.
- Optimize wildlife habitat values through the protection of old-growth and large trees, snags, and downed trees, as well as preserving a vegetation mosaic authentic to the long-term structure and pattern of Sierran forests.

Riparian and Wetland Areas

Water is a critical resource that has sustained considerable damage, with a corresponding deterioration of its value for the environment and to humans. At Donner Memorial State Park, water plays an ecologically central role, given the park's location in the snowy Truckee River Basin, along the shore of Donner Lake, and near the confluence of Donner Creek and Cold Creek. The lake is arguably the most dominant scenic feature in the area, while the park's moist meadows, seeps, ponds, and streams lend relief to an otherwise dry landscape. Opportunities for skiing, skating, swimming, boating, and fishing attract visitors year-round.

While park activities have probably not substantially disrupted the ecological integrity of wetland, riparian, and lakeshore habitats, prior uses and management of adjacent lands and waters have had negative impacts in some areas. Logging,

road and railroad construction, off-road vehicle use, and fire suppression have contributed to vegetation loss and corresponding fragmentation of wildlife habitat, while stream diversions and chemical contamination have reduced the viability of aquatic habitats.

These direct impacts have led to stream and lake sedimentation, soil erosion, non-native species invasions, unnaturally high vegetation densities, and a reduction in species diversity. Protection and improvement of sensitive wetland and aquatic resources should be a high priority for aesthetic and ecological reasons, and well as to satisfy regulatory guidelines.

The following wetland vegetation types occur in the Donner area and should be protected as a component of vegetation management and project planning:

- wet montane meadow
- subalpine meadow
- meadow stream
- aspen forest
- aspen riparian forest
- montane black cottonwood riparian forest

Knowledge about the importance of wetlands and techniques for assessing, avoiding, and repairing human-caused impacts have improved substantially since Donner Memorial State Park was originally dedicated. Comprehensive planning and long-term commitments to ecological restoration and maintenance are necessary to achieve positive long-term results. Potential benefits can be realized from the restoration of ecosystems as well as from the related opportunities for education, interpretation, and community participation.

Goal

Promote and achieve improvements in the quality and function of the park's aquatic and wetland ecosystems.

Guidelines

- Restore aquatic, riparian, and wetland habitats, including historical species composition whenever possible, based on monitoring data, technical study, and community participation.
- Develop a public education program aimed at improving water quality and wetland ecosystems, including provisions for the reduction of chemical contamination in all waters.
- Limit access to smaller ponds and streams to non-motorized watercraft.

Other Sensitive Habitats

Larger trees, islands of native vegetation, and rock outcrops provide habitat for a number of species and lend aesthetic value to the larger landscape. Trees are specifically targeted for protection by Department policy, and consideration for the preservation of each of these habitats should be part of site-specific planning and vegetation management. Other habitats, specifically late successional/old growth forest, and dry montane meadows, should also be protected from recreational or management impacts.

<u>Goal</u>

Develop protective measures for sensitive habitats, microhabitats, and individual specimen plants.

Guidelines

- Protect areas in the immediate vicinity of larger trees in the overstory (> 30 inches diameter at 4.5 feet from the ground).
- Protect all significant rock outcrops from damage or destruction.
- Limit uses of other sensitive habitats to scientific study and monitoring, wherever possible, until the magnitude of potential impacts can be assessed.

Sensitive Species

According to current documentation, no special status plant species grow in the park. However, newly acquired lands may include habitat that could support these species. Field surveys, undertaken as a component of vegetation management practices or project planning, will be necessary to ensure that sensitive plant species habitat is not significantly impacted. Vegetation surveys are needed during the planning and implementation stages of park-wide management programs and as part of the planning process for site-specific project developments. Continuing cooperation and consultation with public agencies, environmental advocacy organizations, and the regional community will enhance the protection of natural resources.

<u>Goal</u>

Compile a comprehensive inventory and GIS database of the park's natural resources, with particular emphasis on newly acquired parcels, to include geology and soils, plant, animal, and fungus species, vegetation types, and wetlands.

Guidelines

• Update the park's natural resources inventory, based on the overall scope of management and development needs; areas acquired since the last inventory may have priority over previously documented areas of the park, depending on overall development and management plans.

- Conduct an intensive program of data collection in those areas to be affected by various resource management programs and development projects, such as day use and picnic areas, a roads and trails system, riparian restoration projects, and a prescription fire-based vegetation management program.
- Compile all information on natural resources into a geographical information system, and store information in the park's unit data file.
- Develop plans to preserve intact habitat, through monitoring and adaptive management, for the purposes of providing protection to any sensitive species or vegetation types.
- Provide information, through interpretive and community-based programs, to promote public education about the park's natural resources.

Fire Management

The widespread inclusion of fire as a component of comprehensive vegetation management programs in California reflects a developing understanding of its critical ecological role in many ecosystems. When applied through the strategic use of reliable historical information and monitoring data, fire can assist managers in maintaining vegetative diversity, reducing fuel loads that can contribute to devastating conflagrations, and reducing the scale, frequency, and severity of epidemic outbreaks of pathogens and insects. In general, fire's role in Sierran ecosystems is well understood, and some agencies have successfully reestablished its role in ecosystems. However, in some areas, human-related circumstances can impede or complicate its strategic implementation.

Restoring fire to ecosystems requires integrating ecological goals with other practical considerations. The application of prescribed fire in urbanized areas will be constrained by safety and cultural concerns, while other land uses and values may be in conflict elsewhere. The establishment of defensible zones around vegetation prescribed for burning may be only one of many challenges to be addressed. Fuel loads and high-density stand growth resulting from decades of fire suppression must often be mechanically managed prior to the reintroduction of fire. Given its potential for substantial impacts on hydrology, soils, vegetation, and individual species, fire's implementation as a vegetation management tool demands deliberately conscientious planning, including site-specific resources inventory and the establishment of a rigorous monitoring program.

<u>Goal</u>

Maintain a fire management program based on vegetation management priorities, historical information, monitoring data, and other park management goals.

Guidelines

- Compile and map a fire history of the park, to be merged with information about vegetation, sensitive habitats, hydrology, visitor use and safety, infrastructure, and other pertinent data, in order to develop a spatially based framework for planning.
- Integrate the park's management objectives into regional fire management policies and protocols through the incorporation of science, community involvement and agency cooperation.
- Develop a monitoring plan to track changes in vegetation, wildlife, hydrology, and other environmental and biotic characteristics.
- Develop a plan that incorporates fire as a vegetation management strategy, including provisions for ancillary activities needed for its application, such as pre-burn vegetation management, mechanical thinning, and road maintenance, decommissioning, and restoration.
- Interpret the important role of active resource management techniques, such as prescribed burning, so that the public will understand and accept the temporary aesthetic impacts that result.

Exotic Species

The impacts that result from exotic (non-native, or alien) plant invasions include losses of native habitat, reduction in species diversity, and disruption of ecological functioning, such as changing fire frequency or nutrient cycling regimes. Relatively cold montane and alpine areas tend to be less affected than those with more moderate climates, so the park has few populations of nonnative plants that currently appear to pose a risk to native species and ecosystem functioning.

In general, sites subjected to disturbance are more likely to be infested with exotic invasive plants than sites with intact soil and native vegetation. Disturbance generally involves the disruption of soil or vegetative cover (terrestrial habitats), of nutrient regimes (terrestrial and aquatic habitats), or of other ambient conditions, resulting from either environmental circumstances, like fire, flood, and landslides, or human activities such as grading, logging, and soil compaction. Examples of disturbed areas in the park include roadsides, trails, campgrounds, timber harvest sites, and streambanks. While these sites may be more prone to invasion, they are also more easily monitored due to the

predictability of potential weed invasions and to their relative accessibility. At greater risk, perhaps, are remote, relatively undisturbed areas that nevertheless are potential dispersal sites for seed or vegetative propagules (roots, stems, rhizomes, etc).

Other than non-native perennial grasses, no alien species dominates any patch of native vegetation in the park. However, control of the few invasive species present, such as woolly mullein and poison-hemlock, and monitoring of disturbed areas, would be prudent in order to avoid the development of more severe infestations. Monitoring in more remote areas could be accomplished as part of periodic assessments of all natural resource features.

Goal

Establish a non-native invasive plant species management program, consistent with Departmental policies and guidelines and including a monitoring component, that aims to control and reduce infestations throughout the park.

Guidelines

- Compile an inventory and GIS database/map of non-native plant species in the park.
- As part of a park-wide vegetation management plan, consider efforts to control invasive non-native plant species based on current information about threats to sensitive habitats, potential for dispersal, and other appropriate data.
- Develop a park-wide monitoring program for non-native plant species, prioritized according to habitat sensitivities and disturbance regimes.
- Provide appropriate interpretive and educational materials on non-native species and their ecological and economic impacts.

Habitat Restoration

The process of physically restoring habitat represents the culmination of several aspects of natural resources management. Goals formulated for restoration purposes are often identical to those articulated for the management of vegetation, wildlife, water, and soils. Planning for restoration requires information on species composition and vegetation types, disturbance regimes and species invasions, ecosystem functioning, and hydrology. As a process, planning and designing restoration projects demands consideration of the full realm of ecological components and functions, and requires knowledge of the site's history. The human element should also be included in restoration, both as a component of degraded or restored ecosystems as well as essential participants in planning and implementation. Restoration also provides opportunities for public education about biology and the planning process. Public participation in

preserving and restoring habitat can provide a true sense of community and of place, and of belonging to the environment in which they live.

Goal

Incorporate habitat restoration activities, including project planning and implementation, as a component of natural resources management.

Guidelines

- Develop a schedule of restoration projects that will facilitate ecological preservation and rehabilitation throughout the park.
- Establish a community-based restoration program that involves the public, special interest groups, environmental organizations, and governmental agencies in a cooperative process of restoration planning and implementation.
- Coordinate restoration efforts with programs in other management disciplines, including interpretation and maintenance.

Natural History Education and Interpretation

The education of the general public, including the regional community as well as park visitors, is a vital component of vegetation management. In addition to providing interpretive opportunities for most visitors, resource management affords numerous opportunities to educate through participation. Examples of public education that can enhance understanding of park management and regional ecology include interpretive programs, museum displays, field trips, campfire presentations, and restoration projects. Specific topics for education include the role of fire in ecosystems, Sierran geology and climate, hydrological and nutrient cycles, mutualistic interactions between species, and the earthy, living world of soil. Integrating public participation into the park's various programs will enhance community and visitor appreciation of the wealth of both natural resources and social opportunities the park offers.

Goal

Develop an educational program about the park's natural history that reflects its characteristic environmental features and is integrated with current programs in resource management.

<u>Guidelines</u>

• Provide interpretive information on the park's natural resources and appropriate resource management programs, as well as on the environment, in general.

- Schedule field trips and other community activities that will afford the public opportunities to become aware of the park's resources and specific management issues.
- Establish a restoration program that allows the community opportunities to participate in the preservation and enhancement of the park's natural resources.

Animal Life Management

Many native wildlife species have declined considerably in the past century, both in California and worldwide. Preservation and perpetuation of sustainable populations of native wildlife species are statewide goals for the Department. The goal to rehabilitate, protect, and maintain native ecosystems and indigenous flora and fauna is especially important at the park because of the park's important role as a link between fragmented forest habitats of the Sierra Nevada.

Timber harvest, fire suppression, and gravel mining activities have changed native plant and animal communities within the park. The successful restoration and protection of forest and riparian communities and processes will help to ensure the stability of wildlife populations. For example, snags and downed logs provide an essential component of diverse forests, but were routinely removed as a part of timber harvest practices in the past. In the future, timber and fuels management planning will provide the opportunity to restore and protect snag and downed log habitats.

Recreation facilities and human activities such as picnicking and camping change natural communities, resulting in increased populations of some wildlife species and decreased populations of others. Populations of corvids, such as ravens, Steller's jays, and Clark's nutcrackers, often increase because people make food available by feeding, or by improper storage of food and garbage. Corvids are significant nest predators and can severely damage local bird populations.

Twenty-seven wildlife species known or potentially present in the park are classified as species of special concern (see Appendix E, Sensitive Terrestrial and Aquatic Vertebrate Species). These species play an essential role in the functioning of the ecosystems of the Sierra Nevada and they depend on region-wide protection of their habitats. The goals for Donner Memorial State Park are consistent with regional plans such as the Sierra Nevada Ecosystem Project (SNEP), and the U.S. Forest Service Sierra Nevada Forest Plan Amendment. Modifications to sensitive animal habitats for recreational development or restoration will include protection of sensitive species.

Some species are dependent on mature forests, such as northern goshawk, Sierra Nevada snowshoe hare, and lodgepole chipmunk. Other species require aquatic habitats, such as Sierra Nevada mountain beaver and Lahontan cutthroat trout. The osprey and Cooper's hawk require both mature forest and lakes or rivers.

<u>Goal</u>

Rehabilitate, protect, and ensure the perpetuation of native fish and wildlife populations at Donner Memorial State Park, and where appropriate, restore special animals within Donner Memorial State Park and manage for their perpetuation in accordance with state and federal laws.

- Conduct a comprehensive inventory of the park's sensitive wildlife and habitats.
- Use sound ecological principles and professionally accepted methods to protect and rehabilitate sensitive animal populations and their habitats. Include all native species that are locally important, as well as those protected by federal or state law. A comprehensive list of species requiring special management attention should be prepared and regularly updated.
- When feasible, the Department should support scientific research studies within the park that provide mapping, establish monitoring programs, and furnish data and analysis about the distribution and condition of natural resources. For the successful long-term management of wildlife populations, establish and maintain a process to track and analyze species presence and population health within, and movement through, the park.
- Rehabilitate degraded wildlife habitat in those areas where it will not recover in a reasonable time if left untreated.
- Consider closing or bridging roads that cross through streams to protect sensitive amphibian and aquatic wildlife, as well as water quality. Inventory and monitor river access points to determine the extent of public use impacts.
- Avoid ecological imbalances resulting from human activities. If it is necessary to regulate animal populations, use methods based on sound principles of ecosystem management that are consistent with Department Resource Management Directives.
- Consider reintroduction of locally extirpated native species only if historical documentation exists to confirm the presence of the species of interest within the area and if suitable habitat exists within the park and the region to support its survival. Reintroduction of a species will be conducted using sound ecological methods. Animals to be reintroduced will come from local populations or the closest, most genetically similar populations.

- Reduce and, where possible, eliminate wildlife access to human food and garbage by using wildlife-proof trash containers throughout the park, including administration and residence areas. Educate the public about the detrimental effects that supplanting wildlife food sources with human food can have on the ecological balance of the park and surrounding region.
- New facilities development should be limited to areas with existing impacts, and development should be avoided in sensitive forest and riparian habitats. Trail building and maintenance activities in these areas should be minimized during the breeding season and should comply with protection protocols established by the appropriate regulatory agencies.
- Factor the needs of sensitive aquatic species into the timing and implementation of any work that results in streambed alteration or riparian disturbance to avoid adverse impacts to these species. Consult with the California Department of Fish and Game on restoration of Lahontan cutthroat trout habitat.
- Inspect structures for sensitive species, particularly for bats, and establish protection measures for sensitive species when maintenance, construction, or structure demolition activities are anticipated.

Habitat Linkages

Habitat linkages are lands held and managed primarily for their natural resource values with the purpose of making a continuous connection between two or more larger land areas. Together, these lands form a habitat suitable for facilitating the movement of animals and dispersal of plant propagules. Protecting linkages within the park, as well as between the park and other wildland areas, is essential to maintaining ecosystem health and supporting regional conservation. Because of the importance that mature coniferous forests have for sensitive species, and because of the decline of these habitat types throughout the Sierra Nevada, priority for corridors should be given to those lands that connect such forest ecosystems.

<u>Goal</u>

Preserve, rehabilitate and, as appropriate, establish new effective habitat linkages between the park and other protected lands in order to maintain or increase species abundance and diversity within mature, as well as ancient forest ecosystems, riparian areas, streams, and other significant wildlife habitat areas.

Guidelines

• Establish a program to collect baseline information for monitoring the health and function of natural areas with high visitor impact and habitat linkages as a high management priority. The effects of human uses and impacts, as well as natural processes such as erosion and weather, on the integrity of the park's ecosystems should be measured and, where necessary, mitigated or remedied.

- Monitor mammals, birds, amphibians, and fish, as necessary, to gauge the effectiveness of habitat linkages, identify wildlife population trends, and ascertain potential future habitat linkage needs.
- Maintain working relationships with other landowners, such as the U.S. Forest Service, to coordinate efforts to identify and preserve habitat linkages.
- Based on soundly justified environmental needs, consider establishing new linkages with habitats on other protected lands through acquisition or appropriate conservation easements from willing sources, subject to the availability of support funds.

<u>Buffers</u>

Buffers, such as dedicated open space and forest, lie between the park's boundary and adjacent developments and serve to protect the park's natural and cultural resources. Land uses outside park boundaries can negatively impact parklands through habitat fragmentation, wildfire, impacts to groundwater, chemical pollution, exotic plant infestations, competition and predation from domestic pets, visual and audible intrusions, artificial light, and noise. Buffers may be necessary where activities on neighboring lands create adverse impacts, such as erosion and sedimentation on existing park watersheds and wind throw on ridge top areas.

Goal

Establish, maintain, and preserve buffers around existing significant park resources as protection against adverse environmental impacts.

- Perform studies to assess adverse impacts to prime park resources from such conditions as commercial development, degraded watersheds, leaching of toxins, and runoff from railroad maintenance.
- Establish and maintain cooperative working relationships with local jurisdictions responsible for zoning and land use management.
- Seek cooperative agreements with adjacent landowners, neighbors, and local jurisdictions to provide for needed buffers adjacent to existing park resources. Consider acquiring neighboring properties from willing sources to serve as buffers against such impacts as urban development and upper watershed impacts, where studies document an adverse or potentially adverse impact to the park's prime resources.

Watershed Management

Historic land uses, such as logging, road and railroad construction, and grazing have altered many of the natural processes in the park's watersheds. Problems resulting from these uses include excessive upland and streambank soil erosion, stream sedimentation, changes in channel geometry, alteration of channel courses, loss of streamside vegetation, disconnection of streams from their floodplains and loss of aquatic and meadow habitat. In addition, construction of the dam on Donner Creek has created a barrier to fish migration in and out of Donner Lake.

Goal

Restore geomorphic function to the watershed to the extent possible, thereby significantly reducing or eliminating unnatural soil and streambank erosion, stream sedimentation, and habitat degradation, and to eliminate, where possible, manmade channel restrictions/obstructions within the park's watersheds.

Guidelines

- Work with universities, colleges, and other researchers to increase the scientific knowledge base that could benefit park watershed management without negatively impacting the park resources.
- Recognize that flooding and bank erosion are natural ecological processes; only accelerated erosion and sedimentation should be mitigated.
- Installation or maintenance of channelized streams and hardened stream banks should be minimized or eliminated except where necessary to protect existing critical infrastructure. Where it is necessary to stabilize a channel in place, biotechnical methods should be utilized to the greatest extent possible.
- Investigate feasible methods to re-establish normal seasonal flow patterns and to remove barriers to fish migration in Donner Lake and Donner Creek. Consider water rights issues and design objectives for dam construction and stream crossings.
- Acquire additional lands or conservation easements from willing sources, where necessary, to maintain the physical integrity of ecological units, such as upper watersheds.

<u>Goal</u>

Manage the Cold Creek watershed to re-establish geologic stability and ecological balance.

<u>Guidelines</u>

- Develop a Watershed Management Plan for the park to define current conditions and to determine where mitigation is needed.
- Mitigation may include working both in the stream channel as well as in the upper watershed to restore natural drainage patterns and geomorphic stability. Activities might include road and trail rehabilitation or removal from sensitive areas, stream modifications, debris management or introduction, revegetation, as well as other activities. Provisions will be made for fish habitat during this transition period.

Water Quality

The surface water and groundwater of the Truckee-Donner area is an important resource that must be protected. The primary responsibility for protection of water quality lies with the State Water Resources Control Board and nine regional boards. In the Truckee-Donner area, the Lahontan Regional Water Quality Control Board is responsible for adopting and implementing the Water Quality Control Plan (Basin Plan) that sets forth the water quality standards and control measures for surface water and groundwater. New projects or new/increased visitor use within the park must be evaluated to insure that they do not contribute to degradation of surface and groundwater quality.

Goal

Identify the beneficial uses and the surface water quality objectives for Donner Lake, Donner Creek, and Cold Creek.

- Be familiar with the specified surface water and groundwater beneficial uses, water quality standards, and water quality objectives as set forth in the Water Quality Control Plan for the Lahontan Region.
- Identify any potential naturally-occurring impacts to water quality, such as landslides or stream channel erosion.
- Determine if natural processes have been aggravated or accelerated by human activities and devise mitigation measures.
- Identify management actions to prevent any negative impacts to water quality from planned construction or other activities in the park.
- Adhere to the water quality protection standards and control measures available in the Water Quality Control Plan for the Lahontan Region. The use of best management practices for erosion control and surface runoff (stormwater) must be developed for any projects within the park. Principal control measures are: 1) remedial erosion and drainage control, and SEZ

(Stream Environment Zone) restoration; 2) installation and maintenance of erosion and surface runoff control measures for all new and existing development; 3) controls on nonpoint source discharges from new development (i.e. impervious surface coverage); and 4) controls on discharges from other activities (i.e. recreational facilities, including boating).

- Groundwater beneficial uses and water quality objectives, including the Nondegradation Objective, set forth in the Water Quality Control Plan for the Lahontan Region, must be identified and steps taken to prevent degradation of groundwater within the park. Potential sources of groundwater contamination include chemical pipelines, septic system failures, and chemical seepage via abandoned wells. Contamination of the soils and of surface water can also eventually contaminate groundwater. Measures for groundwater protection include: 1) proper installation, permitting, and maintenance of septic systems; 2) proper decommissioning of all abandoned water wells to prevent a conduit for surface contamination to reach aquifers; 3) prohibiting surface dumping of chemicals, waste oils and gasoline, or other hazardous substances.
- Provide interpretive information to educate the public on ways to improve and maintain the water quality in the Truckee-Donner Basin.

Geologic Concerns and Natural Hazards

Several potential geologic and natural hazards must be considered when planning new buildings, campsites, roads, or trails within the park. Site-specific investigations should be conducted in any areas where new development is planned. The investigations may consist of reconnaissance geologic mapping, aerial photo surveys, and geotechnical investigations. These investigations are important to protect manmade structures, public safety, and to reduce impacts to the natural environment.

The areas of lowest elevation in the park are underlain by sediments deposited by both streams and glaciers. The sediments range in size from clay up to large boulders deposited by alpine glaciers. Most of the soils in this area of the park are relatively young, poorly developed, and considered to be highly erodible. The steeper slopes in Coldstream Canyon, Lakeview Canyon, and on Schallenberger Ridge contain volcanic rocks overlying granitic rocks. Most of these soils are also highly erodible and may be subject to landslides. Special attention must be shown to areas that have been previously logged or subject to forest fires, as this will increase the potential for soil erosion and landslides.

Impacts from avalanches may occur on the north-facing slope of Schallenberger Ridge. Potential avalanche zones exist in the areas above the snowsheds on the Union Pacific rail line. Flooding is possible along Donner Creek and Cold Creek during significant storm events. The potential for overtopping of the dam on Donner Creek exists, and flooding of the low-lying areas in the park could occur.

Micro-earthquakes are a common occurrence in the Donner-Truckee area, due to the continued uplift of the Sierra Nevada. Occasional larger earthquakes, up to magnitude 6.3, have occurred in historic time. Liquefaction during an earthquake could occur in loose, granular materials (alluvium) below the water table, such as along stream channels and in unconsolidated, disturbed materials. However, damage from earthquakes is not expected to be a major concern in the park. No known faults are located within the park boundaries.

<u>Goal</u>

Minimize any negative impacts resulting from the park's natural processes with regard to planned structures or other public projects (trails, roads, campgrounds, etc.).

- Monitor and document the geologic and other natural processes affecting the park and its resources.
- Include professional (biological, geological, engineering) evaluations for the siting and design of permanent structures, campgrounds, roads, and trails to mitigate potential damage from unstable soil, landslides, avalanches, flooding, earthquake-induced damage, and potential soil or groundwater contamination. These evaluations are also to protect the environment from adverse effects due to construction projects. Detailed site investigations and soil testing will be conducted during the planning and design of specific construction projects.
- Perform slope stability and soils studies in public use areas, including monitoring geomorphic change where appropriate and feasible. The intent is to understand the geologic processes affecting sites receiving public use and where resources might be at risk. Employ management actions that minimize erosion and prevent the creation or reactivation of landslides to reduce the risk of erosion hazards to people and resources.
- Identify areas of geological or other natural sensitivities to insure that any planned projects will not negatively impact the park's natural environment. Monitor and document the geologic and other natural processes affecting the park and its resources.
- Determine areas subject to avalanches and prevent the construction of any park structures or campgrounds in those areas. Any roads or trails constructed through avalanche-prone areas should be posted with appropriate warnings during winter months to protect the public.

- Areas subject to flooding along Donner Creek, Donner Lake, Cold Creek, and any tributaries should be identified.
- New structures should be built according to the appropriate seismic guidelines for the area as set forth in the Uniform Building Code (latest accepted edition). Seismically-induced liquefaction may occur in areas of loose, saturated sediments along stream channels and in former gravel borrow pits. Permanent structures should be avoided in those areas.
- All data collection and mapping for determination of geologic hazards should be maintained in a database, with GIS mapping procedures utilized. This allows easier presentation of information for subsequent management plans and reports. This electronic information can be shared between districts, service centers, and other interested parties.
- Provide interpretive programs on the geology of park, how the park was shaped by geologic forces, and the potential geologic hazards within the park.

Park-Wide Goals and Guidelines for Cultural Resources

Cultural resources referred to in this General Plan consist of significant and potentially significant prehistoric and ethnographic sites, historic and ethnohistoric resources, and cultural landscapes. These include but are not limited to such features as archaeological sites, homesteads, historic structures, mill sites, and historic roads and trails. Cultural landscapes are defined, in part, as landscapes that evolved through use by peoples whose activities or occupancy shaped them. They can be comprised of aggregates of such cultural resources as agricultural communities, homestead sites, ethnographic or ethnohistoric landscapes, trails, old roads, cemeteries, orchard remnants and homestead sites, as well as natural resources, topography, and their associated features.

The most important of these resources are the sites associated with the Donner Party and one of the alignments of the Emigrant Trail. They tell the multitude of stories of several thousands of years of human presence upon this land. Protecting and interpreting cultural resources will help future generations better understand the widely differing philosophies about the high Sierra held by Native Americans, early-arriving European and American travelers and settlers, the lumber industry, and today's preservationists and recreationists.

Goal

Ensure the highest level of appropriate protection, stabilization, preservation, and interpretation of the park's cultural resources, focusing in areas of exceptional archaeological and historical significance.

- Develop an inventory, mapping, and database utilizing GIS technology for those cultural resources within the park that may be eligible for inclusion in the National Register of Historic Places and/or the California Register of Historic Resources.
- Prepare a park-wide Cultural Resources Management Plan that establishes an ongoing management process to record and develop findings of significance for cultural resources in the park that are historically or archaeologically important. Consistent with other park goals, including the protection of prime resources, develop a long-range management strategy that includes preservation, stabilization, rehabilitation, or reconstruction for the park's significant cultural resources, including the transportation history of the high Sierra.
- If a finding of significance for cultural resources has not been made, consult with cultural resource specialists to determine significance prior to undertaking programs for development or rehabilitation of an area to natural conditions. Any plan for restoration, remodeling, adaptive reuse, or non-use must comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and will require careful consideration to ensure the widest public benefit, until such time as the more comprehensive Cultural Resources Management Plan can be completed.
- Establish a program to protect all significant cultural resources from adverse effects resulting from park use, development of facilities, resource management programs, or natural processes, such as erosion.
- Develop a research program that will address past lifeways of the Washo within the park. Research topics should address settlement patterns, subsistence technology, trade and exchange, and socio-political functions.
- Consult regularly with Washo and other groups who have traditional ties to resources within the park to ensure productive, collaborative working relationships, especially when considering management practices, such as the Department's gathering policy, and interpretation involving the park's natural and cultural resources of interest and concern to them.
- Consider acquisition of additional land from willing sources, if necessary, that will provide a buffer for the protection of especially significant park historic, prehistoric, and archaeological sites or properties of concern to Native Americans.
- Work with other trails associations and agencies to develop appropriate mechanisms for preserving and interpreting the park's historic trails.

Park-Wide Goals and Guidelines for Managing Visitor Impacts

The Department recognizes the importance of the public need for recreation opportunities but also acknowledges that any recreational use produces at least some impacts. There is a need to manage visitor impacts in conjunction with providing and maintaining the diversity of resource values and conditions of the park. Use the established Donner Memorial State Park General Plan Planning Zones described below as the guide for allowing and managing appropriate types and levels of public use of park resources. See also the Park Planning Zones Proposals matrix.

<u>Goal</u>

Apply professional processes and methods for identifying, analyzing, and managing visitor activities in order to minimize resource impacts, while maintaining appropriate types and levels of visitor use.

Guidelines

- Survey and review areas of potential impacts, employing appropriate personnel and responsible agencies, in accordance with the California Environmental Quality Act (CEQA), prior to site-specific development or during the preparation of management plans.
- Establish specific criteria for desired resource conditions for each planning zone. Periodically assess resource conditions and design and implement appropriate actions to manage public and Department operational impacts while assuring maintenance of acceptable resource conditions.

PARK-WIDE VISITOR USE AND OPPORTUNITIES

Establishing and maintaining access for public use is an important part of the successful management of Donner Memorial State Park. Changing demographics and use patterns will require ongoing periodic evaluations of park operations and resource management programs.

Park-Wide Goals and Guidelines for Circulation

Travelers on Interstate 80 and nearby roads are not currently being informed about the existence of the park in an effective way.

Goal

Improve signage along Interstate 80 and local roads leading to the park that announce the existence and location of the park in a clear and effective way.

Guidelines

 Coordinate with Caltrans, county and local agencies to provide easy to read signs on highways and local roads that direct visitors to the park's entrance(s), and maximize potential visitor opportunities to learn about and visit Donner Memorial State Park. Evaluate and improve signage along the highway and on local roads to reach visitors eastbound and westbound on I-80, northbound and southbound on Highways 89 and 267, as well as interchanges and Donner Pass Road intersections in and around Truckee.

The existing system of roads and trails at Donner Memorial State Park has grown through time primarily in response to the construction of new facilities, and to allow public access to park resources. In light of potential land acquisitions and modifications of existing land uses recommended in this General Plan, the entire road and trail system in the park should be analyzed, and recommendations made for appropriate modifications to existing circulation systems.

<u>Goal</u>

Prepare a Roads and Trails Management Plan for guiding the location, distance, use, and maintenance of existing and future roads and trails.

- The Roads and Trails Management Plan should make recommendations that increase visitors' enjoyment and safety when exploring the park.
 - To serve park destinations and attractions, create a circulation system that does not create traffic conflicts. Consider the development of multi-use and single purpose trails and create separate travelways where necessary to improve safety and minimize traffic conflicts.
 - Evaluate signs on roads and trails within the park to determine if they are adequate to announce, orient, and focus visitors arriving and moving through the park. Make changes where necessary to create continuity of siting and design, concentrating visitors' attention on the park identity, destinations, and attractions, and to provide appropriate warnings of potential hazards (e.g., pedestrian or bicycle crossing points) and opportunities for disabled visitors. Use Department sign standards for materials and content.
 - Provide more loop trails, staging areas, and backcountry trail experiences as a high priority for each of the park's trail user groups, including equestrians, mountain bicycle users, and visitors with disabilities.
 - > Evaluate the current backcountry roads to determine future needs:
 - Roads to be retained in order to provide critical safety and fire response;

- Access for resource management projects such as vegetation inventory and assessments, restoration of habitat, wildlife species monitoring, and prescription fire preparations and management;
- Roads to be converted to trails to provide essential linkages in the trail system;
- Roads to be removed to lessen the impact on the natural or cultural resources.
- Consider expansion of park road and trail linkages with surrounding lands.
 - Evaluate and propose a backcountry trail system that provides longer hikes with connection to U.S. Forest Service lands and trails, the Donner Rim Trail, the Pacific Crest Trail, trails in the Town of Truckee and within its Trail Plan, and others, and to accommodate overnight camping opportunities.
 - Assess the possibilities of developing connections from the park's trail system to surrounding trails through acquisitions by willing sellers or easements.
- Ensure a high level of protection for the park's resources.
 - In the Roads and Trails Plan, emphasis should be placed on creating opportunities for visitors to enjoy the park's diverse topography, biotic communities, scenic views, and cultural attractions with minimal or no impact to the park's natural or cultural resources.
 - Avoid loss of trees and impacts to important habitats and soil stability in all significant ecosystems within the park.
 - Evaluate the suitability of using the historic Emigrant Trail for future trail use and/or an interpretive trail experience.
- Establish design and maintenance criteria for new and existing roads and trails in the park.
 - Establish criteria and characteristics for appropriate road and trail design to guide future road-to-trail conversions and new road and trail construction and maintenance.

Park-Wide Goals and Guidelines for Recreation

The park provides numerous opportunities for recreational activities. As California's population continues to increase and diversify, the demands for outdoor recreational opportunities are also certain to grow and change, both in the numbers of people desiring an outdoor experience and in the types of recreational activities they desire.

<u>Goal</u>

Provide a multitude of recreational opportunities that will allow California's diverse population to visit, enjoy, and better understand the significance of the park's resources, while maintaining the highest levels of natural and cultural resource management.

- Plan recreational opportunities within a regional context. Provide for recreational activities at the park that are appropriate for its size and varied terrain. These may include, but are not limited to, vehicle and primitive camping, trail hiking, bicycling, swimming, boating, cross-country skiing, rock climbing, nature study, and the enjoyment of solitude.
- Evaluate the current capacities of the following kinds of facilities to provide a quality visitor experience, while embracing facility upgrades to make current and future programs accessible to the general public. These include small and large group day use facilities, vehicle-oriented campgrounds, group camping, environmental camps, a museum/visitor center facility, and trails.
- Prepare management plans or complete appropriate studies to provide a
 greater understanding of planning issues and natural and cultural resources
 for major development projects in the park, including trails. These plans and
 studies should include project area resource surveys and monitoring. They
 should take into account potential impacts of facilities and visitation increases
 on the resource base, the relationship of the new facility(ies) to those already
 existing, access and traffic loads on feeder roads, as well as those within the
 park, and disabled accessibility, where feasible.
- Avoid adverse impacts to critical resource areas when considering the need and/or location for new public facilities. For example, refrain from placing high concentrations of people near sensitive riparian habitat.
- Design group camps to accommodate different sized groups, allowing maximum potential for use by a single large group or by more than one smaller group at a time.
- If recreation trends and visitor desires indicate viable interest in types of facilities that would be new to the park, complete feasibility studies as necessary to evaluate compatibility with other uses and resource management objectives.

- Continue to provide public access to the park's waterways, assuring compatibility of public recreation needs with resource management goals for resource protection.
- Explore strategies to provide maximum feasible accessibility to campsites, trails, vistas, interpretive resources, and other park facilities.
- Consider possibilities for private concessions to provide recreational activities that are not offered by the Department.
- Consider acquisition of additional properties by willing sellers to provide appropriate sites for expansion or relocation of recreational facilities, including trail connections.

Park-Wide Goals and Guidelines for Potential Land Additions

Donner Memorial State Park, like most other state parks, has grown over time. Land acquisitions have added recreational opportunities and natural and cultural resources to the park for visitors' enjoyment as well as for preservation and management of these resources.

<u>Goal</u>

Consider local additions to the park's land base, from willing sellers, to increase recreational and resource management opportunities for the park.

Guidelines

- See Park-Wide Goals and Guidelines sections for Natural Resources and Cultural Resources for guidelines for potential acquisitions specific to these subjects.
- The Department should consider any land available for addition to the park to provide expanded opportunities for recreational facilities and uses. Evaluate at the time of acquisition how best to utilize these lands for recreational use, or for relocation or expansion of existing recreational facilities in the park.

Park-Wide Goals and Guidelines for Interpretation

Donner Memorial State Park features natural, cultural and recreational resources of widespread significance. The park provides evidence to the wisdom that discovery is a long, slow, ever changing, multi-cultural process sometimes fraught with failure. The parklands bear witness to the prehistory and history of the population, industrialization, and modernization of the west.

Existing interpretive programs and facilities for the visitor at Donner Memorial State Park do not tell the complete story of the region's geological formation and plant, animal, and human use of this area. The park has the potential to tell all these interesting stories, along with the story of the pioneers and the Donner Party, in a way that connects historic events and times with our experience today.

Role of Collections for Donner Memorial State Park

Museum collections maintained at Donner Memorial State Park have a specific connection to the cultural and natural history of the park or provide support for interpretive themes and programs. Artifacts associated with Native American sites at Donner Lake and the Truckee River, important hunting and gathering locations, will continue to be curated. These include archaeological materials and historic objects associated with ancient peoples or historic Washo inhabitants. Objects associated with the Donner Party experience at the site, including those from archaeological context, and personal items and memorabilia connected with the Donner Party members will remain an important part of the collection.

Those artifacts more generally identified with the Emigrant Trail experience, including wagons, equipment, personal equipment, and historic documents, are potential collection items. These artifacts will objectify the cultural history of the park as a passageway between the eastern and western slopes of the Sierra.

Natural history collections, including specimens of flora and fauna, should focus on the environmental differences between the Great Basin and California natural provinces and on the Sierran biotic province between them. As the Sierra is essentially a massive granite block, geological and topographic factors are an essential part of the cultural history of the Sierra. Geological specimens should also be collected to provide interpretation of these resources.

The subject areas identified above represent site-specific aspects of the collections. The park's purpose will commemorate the people who have crossed the Sierra through time and who experienced the site as passage rather than as a local living environment.

<u>Goal</u>

Expand artifact and museum collections to commemorate the people who have crossed the Sierra through time.

- Acquire and curate artifacts and historical documents that explain the factors underlying the westward migrations and transportation corridors through the region, including those before and after the California Gold Rush. Artifacts should include:
 - Archaeological specimens, both prehistoric and historic, from sites on park property.
 - Art objects created to commemorate the emigrant experience.

- Documentary material recording the impetus for and experience of emigration into California.
- Ethnographic material relating to local Native Americans and those along the Emigrant Trail, and historical material about Chinese participation in railroad construction.
- General artifacts necessary to the interpretive goals of the park.
- Natural history specimens from the Sierra Nevada, California, and the Great Basin.
- Vehicles and machinery important to the emigrant experience, including transportation vehicles used by the emigrants.

Interpretive Period

Donner Memorial State Park is of primary importance to two groups for whom the park is significant: the Washo Tribe, who have lived in the area for thousands of years; and the emigrants from the eastern United States who resided there between 1844 and 1846.

The cultural history interpretive period of the park extends from prehistoric times (approximately 4,000 years before present) to modern times (approximately 1964). The earliest date for the purpose of interpretation is defined by relevant archaeological evidence found within and adjacent to the park; the range of this information extends into the historic period. The earliest date of the historic period is established by the early times recollected through Washo Tribal Oral Tradition and is categorized mainly by recorded history as opposed to physical evidence. At Donner Memorial State Park, natural history is directly linked to human history. The rugged topography, impeding snows, and harsh winter climate all conspired to create the human tragedy that the park memorializes. The primary interpretive period extends through time to the completion of construction of Interstate 80 in 1964.

More specific categorical timelines and their interrelationships should be based on thorough research and be defined in the park Interpretive Plan to be developed after this General Plan is completed.

<u>Goal</u>

Interpret the resources, resource protection, and preservation of Donner Memorial State Park to the public, to promote a broader understanding of the interdependency, diversity, and value of all life; to connect visitors through all their senses to the intrinsic values of the resources at the park and the role that they play in the protection, preservation, and enjoyment of our natural, cultural, and recreational resources.

Guidelines

• The conceptual means to facilitate visitors' connections to existing resources are universally understood truths that underlie all cultures, i.e., birth, life,

adversity, struggle, health, mortality, etc. The Department should attempt to integrate these into interpretive programs and facilities to assist the public in understanding the resources and history of the park.

A unifying interpretive theme provides conceptual and contextual consistency for interpretive exhibits and programs throughout the park.

<u>Goal</u>

Present a unifying theme for interpretation through primary and supporting thematic contexts. Primary and secondary themes will conceptually support the unifying theme.

Guidelines

The following includes an appropriate unifying interpretive theme and primary and supporting themes for Donner Memorial State Park.

- Unifying Theme: Natural and cultural factors create opportunities and challenge adaptations in the Sierra Nevada Range.
 - Primary Theme: Natural processes create and change the land, water and inhabitants.
 - Supporting Theme: The Sierra Nevada Range is alive with geological processes.
 - Supporting Theme: The Sierra Nevada Range defines the Donner Lake Region.
 - Primary Theme: Plants and animals adjust to changing conditions through adaptation.
 - Supporting Theme: Demanding seasonal conditions limit opportunities and foster adaptation or migration.
 - Supporting Theme: Water in many forms supports all life in the Donner Lake watershed.
 - Primary Theme: Humans adjust to changing conditions through adaptation and migration.
 - Supporting Theme: Humans encounter the Sierra Nevada barrier.
 - Supporting Theme: Demanding seasonal conditions limit opportunities and foster adaptation or migration.
 - Primary Theme: Knowledge is power, living vs. surviving in the rugged Sierra Nevada.

- Supporting Theme: Native Americans employ sustainable technology to reap the benefits of the land.
- Supporting Theme: Many wisely guided emigrants follow time-tried paths and methods to seek their fortunes in distant lands.
- > <u>Primary Theme</u>: Human beings catalyze change.
 - Supporting Theme: Humans adapt the land to their needs and wants.
 - Supporting Theme: Push and pull, many changes elsewhere effect permanent changes here.
- > <u>Primary Theme</u>: Human dominion over nature; some win, some lose.
 - Supporting Theme: Those who located and built the mountain crossings and why they did.
 - Supporting Theme: New technologies pave the way for new desires.

Park-Wide Goals and Guidelines for Aesthetics

All landscapes are dynamic and have definable, multi-dimensional characteristics. Light, visual patterns and textures, temperature, scent, sound, expanding vistas or focused views blend together to create distinguishing aesthetic qualities, often referred to by planners as a "Spirit of Place." Donner Memorial State Park is in a landscape characterized by conifer forests, towering mountain passes, streams, wildlife, and seasonal phenomena, such as summer flowers, fall color, and winter snow, that all harmonize to evoke a positive emotional response to this special place of great beauty.

Human perception is based primarily on what is seen and heard. Therefore, the visual and audible effects of human activities are of great importance in determining how a society relates to a landscape.

To sustain the aesthetic and audible qualities unique to the park, both in-park and surrounding land management practices are critical. Preserving the highest aesthetic standards for Donner Memorial State Park is a responsibility that should be shared. State Park planners, park managers, and staff, as well as representatives from other responsible agencies and neighboring landowners, must work cooperatively to create and sustain an aesthetic ambiance befitting the beauty of this place.

<u>Goal</u>

Identify, preserve, and perpetuate the distinctive landscape qualities that give Donner Memorial State Park its special "spirit of place."

Guidelines

- Donner Memorial State Park is in a high Sierra environment and includes both land that is relatively flat and slopes that rise to high elevations. The Department should define fully the aesthetic characteristics of the park and its surrounding landscapes in order to be able to integrate these characteristics into the design of new park facilities.
- Ensure visual and audible standards contained in guiding documents, such as county and the Town of Truckee general plans, are followed both in the park and on surrounding lands identified as having significant aesthetic impacts on the park.
- For positive aural experiences, locate service and maintenance functions away from public areas. Space interpretive stops and campsites so that natural, not human, sounds dominate. Orient openings toward natural sounds such as the babbling creek and the lapping of lake waves. Restrict the audio levels of sounds from radios and other human-made devices, and reduce vehicle noise through screening, berms, separation of use areas, etc.
- Acquire surrounding land from willing sellers to protect views, viewsheds, and to help reduce existing noise levels in the park.
- Develop maintenance standards for existing facilities that are integrated with the aesthetic design standards established for new and renovated park facilities.

<u>Goal</u>

Preserve and perpetuate distinctive landscape qualities in the park, and guide appropriate design for renovation of existing facilities or future construction.

- Building and structure design should reflect the native qualities of the individual building site. Structures should not extend higher than existing tree canopy, and/or should be designed to fit comfortably into an ultimate planting/native vegetation scheme.
- Buildings and structures should be integrated into existing landforms wherever possible, and take advantage of existing contours for energy efficiency (wind protection) and low visual impact, where appropriate.
- Care should be taken when designing structures and public use areas to preserve and present views of natural elements. Emphasize grand views,

such as those to the surrounding peaks and Donner Lake, by the use of design elements that showcase these views. Consider views both from a structure and toward the structure when choosing design elements for that structure.

- Consolidate functions or segment facilities to reduce the footprint of individual structures to allow sensitive placement within existing landforms, including parking lots, buildings, and other large facilities.
- Apply the concept of "first impressions" not only to the entrance area of the park, but to every human-designed element in the park. Identify elements that will exist together in an area and organize and present these elements in a clear and uncluttered way, while reducing and simplifying these elements to the minimum necessary.
- Where appropriate, screen parking lots, roads, and operations structures from public use areas. Use plantings, rocks, elevation change, and other methods that either use or mimic natural elements to minimize negative visual impacts of these facilities.
- Road alignments throughout the park, except those having historical significance, should hug the natural contours and give visitors a positive aesthetic experience while traveling through the park.
- Provide visual surprises within design of facilities to stimulate the educational and aesthetic experiences of visitors.
- For buildings and structures, use designs that utilize native materials or faithfully replicate materials such as native stone and timber, as appropriate. Bury any rocks or boulders used in landscape design to mimic a natural setting, where rocks are usually partially buried.
- For buildings, structures, and site design, use muted colors that reflect the natural surroundings, such as the green and brown of the pines, the colors of the native rock, and the blues of the sky and lake. Brighter colors can be used as accents, but should not be a dominant feature of any structure.
- Use design principles of scale, rhythm, proportion, balance, and composition to enhance the complementary integration of any new facilities into the environmental context of the site.
- Vary the textures of walking and driving surfaces to identify or give a different quality to different spaces. This should especially be considered in the construction of parking lots and walkways around the new visitor center. Consider the use of contrasting pavement textures throughout the park to direct attention to interpretive opportunities.

- Vary the elevations of circulation elements to separate different types of circulation by sight, where possible or appropriate.
- When possible, consult with indigenous populations for design input as well as to foster their sense of ownership and acceptance of new facilities.

Park-Wide Goals and Guidelines for the Use of Sustainable Design

The use of sustainable design and construction materials is an appropriate concept for the Department to consider in development of new facilities. Sustainable design contributes to a healthier environment, which in turn would benefit the park's visitors and natural and cultural resources.

<u>Goal</u>

Use sustainable design in the siting and construction of any future facilities and, as much as possible, in the maintenance of facilities in the park, including buildings, parking lots, campgrounds, day use areas, and trails.

Guidelines

- Where possible, use natural, renewable, indigenous, and recyclable materials, and simple-to-maintain and energy-efficient design.
- Use cost/benefit analysis over time to help justify the use of more costly, sustainable construction materials.
- A primary objective of using sustainable design would be to enhance opportunities to teach and "lead through example" of the importance of respect toward our living Earth and the natural resources that sustain life both inside and outside the park.
- Consider the building or structure/land interface to minimize disturbance to site character, skyline, vegetation, hydrology, and soils.
- Consider using natural or non-toxic means of pest and vegetation control.
- Use sustainable design to minimize impacts to cultural and natural resources by choosing appropriate building sites and creating low-impact structures that avoid the use of environmentally-damaging, waste-producing, or hazardous materials.
- Consider phasing construction to allow for monitoring of resource impacts and adjustment in subsequent phases.

The concept of sustainable design speaks to the need for reconnection between human needs and the natural systems upon which all life is based.

<u>Goal</u>

Design park facilities that recognize that a primary goal for recreation (recreation) is the need for human connection with the park's natural systems and cultural resources.

<u>Guidelines</u>

- Facilities will be designed to incorporate the primary senses sight, hearing, smell, taste, and touch – to enhance the visitor's understanding of the environment's uniqueness.
- Facilities will be designed to foster a sense of connection to the natural and cultural resources in the surroundings, to appreciate their worth and the need for stewardship of these resources for future generations.
- Use sustainable design to help create the feeling that natural and cultural resources are a primary component of the visitor experience at the park.

PARK PLANNING ZONES

Park Planning Zones have been developed in this General Plan as a guide for systematizing land use and resources. The zones represent parts of the park that have similar characteristics and should be managed with similar strategies. They are illustrated on Map 8. The Planning Zones Proposals matrix identifies the presence and condition of resources, desired level of development, and visitor experience preferred within each zone.

Park Planning Zones: Goals and Guidelines

Goals and guidelines for each Planning Zone are either site-specific or pertain to conditions and activities that occur chiefly within that zone. The preceding parkwide goals and guidelines apply to all zones. Protection and preservation of natural ecosystem elements and processes, including protection of listed and special status species and important cultural features, will be integral components of the management of all of the zones.

Planning Zone #1: Cultural Resources, Recreation Use, Museum/Visitor Center

Statement of Management Intent

Planning Zone #1 extends from Donner Pass Road to Donner Creek, the northernmost area of the existing park. There is a small extension of this zone south of the creek at the dam due to the presence of cultural resources. The zone includes the park entrance area, the Emigrant Trail Museum and parking lot, day use trails, and beaches along the east end of Donner Lake. This zone currently has the most concentrated public use in the park. The majority of visitors access the park through this zone.

Considered in this planning zone is an approximately 40-acre area within property owned by A. Teichert and Son, Inc. to the east of the current park boundary, as a potential museum/visitor center site.

It is the intent of management to continue to focus on Planning Zone #1 for the park's entrance and initial visitor contact areas, including the construction of a new visitor center. Existing park day use will remain in this zone.

Planning Zone #1: Zone-wide Goals and Guidelines

The Planning Team considered several criteria and goals for selection of the most appropriate alternative museum/visitor center sites. Criteria that were used included:

- Convenient and safe access year-round from Donner Pass Road, as the museum/visitor center is open all year;
- Good views of the mountain passes and peaks that the pioneers traveled (for interpretive purposes);
- Situated so that activities at the facility would present a minimum of disturbance to existing park day and overnight use facilities;
- Potential for the least adverse impacts to natural and cultural resources;
- Large enough to accommodate parking facilities of adequate size for museum/visitor center users, including tour buses and trucks for facility service.

This zone contains important cultural and natural resources as well as a concentration of visitor use facilities.

<u>Goal</u>

This area should have a successful combination of public access facility development, the interpretation, protection and preservation of important cultural resources, and the restoration of the vitality and health of natural ecosystems.

Guidelines

• Visitor access, recreation, and interpretive facilities that are essential to the park and compatible with cultural and natural resource management objectives will continue to be allowed in this zone in the future.

- This zone contains a large multi-component archaeological site. Management of this planning zone will be focused on preserving and interpreting this significant cultural resource.
- Establish the significance and appropriate treatment of historic sites and structures in this zone, following all state and federal guidelines.
- Vegetation management in this zone will focus on protection of native species and habitats, where possible, and be maintained for compatibility with protection of cultural resources and provisions for facilities development.
- Protect and preserve prominent natural features, including trees, rocks, substantial stands of native vegetation, and watercourses. Provide for protection of all prominent natural features in accordance with Departmental policies and guidelines and regulatory laws and statutes, during the implementation of any development or associated work within this zone.
- Identify all natural and cultural resource features to be protected within potential development impact areas; map these features and provide data storage in a geographical information system during the planning stages of site-specific development.
- Restore disturbed sites wherever possible to maintain and improve overall vegetative and aesthetic integrity.
- In placing new utilities, follow existing utility alignments, if possible, to minimize impacts on cultural and natural resources. Install utilities underground to minimize impacts on aesthetic resources.
- Protect riparian areas along Donner Creek and protect the public from potential flooding hazards by locating campsites, trails, roads, and permanent structures a set distance from the defined edge of a stream environment zone (SEZ). The setback distance is determined based on criteria in the Basin Plan, and may range from 15 to 50 feet.
- Define the 100-year floodplain within the park to determine acceptable locations for any future structures.

Traffic circulation at the current entrance to Donner Memorial State Park is inefficient. On busy weekends, traffic backs up in front of the kiosk, making it difficult to access the Emigrant Trail Museum parking lot; it can create a backup of vehicles onto Donner Pass Road. The current entrance area is also visually cluttered and does not provide clear direction to visitors.

<u>Goal</u>

Establish patterns of circulation and signage that allow clear choices and adequate space for visitor arrival and departure in any new park or visitor center entrance area(s). Create a visually-pleasing entrance area(s) and facilities that create a sense of expectation and convey a positive and accurate park image.

Guidelines

- Analyze existing traffic problems at the park entrance and use this information in the design of new park entrance(s). Existing traffic conflicts between park users and park staff, and visitor center users and campground/ day use visitors are particular problems in the existing park.
- If the museum/visitor center and campground/day use access roads come into the park from the same entrance point on Donner Pass Road, have the visitor center access road split off from the entrance road before the kiosk. This will allow year-round visitor center access without conflicts with other park users. Allow enough vehicle stackup space prior to the kiosk, or extra traffic lanes, for heavy use days.
- Attempt to provide travelers coming into the park or new museum/visitor center area with a feeling of "slowing down the pace" and of transition from the urban and highway environments to the natural world.
- Analyze and improve "first impressions" by park visitors in the entrance area(s). This effort should include designing park facilities and elements (signage, landscaping, fencing, paving, etc.) with a minimum of the negative visual impacts associated with clutter. Create a visual theme for the park (see Park-wide Goals and Guidelines for Aesthetics above) and incorporate its design elements and goals in a holistic manner within the park and the new visitor center entrance area(s).
- Provide landscaping for park facilities that mimics the nearby natural setting; for instance, bury landscaping boulders in the soil to reflect the natural condition of boulders in the surrounding area, rather than place them on top of the soil.
- Where possible, when designing parking lots, design several smaller parking areas rather than one large area, and use screening between parking areas and from park visitors. Use existing vegetation, trees, boulders, etc. as natural buffers between small parking areas. Create parking area(s) that are large enough for winter snow storage as well as for winter visitor center and recreation users' parking needs. Follow local and regional agencies (Lahontan Regional Water Quality Control Board, etc.) regulations for site design and construction.

- Establish obvious visitor and staff contact points and have clear directions to park areas and attractions.
- Separate vehicle, pedestrian, bicycle and equestrian circulation to the extent possible.
- Where possible in this Planning Zone, screen or soften the visual effect of roads, parking areas, and operations and maintenance facilities from public views in order to enhance visual aesthetics and provide buffers between use areas.
- Park roads leading to developed facilities shall be accessible to patrol and emergency vehicles.

Planning Zone #1: Museum/Visitor Center Alternatives and Proposals for Facilities

Teichert Property Alternative

A site within the A. Teichert and Son, Inc. property east of the current park is the General Plan's preferred alternative for the location of a new museum/visitor center for Donner Memorial State Park. Management intent for this area would focus on bringing visitors in on roads on Teichert property to the new museum/visitor center. This new facility would tell the stories of natural, cultural, transportation, and recreational history of the area through time, as well as orienting visitors to Donner Memorial State Park and its resources.

<u>Goal</u>

To provide a new museum/visitor center for Donner Memorial State Park preferably on the Teichert property east of the current park.

Guidelines

- Access to the new visitor center would be off Donner Pass Road onto Coldstream Road, and through Teichert property west of the visitor center site. Vehicular access to Donner Memorial State Park day use areas and campgrounds would remain at or near the current park entrance along Donner Pass Road.
- First impressions of the building and its related facilities should be of an uncluttered site, with direct access to the parking area and understandable, clearly signed circulation to the museum/visitor center, as well as to other nearby park features.
- The purpose of the new museum/visitor center is to support the mission of the Department, provide a California gateway experience, and inspire park and museum visitors with lasting impressions of the natural, cultural, and

recreational resources in the park. Most importantly, the nexus of change that occurred following the advent of emigration through the area should be explored.

- The building should be designed to showcase and interpret views of the canyons and passes that the pioneers saw and traveled through.
- Any site work within areas of existing vegetation would be sensitive to the natural surroundings, with a minimum of disruption to the vegetation.
- The parking lot for the new visitor center should be designed and located where it will not adversely impact views from the building to the mountain passes south and west of the building site, from public use areas, and park trails.
- Site planning for the museum/visitor center should consider the design of the surrounding outdoor areas to provide for outdoor gatherings and children's play. These facilities could include an outdoor amphitheatre and playground area.
- A trail is proposed from the new museum/visitor center to the cultural sites near the existing museum. This trail would connect with existing trails to allow efficient public access to natural and cultural resource areas, to Coldstream Canyon, and to park day use areas and campgrounds. The trail would be sited and landscaped to create a pleasant, aesthetically-pleasing walking experience to encourage museum/visitor center users to walk rather than drive to the park's attractions, and campers and day users to walk rather than drive to the museum/visitor center. It should be screened from roads, parking lots, and other park facilities.
- The parking lot at the existing museum would be reduced in size to accommodate short-term visitor parking and parking for disabled persons. Bus parking and turnaround should be located away from the monument site and active visitor use areas. Bus parking may be developed adjacent to Donner Pass Road northwest of the existing kiosk. Buses would enter the bus parking area after going through the kiosk. All new pavement areas will be capped with appropriate materials to protect and signal the presence of cultural resources, if appropriate.
- The Pioneer Monument area should be enhanced with interpretive signs and site furnishings to increase visitor enjoyment and knowledge of the history of the site.
- The existing park entrance road should be improved to allow more vehicle stack-up room in front of the kiosk, and/or additional lanes around the kiosk for improved traffic flow.

- If the Teichert property were to have a new museum/visitor center, the plan proposes that the existing Emigrant Trail Museum be converted into offices for park operations and administrative purposes. Archaeological investigations should be done to help determine site significance.
- Converted museum/park office and operations and employee residence area and parking access will be through the existing kiosk and on existing roads. Employee parking can be provided in an extension of the operations area driveway toward the converted museum, if necessary.
- If operations and maintenance facilities are located elsewhere, the existing site and structures may be considered for rehabilitation and adaptive use for interpretive programs, artifact collections, etc. The existing maintenance driveway, plus an extension of the driveway pavement toward the existing museum building, can be used for public parking.
- If the Teichert site is developed for a new museum/visitor center, a site at the east end of Donner Lake should be considered for development of a group day use facility, which could accommodate weddings and other appropriate activities through special use permits. Public access to this group facility would be from Donner Pass Road.

Lakeside Area Alternative

If the Teichert site cannot be obtained or developed for the purpose of a new museum/visitor center, then the Department should pursue the construction of a new museum/visitor center located at the east end of Donner Lake. This area is one of the least culturally sensitive within a larger cultural site north of Donner Creek. Prior to acquisition by the Department the parcel was the site of a lumber mill. The previous owner created significant disturbance to the area as he cleared the site prior to its sale.

<u>Goal</u>

A new visitor center at the east end of Donner Lake should introduce park visitors to the natural and cultural values and stories associated with Donner Memorial State Park, and to direct visitors to other areas of the park.

Guidelines

• A separate park entrance to the new museum/visitor center would be developed along Donner Pass Road, at the west side of the park in an area that is now an unpaved road. Visitor access to camping, day use, and park operations and administrative facilities would remain at or near the existing park entrance.

- The entrance road to this site should contain simply-designed, clear signage and an uncluttered aesthetic effect to allow visitors arriving from I-80 and from urban areas to slow down and begin to enjoy the natural surroundings of the park in comfortable and peaceful ways.
- The new building would be approximately 12,000 square feet in size depending on the results of appropriate studies done at the time of design and construction.
- The structure should reflect the surrounding landscape in color, building materials, and scale, and should reflect a rustic simplicity in harmony with the natural character of the park. It should be no larger than necessary to fulfill its functions, and should be energy efficient and accessible to visitors with disabilities. Restrooms should be sited to be conspicuous but should not be focal points.
- The new museum/visitor center must be constructed outside the 100-year floodplain, or designed accordingly, and should be set back from the lake for minimum visual impact on lake users and from nearby shorelines, and to reduce impacts on sensitive natural resources.
- Parking capacity for the museum/visitor center should reflect parking standards applicable for the size of building determined to be appropriate for the site. This parking may also serve as trailhead parking for recreational activities during the winter months.
- A new interpretive/nature trail connection should be made between this new visitor center and the Pioneer Monument and surrounding cultural sites and other park attractions.
- An access road within the park for authorized vehicles should be considered between the new visitor center and entrance kiosk.
- Feasible alternatives for improving the existing dam on Donner Creek for public vehicle access into the park's developed day use and campground areas should be identified.
- All other aspects of the proposed plan would remain the same as if the visitor center were developed on the Teichert site.

Existing Entrance and Emigrant Trail Museum Area

For many years, the existing entrance area for the park has experienced traffic conflict and congestion problems that can negatively impact visitors' first impressions and experiences when entering the park. The existing Emigrant Trail Museum has inadequate facilities for interpretation of park resources. Also,

existing operations and administration facilities in this area do not adequately serve the park and its visitors.

<u>Goal</u>

The park's entrance and existing Emigrant Trail museum area should promote positive first impressions of the park, make first contact with visitors, direct visitors to other areas of the park, allow convenient access to the park's cultural and natural sites in this area, and serve park administration and operations functions.

Guidelines

- Analyze existing traffic patterns, circulation, and parking facilities in Planning Zone #1. Make improvements that create a positive first impression of the park, and minimize traffic conflicts both inside and outside the park on adjacent roads. For peak use periods, consider moving the point of access on Donner Pass Road and adding traffic lanes on either side of the kiosk to create more vehicle stackup space in front of the kiosk.
- Consider conversion of the existing Emigrant Trail Museum to a park administration/operations structure.
- Provide short term and disabled parking for access to the Pioneer Monument, the Nature Trail/Murphy Cabin site, and other attractions in this area. Use the existing museum parking lot and kiosk pavement footprint area as much as possible in providing this parking area. Remove the remainder of the existing museum parking lot.
- Screen or soften the visual effect of parking areas and park buildings from public use areas.
- Historic or non-historic buildings currently used for employee housing and park operations functions could be adapted for park administrative and/or interpretive facilities, if alternative housing and/or maintenance facilities could be provided elsewhere.
- Additional parking facilities for park staff working in a converted museum building could be located in an extension of the current operations driveway.

Operations and Residence Area

 Historic structures in the park should be evaluated for their statewide and national significance. Following this evaluation, adaptive uses for these structures can be considered, such as employee residences, or conversion to interpretive venues or park offices. Any modifications should follow all applicable federal and state guidelines and regulations.

- An alternate site for operations facilities and maintenance functions may be considered at a location west of the existing park residence area in the existing maintenance storage area, located outside of required setbacks for construction of facilities along Donner Creek.
- If operations and maintenance facilities are located elsewhere, the existing site and structures may be considered for rehabilitation and adaptive use for interpretive programs, artifact collections, etc. The existing maintenance driveway, plus an extension of the driveway pavement toward the existing museum building, can be used for public parking.
- Employee housing may be located outside of the park, away from public use areas, if more appropriate locations can be found.
- Highway and park directional signage should be evaluated and improved as it relates to new park development and park visitor needs. Signs should be visible and clearly understandable to visitors in vehicles as well as pedestrians.

Planning Zone #2: Recreation Use, Natural Resources

Statement of Management Intent

The majority of the park's recreation facilities are present in this zone: three campground loops, day use areas along the shore of Donner Lake, the Split Rock rock climbing area, and several hiking trails that connect to recreational facilities and to Coldstream Canyon and beyond.

This area provides visitors with comfortable, safe and enjoyable overnight camping facilities as well as beautiful day use areas and trails along the shores of Donner Lake. The goal of management is to continue to provide these amenities for visitors while linking their stay to the natural and cultural resources that surround them.

<u>Goal</u>

Provide safe, convenient recreational and interpretive opportunities for visitors within this zone, consistent with appropriate protections for natural and cultural resources.

<u>Guidelines</u>

- There have been small culturally important areas identified in recent studies within this zone; however, recreational development has been and will continue to be the focus for management of this area.
- Provide a group campsite and associated facilities to accommodate a single large group, or several smaller groups at a time.

- Natural and cultural resources within this zone will be protected and managed according to Department, state, and federal goals and guidelines for these resources.
- Vegetation management in this zone will focus on protection of native species and habitats, and be maintained for compatibility with protection of cultural resources and provisions for facilities development.
- Protection of natural resources should include maintaining the integrity of the glacial moraines, and locating park facilities outside floodplain and riparian habitat, where possible and appropriate.

Planning Zone #3: Future Study Zone

Statement of Management Intent

This zone includes park property in Coldstream Canyon, Schallenberger Ridge, and potential land acquisitions to the west and south of the existing park. This general plan effort has been focused on potential visitor center sites and park circulation; studies in Planning Zone #3 have been limited and would need to be completed prior to any facility construction in this zone.

<u>Goal</u>

Continue management of natural and cultural resources in this zone while continuing studies of these areas to determine appropriate land uses and resource management strategies.

Guidelines

- Natural and cultural resources management will continue in this zone. Future studies will determine appropriate future management actions regarding these resources.
- Vegetation management in this zone will focus on protection of native species and habitats where possible and be maintained for compatibility with protection of other natural and cultural resources and provisions for facilities development.
- Continued public access will be allowed pending future planning and studies to evaluate and recommend appropriate land uses and the types and location of new facilities. Development of recreational facilities in this zone will require appropriate studies to be completed.
- Coordination with adjacent property owners (public and private), and federal, state and local agencies having jurisdiction over nearby lands will be necessary during these future planning processes.

ENVIRONMENTAL ANALYSIS



ENVIRONMENTAL ANALYSIS

SUMMARY

The objectives of the Environmental Analysis section are to identify the significant impacts of implementing the General Plan and to provide general mitigation measures for a first tier of environmental review. The General Plan does not provide a detailed program of specific development or management, but sets the broader goals for the park's management, resource protection, and provisions for public use. Future planning steps may include layout and design of facilities or specific resource management plans and processes. A more detailed level of environmental analysis is applied at that time.

This analysis focuses on the environmental effects of the preferred alternative – Lakeside Area, where the proposed museum/visitor center location is within the current park boundaries. The environmental effects of the preferred alternative – Teichert Property, where the proposed museum is on adjacent property (currently owned by A. Teichert and Son, Inc.), will be evaluated further in a separate project-specific Environmental Impact Report when details of the project are considered and the property is transferred to the Department.

The proposals contained in this document were developed during the general planning process for Donner Memorial State Park. The General Plan proposals, also referred to as the plan, respond to critical issues in park facilities and management and provide guidelines for future park land use decisions. The plan outlines specific goals and guidelines, recommends facility development, and identifies the need for specific resource management plans.

The plan proposes construction of a new museum/visitor center on adjacent property east of the current park boundaries, or on a site at the east end of Donner Lake. The park administrative functions may be relocated to the structure currently occupied by the Emigrant Trail Museum. The museum/visitor center entrance road will be relocated to accommodate the new museum and to alleviate traffic circulation problems at the existing entrance. Parking facilities will be modified and park-wide traffic circulation will be improved. Trail connections will be developed from the new visitor center to existing park facilities, and a group day use and group camping area will be developed. Comprehensive management plans for roads and trails, natural resources, and cultural resources are also proposed. Planning zones have been identified which will guide parkwide land use decisions and visitor use areas.

Potential significant environmental impacts are those commonly associated with facility development and visitor use. Potential adverse impacts identified in this plan include disturbance to or loss of natural and cultural resources, degradation of water quality due to excessive soil erosion and sedimentation, and impacts to

visual resources. Potential mitigation measures for each type of impact have been discussed. These mitigation measures reflect the specificity of the General Plan and are therefore in the form of guidelines. The most appropriate mitigation measures will be developed as specific projects are proposed and implemented.

DESCRIPTION

This General Plan for Donner Memorial State Park, with all its sections, constitutes an environmental impact report (EIR), as required by Public Resources Code Sections 5002.2 and 21000 et seq. It will be submitted to the California Park and Recreation Commission (Commission) for approval. The Commission has sole authority for the plan's approval and adoption. Following approval by the Commission, the Department will prepare management plans and area development plans as staff and funding become available. Future projects, based on the proposals in this General Plan, may be subject to permitting requirements and approval by other agencies, such as the Department of Fish and Game.

The Notice of Preparation for this General Plan was circulated to the appropriate federal, state, and local planning agencies. Written comments were received from the California Regional Water Quality Control Board, Lahontan Region.

The tiering process of environmental review is incorporated into this EIR. Tiering in an EIR prepared as part of a general plan allows agencies to consider broad environmental issues at the general planning stage, followed by more detailed examination of actual development projects in subsequent environmental documents. These later documents incorporate, by reference, the general discussions from the broader EIR in the General Plan and concentrate solely on the issues specific to the later projects [Public Resources Code Section 21093; California Environmental Quality Act (CEQA) Guidelines Section 15152]. This document represents the first tier of environmental review.

As a first tier of planning, this plan provides park-wide goals and guidelines for interpretation, cultural and natural resource management, circulation, recreation, aesthetics, sustainable design, and visitor use. Future second tier review will provide more detailed information and environmental analysis. At each planning level the plan will be subject to further environmental review to determine if it is consistent with the General Plan and to identify any significant environmental impacts and mitigation measures that may be specific to the project.

Mitigation generally requires resource specialists to evaluate the scope of work, identify the cause of the impacts, and specify measures to avoid or reduce the impacts to a less than significant level. More comprehensive environmental review will be possible at those levels of planning, where facility size, location, and capacity can be explicitly delineated, rather than at the general plan level.

Additional potentially significant environmental impacts and mitigation measures specific to the project will be identified at this time.

The Plan section of this General Plan represents the project description and establishes the overall long-range purpose and vision for Donner Memorial State Park. Specific goals and supporting guidelines are designed to address the currently identified critical issues, while developing strategies for resource protection, preservation, rehabilitation, resource interpretation, and facility development at the park.

The plan proposes the identification of three distinct planning zones to guide land use decisions, facility development, and visitor use. The plan also outlines a number of park-wide proposals, including the development of a comprehensive resource management plan, a roads and trails management plan, and watershed management plan. If the General Plan were fully implemented as written, the following proposals would be carried out:

Preferred Alternative: Summary of Proposals by Planning Zone

Planning Zone #1: Cultural Resources, Recreation Use, Museum/Visitor Center

- Identify, protect, and interpret all significant natural and cultural resources; restore disturbed sites where feasible.
- Analyze existing traffic circulation at the park entrance; improve the park entrance road for increased traffic flow; create a circulation system that does not create traffic conflicts.
- Utilize sustainable design and materials in the development of new facilities.
- Screen or soften the visual effect of parking lots and operations and maintenance areas from public views.
- Provide a new museum/visitor center on property east of the current park boundary, or at a site adjacent to Donner Lake; design the museum/visitor center building to highlight and interpret the major views of the historic passes used by the pioneers.
- Develop a separate entrance from Donner Pass Road to the new museum/visitor center; develop a new trail from the museum/visitor center to other established trails and park facilities and provide appropriate trail connections.
- Convert the existing Emigrant Trail Museum to park offices.

- Reduce the size of the parking lot at the existing Emigrant Trail Museum to provide short term and accessible parking only; develop separate bus parking.
- Install additional interpretive signs and site furnishings at the Pioneer Monument.
- Develop a group day use facility at the east end of Donner Lake.
- Consider alternative sites for the maintenance and operations facilities and functions; consider rehabilitation and adaptive uses for the existing maintenance and operations structures.
- Evaluate highway and park directional signage; furnish clear signage to park areas, attractions, and facilities.

Planning Zone #2: Recreation Use, Natural Resources

- Protect and manage natural and cultural resources.
- Maintain recreational development as the priority for management.
- Develop a group camp area.

Planning Zone #3: Future Study Zone

- Continue natural and cultural resources management.
- Continue public access.
- Coordinate with private landowners and federal, state, and local agencies with jurisdiction over nearby lands.

Preferred Alternative: Park-Wide Proposals

- Develop a comprehensive natural and cultural resources inventory.
- Develop resource management plans to evaluate the park's natural and cultural resources and provide guidance for protection, habitat restoration, and adaptive management.
- Coordinate with resource and regulatory agencies for the protection, enhancement and management of cultural and natural resources; maintain cooperative relationships with all groups who have traditional ties to resources within the park.

- Minimize activities and new facility development in sensitive habitats; inventory and monitor areas where the public has access to water resources to evaluate use impacts; limit access to smaller ponds and streams to nonmotorized watercraft; reduce, and where possible, eliminate wildlife access to human food and garbage.
- Inspect all structures for sensitive species; identify and comply with all species protection measures prior to maintenance, construction and/or structure demolition.
- Cooperate with adjacent landowners, local jurisdictions, and regulatory agencies for ongoing resource protection, including the acquisition of property from willing sellers or obtaining conservation easements, for habitat linkages, buffers, and the enhancement and protection of views and viewsheds.
- Develop a Watershed Management Plan that will identify surface and groundwater quality objectives, beneficial uses, and existing negative impacts to water quality; develop management actions to prevent and minimize impacts to water quality from naturally-occurring processes, visitor use, maintenance, and development activities (to include best management practices for erosion control and surface runoff for all projects within the park).
- Identify and evaluate areas of potential resource hazards, including flooding, landslides, and avalanches; develop management actions to minimize impacts to recreation, facilities, and visitor use; prohibit the development of permanent structures, campgrounds, and major day use facilities in areas subject to significant hazards.
- Utilize the planning zones as a guide for appropriate development and visitor use; establish specific criteria for desired resource conditions and visitor experience for each planning zone; establish management actions to minimize unacceptable impacts.
- Implement a comprehensive and cohesive sign program to evaluate signage along the highway, on local roads, and within the park; cooperate with appropriate state, county, and local agencies to eliminate any deficiencies.
- Develop a Roads and Trails Management Plan to guide the location, distance, use, and maintenance of existing and future roads and trails.
- Provide a variety of recreational opportunities for California's diverse population; evaluate capacities of existing facilities and visitor demand for expanded or new types of facilities; evaluate the need for upgrading facilities for maximum feasible accessibility.

- Identify, preserve, and perpetuate the distinctive landscape qualities of Donner Memorial State Park by defining the aesthetic characteristics of the park and developing aesthetic quality objectives and standards; enhance and protect existing views, viewsheds, and other aesthetic resources in the design and layout of new park facilities; develop and integrate maintenance standards for existing facilities with aesthetic design standards established for new and renovated park facilities.
- Develop interpretive programs for natural resources in order to promote public understanding and stewardship.

The proposed General Plan attempts to address the challenges and constraints created by the existing uses, facilities, and visitor demands. The plan provides direction, criteria, goals, and objectives for future development, operation and management.

ENVIRONMENTAL SETTING

Refer to the Park Summary section of the General Plan for a description of the existing park environment, significant resource values within the park, and the local and regional environment in the vicinity.

This General Plan is consistent with other applicable regional plans, such as the Town of Truckee General Plan, Nevada County General Plan, and Placer County General Plan.

SIGNIFICANT ENVIRONMENTAL EFFECTS

The purpose of this section is to identify impacts of the project that have the potential for significance and will require more detailed analysis when management plans and area development plans are prepared.

According to the CEQA Guidelines Section 15382, a significant effect on the environment refers to a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." Significant environmental effects are those commonly associated with visitor use, facility rehabilitation, and development projects. These adverse effects can include negative visual impacts, degradation of water quality, and disturbance to or loss of cultural resources, sensitive species, and wildlife habitats.

The term threshold is used to describe levels of impact. Thresholds are standards used to determine if an activity or project will cause, or potentially

cause, a substantial adverse physical change. If the project or activity could exceed a threshold, the impact is considered potentially significant. If appropriate mitigation can reduce the impact below the threshold, the impact is considered less than significant.

Mitigation is defined as actions that will:

- avoid the impact altogether by not taking a certain action or parts of an action;
- minimize the impact by limiting the degree or magnitude of the action and its implementation;
- rectify the impact by repairing, rehabilitating, or restoring the impacted environment;
- reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action; and
- compensate for the impact by replacing or providing substitute resources or environments (CEQA Guidelines Section 15370).

This General Plan is the first phase of a tiered EIR and, as such, proposed development and associated mitigation are general in nature. Many of the proposed mitigation measures are contained in the plan goals and guidelines. As management plans, area development plans, or other projects are proposed, they will be subject to further environmental review. Project specific mitigation measures will be developed and implemented at that time.

The following potential impacts and associated mitigation measures refer to proposals planned within the existing park boundaries. The proposal for a future museum/visitor center at an off-site location (currently Teichert property) will be subject to separate and extensive environmental review.

Aesthetic Resources

Threshold

The threshold level for an aesthetic impact consists of a management or development activity that will substantially degrade the existing aesthetic character or quality of a site and/or its surroundings, or is incompatible with the character of the park. This includes, but is not limited to, activities that are visually offensive to both visitors and park neighbors.

Impact

Potentially significant, unless mitigated

Discussion

Any changes that substantially degrade the visual experience for visitors to the park and others viewing the park from adjacent property have the potential to cause significant impacts. The significance of visual impacts is dependent on the expectations and perceptions of the viewers. The presence of facilities or

numerous visitors would generally be more offensive to those expecting a wilderness experience than to those expecting higher levels of service or social interaction.

The following are identified in the plan as facilities that, if developed, could create significant adverse visual impacts within the park:

- New museum/visitor center
- Group day use facilities
- Group camp facilities
- Parking for the museum/visitor center, group day use, and buses
- Entrance roads
- Interpretive exhibits/facilities
- Trails, including trail connections and associated support facilities (trailheads)
- Adaptive reuse of the existing Emigrant Trail Museum and operations and maintenance structures
- Informational signage

The development of new facilities could create adverse visual impacts if proper design for color, scale, location, style, materials, and architectural mass are not carefully considered. The use of inappropriate colors, design, and materials in the natural landscape or historic setting may be visually offensive.

A parking area with reflective parked vehicles and inappropriate lighting could be a very obvious human-made intrusion to the natural landscape. Development of outdoor interpretive structures could create adverse visual impacts for park visitors. High-profile directional, informational, and interpretive signs along trails, roads, and highways could also contribute to visual clutter. In addition, there is a potential for significant visual impacts from development adjacent to Donner Lake in an area of the park that may be visible from the nearby road and by neighboring landowners.

The impacts to visual resources are considered potential because the actual size, location and design of the facilities or structures have not been determined.

Mitigation

Visual impacts can be avoided or reduced by appropriate siting, design, and selection of materials. The development of aesthetic design standards and objectives, management plans, and specific project designs will define aesthetically appropriate design features, identify visual resources, and identify optimum methods for protecting existing resources. Appropriate native plant species should be used to screen or soften the visual effect of parking areas, campground facilities, roads, and trails; buffer intrusive or distracting views and activities outside park boundaries; and enhance scenic views. Construction and

maintenance activities should be scheduled to decrease the impacts to visitors and adjacent property owners.

General Plan designated planning zones will also provide additional resource protections. The planning zones outline appropriate development and land use, or make recommendations for future studies, as well as recommend consideration of acquisition parcels to retain and enhance scenic resources.

All plans and projects will be in compliance with local, state, and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project specific mitigation. Mitigation will be implemented in later planning and development stages.

The impacts to visual resources can be reduced to a less than significant level.

Responsibility:	Department of Parks and Recreation Staff/Landscape Architect, and other mandated contracting authorities
Monitoring/Reporting:	Completion of required resource evaluations and development plans prior to implementation of specific projects, as part of the subsequent tier CEQA review

Biological Resources

Threshold

Direct take or removal of a sensitive species; substantial reduction, disturbance, or alteration of sensitive habitat or native plant community; actions that reduce, disturb or alter critical habitat, cause a fish or wildlife habitat to drop below self-sustaining levels, reduce the number or restrict the range of a rare, threatened, or endangered species, or threaten to eliminate an animal community; introduction of non-native, invasive species.

Impact

Potentially significant, unless mitigated

Discussion

Human activities and associated impacts (including timber harvest, mill operations, fire suppression, and gravel mining) have altered native plant and animal communities throughout the region, including lands in what is now Donner Memorial State Park. The remaining habitats that have survived provide food, shelter, and nesting sites for sensitive species and are highly valued park resources. Consequently, protection and restoration of these habitats, especially forest, riparian, and wetland communities, is essential and will help ensure the stability of plant and wildlife populations. The park has an important role as a link between fragmented forest habitats of the Sierra Nevada. Sensitive wildlife, habitats, and plant communities are known to occur at Donner Memorial State Park. A complete survey of the park's biological resources has not been completed; therefore there is the potential for additional sensitive resources at the park. Potential significant impacts to these biological resources may occur during facility development, construction, rehabilitation, or resource management as proposed in the General Plan.

Development of the following facilities and activities could create significant adverse impacts on biological resources within the park, especially the introduction of new facilities and structures into previously undisturbed areas.

- New museum/visitor center
- Group day use facilities
- Group camp facilities
- Parking for the museum/visitor center, group day use, and buses
- Entrance, visitor, and maintenance roads
- Trails, including trail connections and associated support facilities (trailheads)
- Interpretive exhibits/facilities
- Adaptive reuse of historic structures
- Rehabilitation of areas where the landscape has been disturbed
- Vegetation management projects and programs

There are several habitat types within the park's current boundaries that are considered sensitive. Two of the most sensitive habitat types within the park boundaries are wetlands and riparian habitat. Facility rehabilitation and development, including additional trails, regional trail linkages, and resource management have the potential to disturb, degrade, or remove habitat. The introduction of new facilities and structures into previously undisturbed areas of the park could create substantial adverse impacts on wildlife.

The plan identifies the majority of potential facility development in an area that has been previously disturbed and currently receives a large amount of visitor use. There would be minimal adverse impacts to vegetation and wildlife in this portion of the park.

Ground disturbance, including grading, soil compaction, or vegetation removal, has the potential to provide habitat for non-native invasive species. Ground disturbance could include new facility construction (structures, parking lots) as well as trail and campground development or rehabilitation. Trails and roads can also become dispersal corridors for invasive plants. The spread of invasive species, especially in previously undisturbed native habitats or sensitive habitats, may have adverse impacts by promoting the loss of native habitat and reducing species diversity. Vegetation management in the park can result in significant impacts as well as pose potential risks to humans and property. Among management activities that will require further impact assessment prior to implementation are prescription burning of vegetation, habitat restoration projects (including stream restoration, soil grading, and other activities), and removal of plants, whether exotic or native.

Mitigation

The General Plan proposes a number of guidelines to preserve, enhance, and minimize disturbance to vegetation and wildlife. A comprehensive Natural Resource Management Plan would be developed that will provide guidance for identification, protection, habitat restoration, and adaptive management of the park's resources, especially species of special concern and sensitive habitats.

Site-specific surveys for sensitive species and habitats will be completed as part of the planning process for resource management projects, construction, maintenance, or rehabilitation of facilities and trails. If necessary, state and federal resource agencies may be consulted to assist with appropriate resource protection, habitat enhancement, and management techniques.

If there is any potential for significant adverse effects, proposed facilities will be redesigned to avoid impacts, or appropriate mitigation measures will be developed to reduce the impacts to a less than significant level. All activities and new facility development in areas of known sensitivity would be minimized. This may include limiting access to some areas of the park, or temporarily closing or relocating facilities to promote restoration. Construction and restoration will be scheduled whenever possible to avoid disturbance to sensitive wildlife, especially during the breeding season. In addition, all large trees, significant rock outcrops, and other sensitive habitat will be preserved and protected from construction impacts.

The planning zones outlined in the General Plan will also provide additional resource protections by designating appropriate land use, facility development, and visitor use areas, resulting in a significant reduction in opportunities for facility development and adverse visitor use impacts in sensitive areas.

Visitor use impacts to wildlife can be significantly reduced or eliminated by placing facilities away from known nesting sites and sensitive habitat. However, all impacts cannot be avoided because the range of some animals may include the entire park. As much as possible, efforts will be made to reduce or eliminate human influences to wildlife (including access to food and garbage). An expanded interpretive program for natural resources is proposed that would promote public understanding, education, and stewardship.

The plan proposes an invasive species management program that would provide guidelines for managing all ground disturbance. A program of revegetation of disturbed areas with appropriate native species should be implemented.

For continued resource protection and enhancement, on-going communication and cooperation with regulatory agencies, local jurisdictions, and adjacent landowners will be pursued to encourage conservation easements and acquisition of property from willing sellers for buffers and habitat linkages.

Foremost among the necessary precautions observed during the planning and implementation of vegetation management is adherence to existing laws, regulations, and protocols. Mitigation strategies will include avoidance and minimization of impacts, or compensation for unavoidable impacts. The environmental disclosure process requires that all such planning be developed with the participation of the local public and all appropriate agencies. Activities with the potential for impacts beyond park boundaries will include disclosure of potential impacts specific to each activity. Mitigation for significant impacts shall be developed as part of the planning and environmental disclosure process.

Impacts to biological resources can be mitigated to a less than significant level by implementing the General Plan guidelines and project specific mitigation measures.

All plans and projects will be in compliance with local, state, and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project specific mitigation.

Responsibility:	The Department of Parks and Recreation Staff/Resource Ecologist, and other mandated contracting authorities
Monitoring/Reporting:	Completion of required resource evaluations and development plans prior to implementation of specific projects, as part of subsequent tier CEQA review

Cultural Resources

Threshold

Substantial loss or destruction of the historic fabric or structure(s) that eliminate important examples of major periods of California history or prehistory; addition or alterations, including non-historic additions and repairs, that adversely impact or substantially alter the visual continuity of a cultural resource or landscape.

Impact

Potentially significant, unless mitigated

Discussion

Donner Memorial State Park contains significant and potentially significant cultural resources that could be destroyed or degraded by new development and

facility improvements proposed in the General Plan. These resources consist of prehistoric and ethnographic sites, historic and ethnohistoric resources, and cultural landscapes. Archaeological sites, homesteads, historic structures, railroad related resources, mill sites, and historic roads and trails are important features. Some of the most significant resources are the sites associated with the Donner Party and the Emigrant Trail. In addition, a primary prehistoric site extends throughout the core area of the park. There has not been a complete inventory of the park's cultural resources; therefore, there is potential for the discovery of previously unknown prehistoric and historic sites during facilities construction, rehabilitation, resource management projects, restoration, or maintenance operations. Areas in Planning Zone #1 are of greatest concern. This is where the majority of known important cultural resources are located, and where the highest visitor use occurs.

The following are identified in the plan as potential facilities and activities that could create significant adverse impacts on cultural resources within the park:

- New museum/visitor center
- Group day use facilities
- Group camp facilities
- Parking for the museum/visitor center, group day use, group camp, and buses
- Entrance roads
- Trails, including trail connections and associated support facilities (trailheads)
- Interpretive exhibits/facilities
- Adaptive reuse of historic structures
- Informational signage
- Rehabilitation of areas where the landscape has been disturbed
- Resource management projects

Interpretive facilities and trails and their associated amenities, such as picnic sites, placed in or near historic landscapes can potentially decrease historic ambiance and increase the threat of vandalism or damage due to additional public use.

Historic structures currently used for operations, maintenance, and housing may be considered for adaptive reuse. Adaptive reuse of historic structures could involve the modification, replacement, or removal of historic fabric such as walls, doors, windows, hardware, and utilities or introduce non-historic elements to a structure, including access ramps, furniture, and heaters.

All areas proposed for development will require inventories on a project-byproject basis if they have not been previously inventoried.

Mitigation

Prior to construction, significant repairs, implementation of interpretive programs, adaptive reuse of historic structures or sites, or other site-specific development, areas of potential impact should be inventoried and reviewed to determine the presence and significance of cultural resources, the potential impact, and recommended mitigation, if appropriate. Impacts may be reduced by project avoidance, site capping, structural stabilization/renovation, project redesign, and data recovery.

The alteration or removal of any historic or archaeological features will be subject to Public Resources Code 5024.5 review requirements. All construction, maintenance, or improvements of historic structures will be in conformance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Weeks and Grimmer 1995) and the California Historical Building Code.

The General Plan proposes development of a Cultural Resources Management Plan which would contain guidelines to assure cultural resource identification and appropriate mitigation of potential impacts to resources within the park, including any future acquisitions. General Plan designated planning zones may provide additional resource protections by authorizing specific park areas for development and appropriate recreational activities.

All plans and projects will be in compliance with local, state, and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project specific mitigation.

Impacts to cultural resources will be mitigated to a less than significant level through the implementation of General Plan goals and guidelines and any additional site-specific mitigation measures.

Responsibility:	Department of Parks and Recreation Staff/Cultural Resource Specialist, and other mandated contracting authorities
Monitoring/Reporting:	Completion of required resource evaluations and development plans prior to implementation of specific projects, as part of the subsequent tier CEQA review

Water Quality Resources

<u>Threshold</u>

A substantial violation in a water quality standard or waste discharge requirement; alteration of the existing drainage pattern of an area in a manner

that would result in substantial erosion or siltation; substantial degradation of water quality, especially related to non-point sources.

Impact

Potentially significant, unless mitigated

Discussion

Surface and ground waters are of high quality in the Lahontan Region and the protection of water quality is extremely important in the Truckee Basin. Many water quality problems are related to non-point sources, such as soil erosion (from construction and timber harvest areas), stormwater runoff (sediment and chemicals), and individual wastewater disposal systems. Non-point sources have been identified as the major cause of water pollution in California.

The General Plan proposes a number of facilities that may have an impact on water quality. Development and maintenance of the following facilities could create significant adverse impacts.

- New museum/visitor center
- Group day use facilities
- Group camp facilities
- Parking for the museum/visitor center, group day use, and buses
- Entrance, visitor, and maintenance roads
- Trails, including trail connections and associated support facilities (trailheads)
- Interpretive exhibits/facilities
- Rehabilitation of areas where the landscape has been disturbed

Surface waters within the park include Donner Creek, Cold Creek, Donner Lake, and unnamed ponds in Coldstream Canyon. Donner Creek and Donner Lake are adjacent to existing recreation facilities as well as future proposed development and are highly susceptible to water quality impacts. Sedimentation of these surface waters may increase turbidity and physically alter the streambed and lakebed habitat. As tributaries to the Truckee River, any increase in sediment loading to these waters may be considered a significant impact.

Soils in many areas of the park are classified as highly erodible. Any proposed soil disturbing activities or increases in impervious surfaces may contribute to potentially significant adverse impacts to water quality unless mitigated.

Human activities in the watershed can greatly accelerate the rate and amount of erosion and sedimentation. Activities at the park that could increase sedimentation may include construction of new facilities, rehabilitation of existing facilities, operations and maintenance practices, and outdoor recreation.

Potential impacts associated with construction practices include soil and vegetation disturbance from grading, filling, and construction equipment use and storage. Surface and groundwater contamination may occur from construction materials, such as concrete, paint, and other chemical products. Ground disturbance, especially in floodplains and wetlands, may reduce the natural processes for sediment and nutrient absorption.

Impervious surfaces may contribute to water pollution as a source of vehicle contaminants, such as oils, grease and other petroleum and chemical products. These substances become suspended or dissolved in stormwater runoff and may enter surface or groundwater.

Maintenance and operations practices may include snow removal, which can carry deicing chemicals and vehicle fluids from the roadway into surface or groundwaters. Sand, which is often used on road surfaces to provide traction in the winter, can be crushed and dissipated and may enter surface waters. Normal park operations may also include trail maintenance and vegetation removal by mechanical or chemical methods. These practices can disturb the ground surface, contributing to increased erosion and sedimentation, and excess pesticides may enter groundwater or surface waters.

Recreation impacts can include soil compaction in campgrounds, day use areas, and along trails, streambanks, and lakeshores. Intense visitor use may also cause increased erosion on trails, disturbance to or destruction of sensitive wetland and riparian vegetation due to trampling, and watershed damage by human-caused wildfires.

Mitigation

The Department will comply with all applicable water quality control standards for the Truckee River Hydrologic Unit as contained in the Water Quality Control Plan for the Lahontan Region (Basin Plan).

Compliance will be achieved through the implementation of park guidelines, appropriate best management practices, and site-specific mitigation measures. The use of best management practices for erosion control and surface runoff should be developed for all projects in the park. Certified best management practices for the Lahontan Region, developed by the U.S. Forest Service and the Tahoe Regional Planning Agency, will be considered.

As part of the planning process for any proposed development of site-specific plans, resource management plans, or facility construction, site-specific studies of soil conditions and facility siting will be conducted. All new projects, rehabilitated facilities, and increased visitor use in the park will be evaluated to ensure that they do not contribute to degradation of water quality. Any accelerated erosion, sedimentation, and habitat degradation will be reduced or eliminated where feasible.

Natural vegetation, soils, and the duff layer will be protected and restored to preserve natural infiltration. Erosion control practices should be used near surface waters for all activities that disturb the ground surface, and existing drainage patterns should not be significantly modified.

Potential mitigation measures for construction impacts may include the use of erosion control best management practices to stabilize soils during construction and for any activities that involve soil disturbance; stabilizing all disturbed areas by the beginning of the wet season (October 15); protecting all non-construction areas to prevent unnecessary disturbance; restabilizing and revegetating areas at the completion of construction; and avoiding storage of surplus or waste materials in the 100-year floodplain, near surface waters, or in drainages.

Recreational facilities will be designed to minimize water quality impacts by avoiding disturbance to steep slopes, highly erodible soils, and riparian and wetland areas. Recreation impacts may be avoided or reduced by utilizing erosion control measures near surface waters for all human activities which disturb the ground surface; developing ongoing programs of trail maintenance and watershed restoration for areas disturbed by recreational use; and designing new facilities to minimize water quality impacts by avoiding disturbance to steep slopes, highly erodible soils, and riparian/wetland areas. Best management practices will be applied to new and existing campgrounds, day use areas, and trails to reduce erosion and provide appropriate treatments for stormwater runoff. To allow the recovery of compacted soils and natural vegetation, temporary closure, remodeling, or relocation of campgrounds and other facilities will be considered.

To avoid potential impacts to water quality, efforts will be made to discourage park visitors from entering sensitive habitat areas, including wetlands, riparian areas, and streambeds. Appropriate biotechnical streambank erosion control methods may be utilized where feasible.

The General Plan proposes development of a Watershed Management Plan that would identify surface and groundwater quality objectives, existing negative impacts to water quality, and management actions to minimize and prevent impacts to water quality from visitor use, park maintenance, and development activities, as well as naturally-occurring processes such as landslides. The General Plan also proposes a Roads and Trails Management Plan to evaluate all roads and trails in the park, including trail location, use, and maintenance practices.

The existing interpretive program will be improved in order to educate the public on ways to improve and maintain water quality, including information on the water quality impacts of recreation. Future implementation of specific projects will be subject to a more extensive analysis of potential impacts and mitigation during subsequent environmental review.

Impacts to water quality can be mitigated to a less than significant level through the implementation of General Plan guidelines and project specific mitigation measures.

Responsibility:	The Department of Parks and Recreation Staff/Resource Ecologist/Geologist, and other mandated contracting authorities
Monitoring/Reporting:	Completion of required resource evaluations and development plans prior to implementation of specific projects, as part of subsequent tier CEQA review

UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL EFFECTS

Evaluation at the specificity of this first tier review indicates that the potential effects from projects proposed in this General Plan can be reduced to a less than significant level with appropriate facility siting, the implementation of resource management programs, and the development of other specific mitigation measures.

Until the uses, locations, and scope of facilities or management plans are specified the actual level of impact, whether individual or cumulative, cannot be determined. However, all plans and projects are required to be in compliance with local, state, and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project specific mitigation.

Unavoidable significant environmental effects are not anticipated as a result of the proposals in this General Plan/Environmental Impact Report.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

No significant irreversible changes to the physical environment are anticipated from the adoption and implementation of this General Plan.

Facility development, including structures, roads, and trails, may be considered a long-term commitment of resources; however, the impacts can be reversed through removal of the facilities and discontinued access and use. The Department does remove, replace, or realign facilities, such as trails and campsites, where impacts have become unacceptable either from excessive use or from a change in environmental conditions.

The construction and operation of facilities may require the use of non-renewable resources. This impact is projected to be minor due to the limited amount of facilities planned for development and to the consideration of sustainable practices in site design, construction, maintenance, and operations as proposed in the General Plan. Sustainable principals used in design and management emphasize environmental sensitivity in construction, the use of non-toxic materials and renewable resources, resource conservation, recycling, and energy efficiency.

Many cultural resources are considered unique and nonrenewable. Destruction of any significant cultural resource may be considered a significant irreversible effect. To avoid this impact, proposed development sites will be surveyed for cultural resources; all site and facility designs shall incorporate methods for protecting and preserving significant cultural resources; and human activities will be monitored to ensure protection of cultural resources.

GROWTH-INDUCING IMPACTS

If implemented completely, the General Plan may indirectly foster economic and population growth in the region.

With complete development of all proposals, park visitation is likely to increase. This would be due to an increased capacity and interpretive potential at the future museum/visitor center, the development of group day use and group camp areas, and improvements subsequent to the Roads and Trails Management Plan, including additional new trails and linkages from the park to regional trails. Additional directional and informational signage outside the park boundaries (on the highway and in the community) should raise the park's profile as a destination for recreation and historical interpretation.

Any improvement or increase in capacity can encourage increased use, which may create additional tourism and the need for tourist services in the adjacent communities and surrounding region. The proposals in the General Plan may potentially foster economic growth in the region by encouraging an increase in supporting recreation and tourist services, such as recreation equipment, supplies, food, and related facilities. The Truckee area has a recreation and tourism-based economy and an increase in visitor use may be considered an economic benefit. There are currently numerous recreational and housing developments proposed for the region.

The increased capacity and interpretive potential of the proposed museum/visitor center may result in the need for an increased number of permanent and seasonal staff. The General Plan also recommends consideration of staff

housing outside the park boundaries. These proposals may result in a very minimal growth impact to the area.

Population growth in the state and region will continue to create an increased use and demand for recreational opportunities at Donner Memorial State Park.

ALTERNATIVES

Three alternatives to the preferred alternative – Lakeside Area museum/visitor center location were considered during development of in-park alternative site proposals for the General Plan. The Teichert property site has not been evaluated in this alternatives analysis as it is not currently State Park property.

- Alternative 1 No Project
- Alternative 2 Emigrant Trail Museum Expansion on Existing Site
- Alternative 3 Future Museum at China Cove Road

Alternative 1 – No Project

Description

The California Environmental Quality Act requires an evaluation of the specific "no project" alternative and its impact [CEQA Guidelines Section 15126.6(e)(1)]. The no project alternative describes the existing conditions, as well as the physical conditions that are likely to occur in the future if the project (the proposed plan) is not approved. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the expected impacts of not approving the project.

If a general plan is not implemented for Donner Memorial State Park the existing situation will continue for park development, operation, and management. Development within the park would be restricted to projects that:

- repair, replace, or rehabilitate an existing facility;
- provide a temporary facility, so long as the construction does not result in the permanent commitment of resources;
- are necessary for the protection of public health and safety; or
- provide emergency measures necessary for the immediate protection of a natural or cultural resource [Public Resources Code 5002.2(c)].

Evaluation

The existing conditions, lack of needed facilities, and limitations would continue if the General Plan were not adopted. Without the facility improvement to accommodate the existing visitor demand, as well as the projected increasing visitor use, sensitive natural and cultural resources may be expected to degrade over time due to overuse.

Under the no project alternative the park's natural and cultural resources may not receive an increased level of protection. Comprehensive park-wide resource management plans and policies for natural and cultural resources may not be developed. Under the no project alternative cultural resource protection would be limited. Development of a systematic assessment process to determine the future treatment of cultural resources within the park would be unlikely because implementation of new programs would require adoption of a general plan.

Visitation to Donner Memorial State Park is increasing every year and there is public pressure to expand some facilities at the park. However, without a general plan, the Department would not have the authority to develop or enhance facilities to respond to this demand. Funding for recreation and interpretation improvements to enhance the visitor experience may be difficult to obtain. Recreational and interpretive improvements that could enhance the visitor experience at the park's current level of use or anticipated future needs would not be developed.

Under the no project alternative development of the park's trail system would generally be limited to routine maintenance and rehabilitation. Because projects would be limited to existing trails, a comprehensive evaluation of a park-wide trail system may not be accomplished and opportunities to create a higher quality visitor experience in the backcountry could be missed. The opportunities for regional trail linkages may also be lost.

Under the no project alternative, land use management may not be evaluated on a park-wide basis, and planning zones to guide land use, visitor use intensity, recreational facility development, and possible future acquisitions may not be developed. Without an organized land use plan, management plans, and development guidelines, incremental cumulative impacts may adversely impact the park in the future.

Traffic and circulation improvements may not be accomplished with the no project alternative. Traffic, circulation, and parking problems would continue as visitor use increases, creating pedestrian and vehicular use conflicts. Improvements to informational and directional signage would not occur.

The existing visual character of the park could not be improved or enhanced in a significant way, existing scenic resources may be affected, and protection of existing scenic vistas by acquisition or conservation agreement may not be provided with the no project alternative.

Alternative 2 – Existing Museum Expansion

Description

Alternative 2 contains the same key components and scope as the proposed plan, with the exception of expanding the existing museum at its current location and increasing associated parking facilities. The expansion would be accomplished by:

- adding a second floor to the existing museum building; or
- demolishing the existing building and constructing a new two story building on the existing foot print

This alternative was considered to provide the opportunities of a larger museum and parking facility, but to potentially reduce natural and cultural impacts by building on the existing foot print instead of developing an additional structure at another location.

Evaluation

This alternative would require extensive structural studies to determine the feasibility of adding another floor to the existing building and providing the necessary accessibility requirements. All plumbing, heating, and electrical systems would have to be upgraded to conform to the local building codes. The addition of a second floor may require expansion of the building foundation, with potentially further negative impacts to existing resources. The option of adding a second story may be extremely costly and the limitations of remodeling the existing building may not provide an efficient and well-functioning visitor facility. Even with the addition of a second floor, there still may not be adequate space for the necessary park administration and operations functions, exhibit space, or collections storage.

Building on the existing foot print may provide less disturbance to sensitive natural and cultural resources than new construction at another location due to less ground disturbance. However, the existing natural and cultural resources at this site are highly valuable with a concentration of Donner Party cabins/camp sites and the historic Pioneer Monument. The existing museum building also has the potential to be a bat habitat/roosting site. Extensive natural and cultural resource studies would be necessary prior to any building modifications, site disturbance, or construction. Any type of development may cause potentially adverse impacts to these resources.

An expanded museum at this site would result in an increased concentration of visitor impacts to this area. The Pioneer Monument and the Nature Trail are also adjacent to the museum. Increased visitor use in the area may result in substantial increased use of the trail, potentially causing significant soil compaction, trampling of vegetation, and disturbance to wildlife. The soil compaction and vegetation disturbance may result in increased erosion and

sedimentation loading to Donner Creek, a tributary to the Truckee River, and also to the existing wetland habitat nearby. This may be considered a significant adverse impact.

With this alternative it would be necessary to expand the existing parking lot, develop separate bus parking, and improve park circulation, especially at the entrance road. This concentration of related facilities would create an unacceptable level of negative impacts to this area of prime cultural resources. The increased size of a two story building may also have a potentially negative visual impact to park visitors as well as adjacent property owners.

Alternative 3 – Future Museum at China Cove Road

Discussion

This alternative would provide most of the same features as the proposed plan except that the future museum would be located within the park along China Cove Road, an existing paved road that parallels the south shore of Donner Lake. This proposed museum location is approximately midway between the Ridge Campground and Splitrock Campground, and is located across the road from a trail leading to the day use area along the lake.

This site is currently in a relatively undeveloped area, previously disturbed by timber cutting. Once dominated by a lodgepole pine forest, it is currently a large cleared area surrounded by a young forest of sparsely scattered conifers. There are no sensitive species or habitats known to occur at this site, although seasonal wetlands may be present. The site is not known to contain any significant cultural resources. Soils with a high erosion potential are present in this area. This location is farther from Interstate 80 and the main park entrance at Donner Pass Road than most of the more developed areas of the park, such as the Pioneer Monument, existing museum, main parking lot, Nature Trail, and maintenance and operations area. This area currently receives minimal visitor use during the winter.

In addition to a new museum building, additional support facilities would be necessary at this site. Parking facilities would be developed and the park roads and circulation system would require modification to accommodate a higher amount of visitors in this location of the park.

Evaluation

Although the forest habitat in this area has been disturbed the existing younger forest continues to provide valuable wildlife habitat. There is minimal human disturbance surrounding this area and therefore there may be a higher value to wildlife than other locations in the park. Since there is very limited use of this section of the park in winter it may currently provide important winter habitat and travel corridors for a number of sensitive wildlife species. If the site were to be developed as a museum, access must be maintained year-round for vehicles and

pedestrians. This may represent a significant increase in disturbance and an adverse negative impact to wildlife.

Because there are no known significant cultural resources in this area, this location for the museum may provide the least potential for significant adverse impacts to cultural resources.

There is potential for adverse impacts associated with construction practices, especially in this area known to have highly erodible soil. The need to develop extensive modification to the current road system would result in considerable disturbance to soil and vegetation, as well as an increased amount of impervious surface. Because the museum site must have year-round access, there would be a need for increased road maintenance, especially during the winter in order to keep the roads clear of snow. Road maintenance and snow removal practices have the potential for significant adverse impacts related to stormwater runoff and increased sediment loading to Donner Creek and Donner Lake.

There are few significant rock outcrops or boulders on the surface at this area, although boulders and cobbles may be present at depth. Building in this location of the park may not require as much site and foundation work as other alternative sites.

Located adjacent to two campgrounds, this alternative museum site may potentially have significant adverse visual and noise impacts on the overnight visitors who may expect and desire a quieter wilderness experience. Screening the building and parking area may not be visually compatible in the open pine forest habitat. The additional requirements for night lighting in the area may also be a potentially adverse impact to wildlife in this area and the visitor experience in nearby campgrounds.

CUMULATIVE IMPACTS

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines Section 15355).

The facility development proposed in the General Plan may result in impacts to cultural resources, sensitive species, wildlife habitat, water quality, and visual resources.

The entire region, including the Truckee Basin and Tahoe Basin, is experiencing tremendous growth. Significant development is planned in the Town of Truckee, and areas surrounding the town within Nevada County and Placer County. This development includes residential, commercial, industrial, and mixed use. There are also a number of recreation-based development projects planned throughout the region: Squaw Valley is proposed to become an international resort, with emphasis changing from primarily winter use to year-round use; the Northstar at Tahoe resort is expanding with the addition of new housing development; and there are international tourism and recreational development interests considering the Truckee Basin the next big international focus for winter/summer recreational and resort development.

To the extent that water quality degradation and the loss of biological, cultural, and visual resources is occurring in the region (especially in Nevada and Placer counties) any loss, disturbance, or degradation of these resources would contribute to cumulative impacts. The plan proposes a number of mitigation measures to avoid or minimize impacts to these resources. In addition, the possible acquisitions and conservation easements discussed in the General Plan will act to protect existing park resources, preserve viewsheds, and enhance plant and wildlife habitat by providing habitat linkages and buffers. Mitigation will reduce the impacts to a less than significant level.

EFFECTS FOUND NOT TO BE SIGNIFICANT

As a first tier of planning and environmental analysis, the following impacts were found not to be significant. Future implementation of plan proposals will be subject to a more detailed analysis of potential impacts resulting from the specific project during a second-level environmental review.

The proposed plan for the museum/visitor center at the off-site location will be subject to additional environmental review and further impact analysis, if the property is transferred to the Department and the project is implemented.

Land Use and Planning

The General Plan for Donner Memorial State Park provides guidelines for future land use and development and is consistent with local and regional general plans. The General Plan proposals are consistent with the existing land use in the area, which is a combination of open space, recreational, residential, and commercial. The proposal to locate a new museum/visitor center on adjacent property corresponds to the Town of Truckee General Plan land use designation for that planning area. The museum would be located in an area currently zoned for mixed-use development, to include open space (including parks), commercial, industrial, and residential. Future implementation of general plan proposals will be subject to additional tiered environmental review. No significant land use and planning impacts are projected.

Population and Housing

The impact of this plan on population and housing requirements would be minimal. There may be an increase of permanent or seasonal staff with the development of an expanded museum/visitor center (including the possibility of expanded interpretive and educational programs). Staff housing may be accommodated outside of the park boundaries, if available. If implemented, these proposals would not substantially or adversely impact housing and population growth in the area. No significant population and housing impacts are projected.

Geologic Hazards

There are specific areas within the park boundaries with the potential for landslides and avalanches. The entire region has experienced earthquakes, with micro-earthquakes common in the Truckee-Donner area. The General Plan provides a number of guidelines to protect the public from these natural hazards. Site specific surveys to identify potential hazardous areas should be conducted prior to any permanent facility development, and construction of facilities in these areas avoided if appropriate. Signs will be posted on trails warning visitors of any potential hazards. All new development will comply with current building code standards for construction in seismic areas.

Future projects will be subject to further, more detailed review. The project will not result in or expose people to substantial geologic hazards.

Air Quality

The region has exceeded the standard for particulate matter (PM10) emission levels. This is primarily attributed to wood-burning stoves and vehicles raising dust along sand covered highways during the winter months. Dust from the site preparation and construction of facilities proposed in the General Plan may create temporary air quality impacts. The impact can be substantially reduced by the use of dust control measures and other construction best management practices. Dust control measures should be developed during site-specific planning as an element of sustainable design for site development and in future project development review and implementation.

There may be increased park visitation as a result of additional directional signage as well as expanded facilities and interpretive opportunities. The majority of visitors arrive by private vehicle or bus. An increase in visitor use may cause a minor increase in total vehicle emissions in the region. There is currently a public

transit stop, providing transit service during the summer months only, at the park entrance. Should a new park entrance be developed, the Department should coordinate with the Town of Truckee to locate the transit stop at the new entrance and publicize the location and benefits of public transit to the community and park visitors.

The Department will continue to comply with all local, state, and federal regulations regarding air quality. Air quality impacts resulting from this project will not be significant.

Transportation/Circulation

There will not be significant adverse impacts to transportation or circulation as a result of implementation of this General Plan.

The plan proposes road, trail, and parking improvements that will enhance circulation in the park. These improvements, including providing separate entrance roads and parking areas for the museum/visitor center and day/overnight park users, should reduce the current congestion that often impacts the existing park entrance area and the public road outside park boundaries. Entrance road design and construction to support a new museum/visitor center along Donner Pass Road would comply with Nevada County and Caltrans road requirements, and the Town of Truckee General Plan, to minimize impacts to Tahoe-Donner Association beach users and others who travel on Donner Pass Road.

In addition, a comprehensive Roads and Trails Management Plan will be developed to guide the location, use, and maintenance of existing and future roads and trails within park boundaries. The potential impacts of any proposed roads and trails will be evaluated at that time.

As noted above, with expanded facilities, increasing population growth in the state and region, and subsequent increasing demand for recreational opportunities, the park will continue to experience increased visitation. Improvements in directional and informational signage should also make travelers aware of the park and its location and may result in increased visitation. Most of the visitors will arrive by private vehicle or bus, although some may take advantage of the proposed regional trail connections. The plan considers development of a discrete area for bus parking, and proposes a guideline to create a circulation system that does not create traffic conflicts by considering separate travelways where necessary in order to reduce user conflicts and provide a safer environment for park visitors.

Future implementation of general plan proposals will be subject to additional tiered environmental review. If implemented, this plan would not substantially impact traffic and circulation resources.

Energy and Mineral Resources

The plan will not result in significant impacts to energy and mineral resources. Sustainable practices for site planning, building design, construction, materials, maintenance, and operations should be prescribed where feasible. These practices utilize elements of energy efficiency, energy conservation, the use of renewable and recycled materials, and total life cycle cost analysis.

Future implementation of general plan proposals will be subject to additional tiered environmental review. If implemented, this plan would not substantially impact energy and mineral resources.

Hazards

The project would not release hazardous substances, create a health hazard, expose people to any existing sources of health hazards, or increase a fire hazard.

The park may have soil and groundwater contamination. Additional areas of contamination may be present in future acquisitions. Soil and groundwater studies and investigations of prior land use should be conducted to determine any areas of potential contamination prior to future projects or acquisitions.

The project proposes to maintain a fire management program that may evaluate the current fire risk and recommend strategies to reduce the fuel load in the park, thus increasing public safety.

Future projects will be subject to further, more detailed review. Should any hazardous substances or other health hazards be identified appropriate warning and protective methods should be developed and implemented. The project will not result in or expose people to substantial health or fire hazards.

Public Services

The proposal would not require additional government services for fire protection, police protection, schools, or public facility maintenance.

The plan proposes that a new entrance road to the museum/visitor center be located at the off-site location. Access to this entrance road would be from an existing public road. Should the new museum/visitor center be located on existing park property development of a new entrance road is also proposed. Access to this entrance road would be from Donner Pass Road. Significant increased maintenance of these existing public roads is not anticipated with the addition of new access points. Future implementation of general plan proposals will be subject to additional tiered environmental review. If implemented, this plan would not have an adverse effect on public services.

Utilities and Services Systems

The project recommends new facility development (including a museum/visitor center, group day use and campground areas) that will require additional utilities and service systems. The increase required will be minimal.

Future implementation of general plan proposals will be subject to additional tiered environmental review. If implemented, the project will not result in a need for substantial increases or alterations in utilities and service systems.

Noise

The General Plan proposes new facility development in Planning Zone #1 that could potentially increase noise levels during normal operation. The addition of a visitor center and group day use facility may add increased noise levels through normal visitor use and traffic. Development of these new facilities will involve construction equipment and may cause temporary increased noise levels. Noise impacts should be subject to timing constraints to avoid negative impacts to park visitors, neighbors, and sensitive wildlife identified as occurring in the vicinity.

Any future projects will be subject to additional environmental review. There will not be significant adverse noise impacts resulting from the implementation of this plan.

Recreation

The plan may restrict some types of recreation in order to minimize resource impacts; however, the plan also proposes the evaluation and potential development of other forms of recreation to respond to visitor demand and to provide increased opportunities for interpretation and education.

The General Plan proposes limiting motorized watercraft in ponds and streams and considers the closure of non-essential roads in order to decrease disturbance to sensitive wildlife. If implemented, the plan may also consider bridging roads that cross streams in order to protect sensitive wildlife, habitat, and water quality, as well as limiting new facility development and minimizing activities in sensitive habitats during the breeding season.

The project calls for the development of a Roads and Trails Management Plan that would evaluate the need, location, use, and development of existing and future roads and trails and associated facilities. This management plan may propose discontinuing the use of specific roads and trails due to severe erosion or disturbance to sensitive wildlife habitat.

The plan proposes increasing recreational resources with development of a new museum/visitor center, group day use and camping facilities, loop trails, and trail linkages from the new development to existing park facilities as well as to local and regional trails outside the park boundaries. The plan also calls for evaluating the need for upgrading facilities for maximum accessibility and evaluating visitor demand for expanded or new types of facilities.

Any future projects will be subject to additional environmental review. There will not be significant adverse impacts to recreational resources resulting from the implementation of this plan.





REFERENCES

- Barbour, Michael G., and Jack Major. 1988. *Terrestrial Vegetation of California* (*New Expanded Edition*). California Native Plant Society, Sacramento, CA.
- Bass, Ronald E., Albert I. Herson, and Kenneth M. Bogdan. 1999. CEQA Deskbook. Solano Press Books, Point Arena, CA.
- Birkeland, Peter W. 1963. "Pleistocene Volcanism and the Deformation of the Truckee Area, North of Lake Tahoe, California," in *Geological Society of America Bulletin*, Vol. 74, p. 1453-1464.

_____. 1964. "Pleistocene Glaciation of the Northern Sierra Nevada, North of Lake Tahoe, California," in *Journal of Geology*, Vol. 72, p. 810-825.

- Burnett, John L. and Charles W. Jennings. 1962. *Geologic Map of California, Chico Sheet*, California Division of Mines and Geology, scale 1:250,000.
- California Air Resources Board, Planning and Technical Support Division. *The* 2001 California Almanac of Emissions and Air Quality.
- California Department of Fish and Game, *California Natural Diversity Database*. 2001.
- California Native Plant Society. 2001. Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society, Sacramento, CA. 388 pp.
- d' Azevedo, Warren L. 1986. Washo. In *Handbook of North American Indians, Vol.11: Great Basin*, edited by Warren L. d' Azevedo, pp. 466-498. Smithsonian Institution Press, Washington, D.C.

Donner Memorial State Park Interim Vegetation Management Plan. 17 pp.

- Downs, James F. 1966. *The Two Worlds of the Washo.* Case Studies in Cultural Anthropology. New York: Holt, Rinehart and Winston.
- Elston, Robert G. 1982. Good Time, Hard Times: Prehistoric Culture Change in the Western Great Basin. In *Man and Environment in the Great Basin*, edited by David B. Madsen and James F. O'Connell, pp. 186-206. Society for American Archaeology Papers No. 2. Washington, D.C.

____. 1986. Prehistory of the Western Area. In *Handbook of North American Indians, Vol. 11: Great Basin*, edited by Warren L. d' Azevedo, pp. 135-148. Smithsonian Institution Press, Washington, D.C.

- Evans, Nancy. 1990. *Resource Inventory: Ethnography and Ethnohistory, Ward Creek Project.* State of California, Department of Parks and Recreation.
- Federal Emergency Management Agency. 1987. Flood Insurance Rate Map, Nevada County, California, Panel 484.
- Fong, Arthur M. 1990. *Resource Inventory, Topography, Donner Memorial State Park.*
- Fox, S. 2001. Biological Evaluation for the Larry Hahn Rezoning Minor Land Division Project (EIAQ-3471) Placer County, CA. 11 pp.
- Grayson, Donald K. 1990. Donner Party Deaths: A Demographic Assessment. Journal of Anthropological Research 46: 223-242.
- Hardesty, Donald L. 1997. *The Archaeology of the Donner Party*. University of Nevada Press, Reno and Las Vegas.
- *High Sierra Crossings Museum and Nature Preserve, Project Concept.* May 2001. A Conservation Proposal in Partnership with The California Department of Parks and Recreation and A. Teichert and Son, Inc. 27 pp.
- James, Steven R., Bonnie Brown, and Robert G. Elston. 1982. Archaeological Investigations at the Vista Site (26WA3017), Washoe County, Nevada. Intermountain Research, Silver City, NV.
- Jennings, M.R. and M.P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. Final Report. California Department of Fish and Game, Rancho Cordova, CA.

Kerbavaz, Joanne. 1989. Resource Inventory, Donner Memorial State Park.

- Lindstrom, Susan G. 1987. *An Historical Overview of Donner Memorial State Historic Park.* State of California, Department of Parks and Recreation.
- Lonsdorf, Robert. 1998. "Schallenberger Ridge/Donner Memorial State Park Expansion Project," in *An Ecological Evaluation for the Truckee Donner Land Trust*. 18 pp.
 - ____. August 12, 1998. Letter to Gary Walter re: ecological evaluation of 2000 acre acquisition at Donner Memorial State Park. 4 pp.

- Mayer, Kenneth E., and William F. Laudenslayer, (editors). 1988. A Guide to Wildlife Habitats of California. 166 pp.
- McGlashan, Charles F. 1920. *The Location of Breen Cabin*. Privately published, Oakland, CA. On file, California State Library, Sacramento.

_____. 1947. *History of the Donner Party: A Tragedy of the Sierra*, revised ed. Stanford University Press, Stanford, CA. Originally published in 1880.

Moratto, Michael J. 1984. California Archaeology. Academic Press, Orlando.

- Morrison, M.L. 1993. *Wildlife considerations for vegetation management at Donner Memorial State Park*. Report. Department of Forestry and Resource Management, University of California, Berkeley.
- Nesbitt, Paul 1990. *The Cultural Resources of Donner Memorial State Park.* State of California, Department of Parks and Recreation.
- Regional Water Quality Control Board. 1994. Water Quality Control Plan for the Lahontan Region, North and South Basin Plans.
- Sawyer, John O., and Todd Keeler-Wolf. 1995. *A Manual of California Vegetation*. California Native Plant Society, Sacramento, CA.
- Schnell, J. 1958. "Nesting behavior and food habits of goshawks in the Sierra Nevada of California". *Condor* 60:377-403.
- Showers, M., et al. 1990. *Resource Inventory. Donner Memorial State Park*. 382 pp.
- State of California, Department of Finance. 2001. *E-1 City/County Population Estimates, with Annual Percent Change, January 1, 2000 and 2001.* Sacramento, CA.
- _____. 2001. Interim County Population Projections.
- Town of Truckee. *General Plan, Volume I: Goals and Policies*. Adopted February 15, 1996, Amended September 21, 2000.
- USDA Forest Service. 2001. *Sierra Nevada Forest Plan Amendment. Final Environmental Impact Statement*. Summary, Volumes 1-4, Record of Decision.

. 2001. Volcanoes, Glaciers, and Plate Tectonics: The Geology of the Mono Basin, from Pacific Southwest Region. http://www.r5.pswfs.gov/into/vvc/mono/vg&26pt.htm

- United States Fish and Wildlife Service. 2001. *Tahoe/Truckee/Pyramid Restoration and Recovery Implementation Plan*. http://truckeeit.com/.
- United States Geologic Survey. 1999. *Potential Volcanic Hazards*, from U.S.G.S. web page: http://lvo.wr.usgs.gov
- Wakabayashi, John & Sawyer, Thomas L. 2000. "Neotectonics of the Sierra Nevada and the Sierra Nevada-Basin and Range Transition, California," in *Field Guide to the Geology and Tectonics of the Northern Sierra Nevada*, California Division of Mines & Geology Special Publication 122.
- Wendin, D.G. December 17, 1998. Truckee Donner Land Trust. Letter to David Baker re: Donner acquisition and request for funding. (Includes three maps). 6 pp.
- Western Timber Services. 1994. Cumulative Impacts Assessment, Watershed Resources, Donner Timber Harvest Plan.
- Wood, D.L. 1999. *Fire history of Emerald Bay, Donner, Bliss, and Sugarpine State Parks*. Unpublished. U.C. Berkeley. 11 pp.

_____. 1987. *Report on forest insect and disease situations*. Unpublished. U.C. Berkeley. 10 pp.

Zeiner, David C., William F. Laudenslayer, Jr., and Kenneth E. Mayer. 1988. *California's Wildlife, Volume I, Amphibians and Reptiles*. State of California, The Resources Agency, Department of Fish and Game, Sacramento, CA. 272 pp.

_____ and Marshall White. 1990. *California's Wildlife, Volume II, Birds*. State of California, The Resources Agency, Department of Fish and Game, Sacramento, CA. 732 pp.

_____. 1990. *California's Wildlife, Volume III, Mammals*. State of California, The Resources Agency, Department of Fish and Game, Sacramento, CA. 407 pp.

MAPS AND MATRICES



NOTE: FOR THE GENRAL PLAN *MAPS AND MATRICES* OPEN UP SEPARATE FILES LISTED ON THE SAME WEBPAGE WHERE YOU FOUND THIS PDF FILE.

APPENDICES



APPENDIX A

Vegetation Types at Donner Memorial State Park

Calveg	Wildlife Habitat Relationships	Sawyer and Keeler-Wolf	1991 Donner Memorial State Park Resource Inventory
Lodgepole pine	Lodgepole pine	Lodgepole pine	Lodgepole pine forest
White fir	White fir	White fir	Mixed conifer
Mixed conifer	Sierran mixed conifer	Mixed conifer	Mixed conifer
Eastside pine	Jeffrey pine	Jeffrey pine	Mixed conifer
Quaking aspen	Aspen	Aspen	Riparian
Black cottonwood	Montane hardwood-conifer	Black cottowood	Riparian
Mountain alder	Montane riparian	Mountain alder	Riparian
Montane mixed chaparral	Montane chaparral	Bush chinquapin	Montane chaparral
Greenleaf manzanita	Montane chaparral	Greenleaf manzanita	Montane chaparral
Montane mixed chaparral	Montane chaparral	Holodiscus	Montane chaparral
Huckleberry oak	Montane chaparral	Huckleberry oak	Montane chaparral
Montane mixed chaparral	Montane chaparral	Tobacco brush	Montane chaparral
Snowbrush	Montane chaparral	Mountain whitethorn	Montane chaparral
Wet meadow	Wet meadow	Sedge	Mesic meadow
Wet meadow	Wet meadow	Beaked sedge	Mesic meadow
Wet meadow	Wet meadow	Montane meadow habitat	Mesic meadow
Willow-alder, willow- aspen, et al.	Montane riparian	Montane wetland shrub habitat	Riparian
Tule-cattail-sedge	Fresh emergent wetland	Bulrush-cattail	Ephemeral lake
Tule-cattail-sedge	Fresh emergent wetland	Cattail	Ephemeral lake
Wet meadow	Fresh emergent wetland	Spikerush	Ephemeral lake
Perennial grass*	Wet meadow*	Montane meadow habitat	Xeric meadow
Basin sagebrush	Sagebrush	Big sagebrush	Not described
Bitterbrush	Bitterbrush	Bitterbrush	Not described

Calveg	Wildlife Habitat Relationships	Sawyer and Keeler-Wolf	1991 Donner Memorial State Park Resource Inventory
Annual grass & forbs	Wet meadow	N/A**	Vernal pool**
N/A	Riverine	N/A	N/A
N/A	Lacustrine	N/A	N/A
Non-vegetated (exposed rock)	N/A	N/A	Granite outcrop

* This designation is approximate and is probably not consistent with all characteristics of the habitats described in the other classifications.

** Vernal pool descriptions in Sawyer and Keeler-Wolf do not provide suitable series matches based on extant species in Donner Memorial State Park. The use of "vernal pool" to describe seasonally wet depressions in the park may be inconsistent with the specific soil conditions that characterize the vernal pool designation in other locations.

Listings of sensitive vegetation types in the CNDDB are constrained by the database's reliance on reported occurrences. According to Sawyer and Keeler-Wolf (1995), the CNDDB has determined that almost half of the listed vegetation types in California (Holland 1986) are rare enough to merit protection. Many of these types are in clear danger of disappearing or their ecological values irreparably compromised due to development, agriculture, exotic species invasions, or other impacts. While vegetation in California has been mapped or classified at relatively coarse scales over the past 100 years, only recently have ecologists pursued efforts to classify California vegetation at more ecologically and taxonomically relevant scales. These efforts have been supported and implemented by numerous land management agencies, including the U.S. Forest Service, the National Park Service, the Bureau of Land Management, the California Department of Fish and Game, the California Native Plant Society, and The Nature Conservancy. At Donner Memorial State Park, little, if any, of the vegetation has been classified and mapped at scales sufficient to ensure resource conservation and protection.

APPENDIX B

Special Status Plants Potentially Occurring at Donner Memorial State Park

The following list has been compiled from four sources – the California Natural Diversity Database (Department of Fish and Game 2002), the Ecological Evaluation for the Truckee Donner Land Trust (Lonsdorf 1998), the Sierra Nevada Forest Plan Amendment, Appendices (Volume 4 of 6) (United States Forest Service 2001), and the California Native Plant Society Inventory (2001). These lists include special status plants for which suitable habitat may exist in the Donner Memorial State Park area.

A. California Natural Diversity Data Base (CNDDB) (Department of Fish and Game 2002), for the Norden and Truckee 7.5' topographic quadrangles:

Latin name	Common Name
Bruchia bolanderi	Moss
Erigeron miser	Starved daisy
Eriogonum umbellatum var. torreyanum	Donner Pass buckwheat
lvesia sericoleuca	Plumas ivesia
Lewisia longipetala	Long-petaled lewisia
Rorippa subumbellata*	Tahoe yellow cress

* federally endangered

None of the occurrences reported in the CNDDB are within current park boundaries or those of pending acquisitions.

B. Ecological Evaluation for the Truckee Donner Land Trust (Lonsdorf 1998) The following species were recommended for addition to the Donner Land Trust's target list for conservation. None has been documented from the park or adjacent lands, although suitable habitat exists within the general park area.

Latin name	Common name
Arabis rigidissima var. demota	Carson Range rock cress
Arnica tomentella	Arnica
Botrychium ascendens	Upswept moonwort
Botrychium crenulatum	Scalloped moonwort
Botrychium lunaria	Moonwort
Botrychium montanum	Western goblin
Carex davyi	Davy's sedge
Claytonia megarhiza	Fell-fields claytonia
Drosera anglica	English sundew
Epilobium howellii	Subalpine fireweed
Potamogeton filiformis	Slender-leaved pondweed
Scheuchzeria palustris ssp. americana	American scheuchzeria

C. U.S. Forest Service Sierra Nevada Forest Plan Amendment (2001)

The U.S. Forest Service, in its Sierra Nevada Forest Plan Amendment, Appendices (Volume 4 of 6) (2001), published the results of a vulnerability analysis for 135 focal plant species. These species are federally listed as threatened or endangered, or proposed for such listing, or are designated by USFS as sensitive. USFS did not include two taxa, *Draba asterophora* var. *asterophora* and *D. asterophora* var. *macrocarpa*, in its analysis, because the threats to these were not within any of five problem areas (no reference was provided for this designation). None of the species in the analysis has been documented to occur in Donner Memorial State Park; suitable habitat for many of the species is lacking in the park or proposed acquisitions. Further information on threats is available in the Forest Plan Amendment and Appendices.

Latin name	Common name	National Forest
Arabis rigidissima var. demota	Carson Range rock cress	
Arctostaphylos nissenana	Nissenan manzanita	ED
Astragalus webberi	Webber's milk-vetch	Т
Botrychium ascendens	Upswept moonwort	Т
Botrychium crenulatum	Scalloped moonwort	Т
Botrychium montanum	Western goblin	Т
Calochortus clavatus var. avius	Pleasant Valley mariposa	a lily ED, T
Clarkia biloba ssp. brandegeae	Brandegee's fairyfan	Т
Clarkia stellata	Lake Almanor fairyfan	Т
Cypripedium fasciculatum	Clustered lady's-slipper	Т
Cypripedium montanum	Mountain lady's-slipper	Т
Epilobium howellii	Subalpine fireweed	ED, T
Erigeron miser	Starved daisy	Т
Eriogonum tripodum	Tripod buckwheat	ED
Eriogonum umbellatum var. torreyanum	Donner Pass buckwheat	ED, T
Fritillaria eastwoodiae	Butte County fritillary	Т
Horkelia parryi	Parry's horkelia	ED
lvesia aperta var. aperta	Sierra Valley ivesia	Т
lvesia aperta var. canina	Dog Valley ivesia	Т
Ivesia sericoleuca	Plumas ivesia	Т
Ivesia webberi	Webber's ivesia	Т
Lewisia cantelovii	Cantelow's lewisia	Т
Lewisia longipetala	Long-petaled lewisia	ED, T
Lewisia serrata	Saw-toothed lewisia	ED, T
Lomatium stebbinsii	Stebbins's lomatium	ED
Lupinus dalesiae	Quincy lupine	Т
Meesia triquetra	Moss	ED, T
Meesia uliginosa	Moss	Т
Monardella follettii	Follett's monardella	Т
Navarretia prolifera ssp. lutea	Yellow bur navarretia	ED

The complete list for the USFS vulnerability analysis in Tahoe (T) and El Dorado (ED) National Forests is as follows:

Penstemon personatus	Closed-throated penstemon	Т
Phacelia stebbinsii	Stebbins's phacelia	ED, T
Pyrrocoma lucida	Sticky pyrrocoma	Т
Rorippa subumbellata	Tahoe yellow cress	ED
Scheuchzeria palustris ssp. americana	American scheuchzeria	Т
Senecio layneae	Layne's ragwort	ED
Vaccinium coccineum	Siskiyou Mountains huckleberry	Т

D. California Native Plant Society Inventory (2001)

The CNPS Inventory lists the following species, documented from the Norden and Truckee quads. None of these species has been documented from Donner Memorial State Park or from areas anticipated for DPR acquisition in the foreseeable future. No known surveys have been conducted for these species outside the core park area. List 1B species are those that are rare, threatened, or endangered in California and elsewhere, while List 2 species are those that are rare, threatened, or endangered in California but more common elsewhere.

Latin name	Common name	List
Erigeron miser	Starved daisy	1B
Eriogonum umbellatum var. torreyanum	Donner Pass buckwheat	1B
lvesia sericoleuca	Plumas ivesia	1B
Lewisia longipetala	Long-petaled lewisia	1B
Rorippa subumbellata	Tahoe yellow cress	1B
Scutellaria galericulata	Marsh skullcap	2

APPENDIX C

Potentially Occurring Non-Native Invasive Plants

Latin Binomial	Common Name	CalEPPC List	CDFA List	Present at Donner Memorial State Park?
Bromus tectorum	Cheatgrass	Red Alert	NL	yes
Cardaria chalapensis	Lens-podded hoary cress	A-2	В	no*
C. draba	Heart-podded hoary cress	A-2	В	no*
C. pubescens	Globe-podded hoary cress	NL	NL	no*
Cirsium arvense	Canada thistle	В	В	no*
C. vulgare	Bull thistle	В	NL	yes
Conium maculatum	Poison-hemlock	В	NL	yes
Halogeton glomeratus	Halogeton	Red Alert	А	no*
Hypericum perforatum	Klamath weed	В	С	yes
Lepidium latifolium	Perennial pepperweed	A-1	В	no*
Leucanthemum vulgare	Ox-eye daisy	Red Alert	NL	no*
Lythrum salicaria	Purple loosestrife	В	В	no*
Myriophyllum aquaticum	Brazilian water milfoil	В	NL	no*
Verbascum thapsus	Woolly mullein	В	NL	yes

* not documented from the park

California Exotic Pest Plant Council's (CalEPPC) Exotic Pest Plants of Greatest Ecological Concern:

A-1 or A-2 – the most invasive species in the state

B – less invasive

Red Alert – potential to spread although currently restricted to small areas

California Department of Food and Agriculture's (CDFA) Noxious Weed Rating system:

- A an organism of known economic importance subject to enforced action
- B an organism of known economic importance, action discretionary
- C an organism subject to no state-enforced action outside of nurseries
- NL not listed

The CalEPPC list provides rankings primarily based on ecological impacts, while the CDFA listed species are ranked based on economic importance. With the exception of *Cardaria chalapensis* and *Conium maculatum*, the U.S. Forest Service Sierra Nevada Forest Plan Amendment has identified all of these species in its ecosystem-wide monitoring strategy for noxious weed management.

APPENDIX D

Wildlife Habitats

Sensitive Species by Habitat Type (both potential and present at Donner Memorial State Park)

Lodgepole Pine - PRESENT: Sierra Nevada snowshoe hare, lodgepole chipmunk, pine marten; POTENTIAL: Cooper's hawk, goshawk, olive-sided flycatcher, yellow warbler, spotted bat

White Fir – PRESENT: Sierra Nevada snowshoe hare, olive-sided flycatcher; POTENTIAL: Cooper's hawk, goshawk

Mixed Conifer (fir dominated) - PRESENT: Sierra Nevada snowshoe hare, yellow warbler, POTENTIAL: Cooper's hawk, goshawk, spotted owl, olive-sided flycatcher

Mixed Conifer (Jeffrey pine dominated) - PRESENT: Osprey; POTENTIAL: Cooper's hawk, goshawk, spotted owl, olive-sided flycatcher, Townsend's big-eared bat, long-legged myotis

Eastside Pine- PRESENT: Osprey; POTENTIAL: Cooper's hawk, goshawk

Mature Coniferous Forest (various tree species) POTENTIAL: spotted owl, goshawk, osprey, Townsend's big-eared bat, long-legged myotis, wolverine, pine marten

Montane Hardwood Conifer - POTENTIAL: Cooper's hawk, Sierra Nevada snowshoe hare, Sierra Nevada mountain beaver

Aspen/ Mountain Alder - PRESENT: Sierra Nevada mountain beaver; POTENTIAL: Cooper's hawk, Sierra Nevada snowshoe hare, Sierra Nevada mountain beaver

Montane Riparian - POTENTIAL: cooper's hawk, black swift, olive-sided flycatcher, yellow warbler, pallid bat, Townsend's bigeared bat, spotted bat, long-eared myotis, fringed myotis, western mastiff bat, silver-haired bat, Sierra Nevada mountain beaver, Sierra Nevada snowshoe hare, Sierra Nevada red fox

Permanent and Intermittent Streams - POTENTIAL: Lahontan cutthroat trout, mountain sucker, mountain yellow-legged frog

Montane Chaparral - PRESENT: yellow warbler; POTENTIAL: pallid bat, long-eared bat, western mastiff bat, silver-haired bat, Sierra Nevada snowshoe hare, Sierra Nevada red fox

Wet Meadow - POTENTIAL: willow flycatcher, spotted bat, Sierra Nevada red fox

Water (Donner Lake, ponds left from gravel mining) – PRESENT: osprey; POTENTIAL: Lahontan cutthroat trout, mountain sucker, small-footed myotis, long-eared myotis, fringed myotis, long-legged myotis, silver-haired bat,

Barren – disturbed by human activities such as mining

Exposed Rock – POTENTIAL: pallid bat, spotted bat, small-footed myotis, fringed myotis, long-legged myotis, western mastiff bat, Sierra Nevada red fox

APPENDIX E

Sensitive Terrestrial and Aquatic Vertebrate Species

Common Name	<u>Species</u>		Probability Donner MSP	<u>Habitat Affinity</u> at Donner MSP
Lahontan Cutthroat Trout ^a	Oncorhynchus clarki henshawi	FT	Possible	Truckee River tributary streams
Mountain Sucker ^e	Catostomus platyrhynchus	CSC	Possible	cool, clear streams
Mountain Yellow-legged Frog ^e	Rana muscosa	FPE	Possible	ponds, streams
Cooper's Hawk ^a	Accipiter cooperii	CSC (nesting)	Probable	forest near water, riparian
Northern Goshawk ^a	Accipiter gentilis	CSC, FSC (nesting)	Possible ¹	dense, mature coniferous forest
Osprey ^c	Pandion haliaetus	CSC (nesting)	Present	large snag/tree, lake
California Spotted Owl ^b	Strix occidentalis occidentalis	CSC, FSC	Probable	mature coniferous forest
Black Swift ^a	Cypseloides niger	CSC (nesting)	Unlikely	cliffs, waterfalls
Willow Flycatcher ^c	Empidonax trailii	CE (nesting)	Unlikely	meadows with willows
Olive-sided Flycatcher ^d	Contopus borealis	G5S4	Present	mixed conifer, red fir, lodgepole pine
Yellow Warbler ^d	Dendroica petechia brewsteri	CSC (nesting)	Present	riparian woodland, montane chaparral
Pallid bat ^b	Antrozous pallidus	CSC	Possible	open coniferous forest, exposed rock
Townsend's big-eared bat $^{\rm b}$	Corynorhinus townsendii	CSC, FSC	Possible	riparian, mature forest
Spotted bat ^b	Euderma maculatum	CSC, FSC	Possible	coniferous forest, wet meadows, cliffs, rocks
Small-footed myotis ^b	Myotis ciliolabrum	FSC	Possible	forests near water
Long-eared myotis ^b	Myotis evotis	FSC	Possible	snags, riparian, forest, water bodies
Fringed myotis ^b	Myotis thysanodes	FSC	Possible	water bodies, coniferous forests
Long-legged myotis ^b	Myotis volans	FSC	Possible	coniferous forests, water source
Western mastiff bat ^b	Eumops perotis	CSC, FSC	Possible	meadows, chaparral, forests
Silver-haired bat ^b	Lasionycteris noctivagans	FSC	Possible	forests, snags, water source
Yuma myotis ^c	Myotis yumanensis	CSC, FSC	Probable	forests, water bodies
Sierra Nevada Snowshoe Hare ^d	Lepus americanus tahoensis	CSC, FSC	Present	riparian thickets, young conifers
Sierra Nevada Mountain Beaver ^a	Aplodontia rufa californica	CSC, FSC	Present	dense riparian, deep soil, near water
Lodgepole Chipmunk ^d	Tamias speciosus speciosus	FSC	Present	open canopy lodgepole pine forest

Sierra Nevada Red Fox ^a	Vulpes vulpes necator	CT, FSC	Possible	lodgepole pine, red fir, chaparral, riparian
California Wolverine ^a	Gulo gulo luteus	CT, FSC	Possible	coniferous forest, exposed rock, wet mdws.
Pine marten ^c	Martes americana	G5S3S4	Present	coniferous forest, snags, downed logs

Source of species records: ^aCNDDB; ^bUSFS 2001; ^cDPR; ^dMorrison 1993, USFWS^e.

*Status Codes: FE = Federal Endangered; FPE = Federal Proposed Endangered; FT = Federal Threatened; FC = Federal Candidate; CE = California Endangered; CT = California Threatened; CSC = California Species of Concern; G5S4 = found throughout its historic range, but factors exist to cause some concern in California such as narrow habitat or continuing threats; (nesting) status applies only to nesting birds.

Present: known to live in Donner MSP from recent records (1990-2001), and suitable habitat exists. Probable: suitable habitat exists, but no surveys have been conducted to confirm presence. Possible: suitable habitat may exist in the park, no surveys have been conducted to determine presence. Unlikely: although suitable habitat may exist in the park, or requires such large areas of habitat, that it is unlikely that breeding individuals would be found in the park.

Probable¹ Northern Goshawks nested in the park until beetle killed lodgepole pines were removed in 2000-01. Areas of dense forest in Coldstream Canyon may support nesting or foraging Northern Goshawks.

APPENDIX F

Planning Influences

System-Wide Planning Influences

Americans with Disabilities Act of 1990, Title II and III Clean Water Act, Section 404 Federal Endangered Species Act Federal Migratory Bird Treaty Act National Environmental Policy Act (NEPA) Secretary of the Interior's Standards for the Treatment of Historic Properties, revised in 1992

California Code of Regulations

California Department of General Services, Division of the State Architect, Access Compliance

California Endangered Species Act

California Environmental Quality Act (CEQA)

California Fish and Game Code

California Native Plant Protection Act

California Public Resources Code:

Section 5019.50	State Park Classification
Section 5024	Preserving and Maintaining all State-owned Historical
	Resources
Section 5024.1	California Register of Historic Resources
Section 5024.5	Historic resource reviews
Section 5097.9	Native American Heritage: Cultural and Sacred Sties Free
	Exercise of Religion; Cemeteries, Place of Worship on
	Ceremonial Sites
Section 5097.99	Felony Possession of Native American Human Remains and
	Artifacts
Section 5097.991	Repatriation
Section 5020.1(g)	Native American Heritage and Department of Parks and
	Recreation Gathering Policy
Section 21083.2	Unmitigated Significant Effects on Archaeological Sites
(ornor's Executive Or	der W 26.02 (Maintain, protect and manage cultural and

Governor's Executive Order W-26-92 (Maintain, protect and manage cultural and heritage resources)

Natural Communities Conservation Planning Act

California Department of Parks and Recreation Operations Manual California Department of Parks and Recreation Administrative Manual California Recreational Trails Plan California State Park and Recreation Commission Statements of Policy California State Parks System Plan California State Parks Access to Parks Guidelines California State Parks Mission Statement

Park Concessions Policies

Policies, Rules, Regulations, and Orders of the California State Park and Recreation Commission and the California Department of Parks and Recreation

Resource Management Directives of the Department of Parks and Recreation. These directives amplify the legal codes contained in the Public Resources Code, the California Code of Regulations, and the California State Park and Recreation Commission's Statement of Policy and Rules of Order. The directives most pertinent to existing or potential issues at Donner Memorial State Park are:

- #1 State Park System resources definition
- #2 State Park Resource Manager description
- #3 State Park inventory
- #4 State Park acquisition objectives
- #5 State Park development
- #7 Natural and scenic resource analysis for State Parks and Reserves
- #24 Primary objective of the Department of Parks and Recreation
- #25 Program establishment for identification, description, and evaluation of all resources
- #26 Identification and management of environmental and human-related factors influencing State Park lands
- #28 Visitor use impacts
- #29 Vegetation management
- #31 Environmental resource management
- #32 Resource management programs
- #33 Exotic plant management
- #34 Invasive vegetation control
- #35 Natural wildlife habitat preservation
- #36 Wildlife population balance
- #37 Soil conservation and erosion control
- #42 Allowable uses to protect water features
- #43 Water quality control
- #44 Water diversion
- #45 Water pollution control
- #46 Environmental quality
- #50 Statewide inventory, preservation, protection, and interpretation of archaeological sites
- #51 Preservation of native California Indian resources
- #52 Native California Indian community participation in cultural resource management
- #53 Human remains
- #54 Identification, evaluation, and description of historic resources
- #55 Criteria for determination of significant historic resources
- #57 Inventory of significant cultural resources
- #58 Cultural resource protection
- #59 Approval for underground work
- #60 Management and interpretation of human history

- #61 Adaptive use of historic structures
- #63 Cultural resource management programs
- #64.a Priorities for preservation, rehabilitation, and reconstruction
- #64.b Guidelines for preservation and/or restoration of existing historic features
- #64.c Preservation, restoration, and reconstruction of historic features within the primary period of a unit
- #64.d Restoration and preservation of historic features outside the primary period for a unit
- #69 Archaeological resources
- #74 Recreation development/use

Regional Planning Influences

The policies, plans and programs of agencies and organizations in the region affect the park in various ways. These influences represent government on many levels and address regional issues that may affect planning decisions at Donner Memorial State Park.

Federal:

U.S. Fish and Wildlife Service

U.S. Forest Service, Tahoe National Forest

U.S. Army Corps of Engineers

State:

California Department of Fish and Game California Department of Forestry and Fire Protection California Department of Transportation California Regional Water Quality Control Board, Lahontan Region California State Board of Forestry

County and Local: The Town of Truckee Nevada County Northern Sierra Air Quality Management District Placer County Air Pollution Control District Placer County

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