
Lassen Volcanic National Park

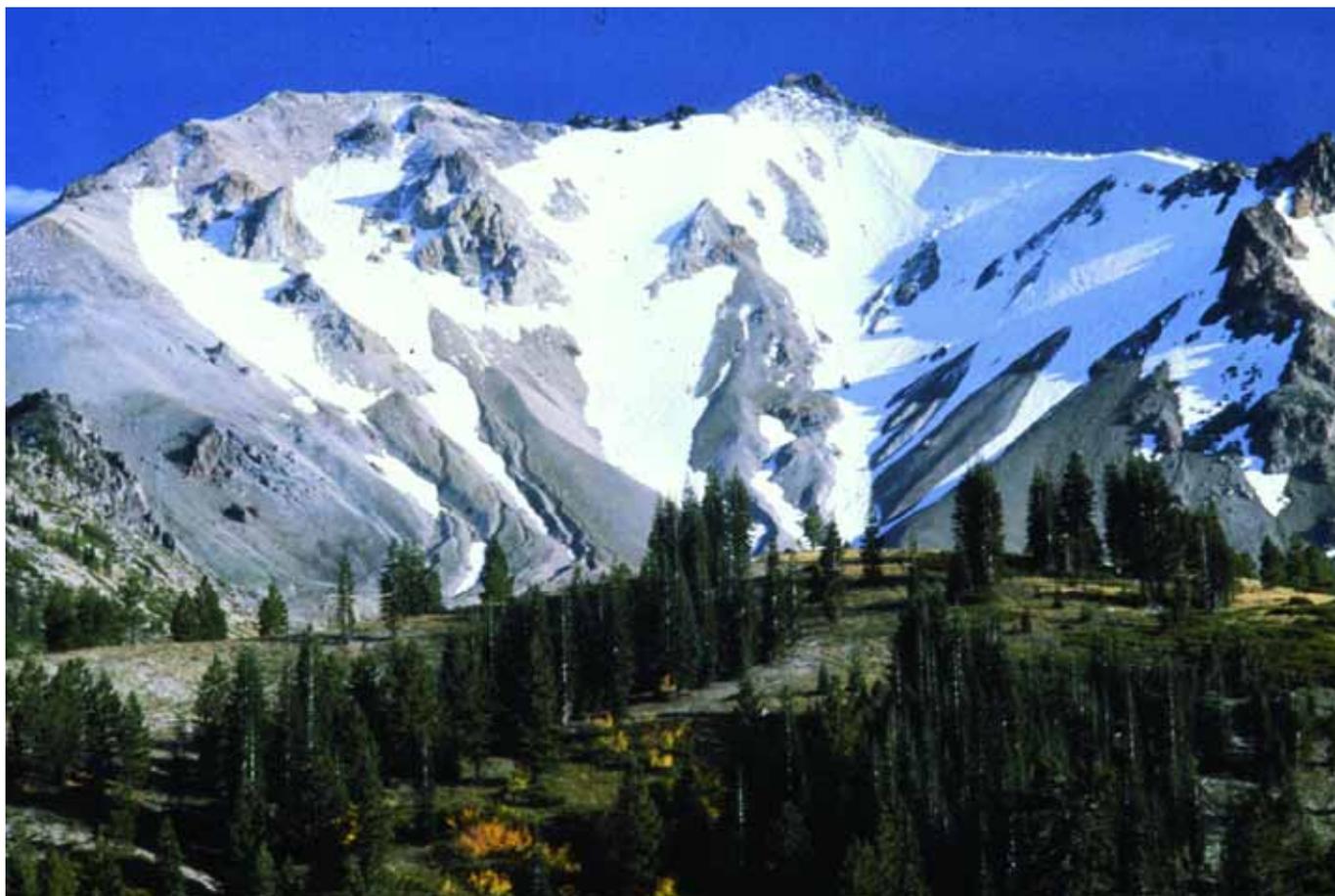
General Management Plan

Lassen Volcanic National Park
California

Produced by the Pacific Great Basin Support Office
National Park Service

U.S. Department of the Interior
Washington, DC

July 2003



This General Management Plan is Lassen Volcanic National Park's overall management strategy for a ten to fifteen year period. This document summarizes the selected alternative from the Final General Management Plan / Environmental Impact Statement (August 2001). The Record of Decision (ROD), signed on February 25, 2002, is included in this document as an appendix. The ROD includes a summary of public and interagency involvement.



Lassen volcanic eruption October 13, 1915

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cinder cone



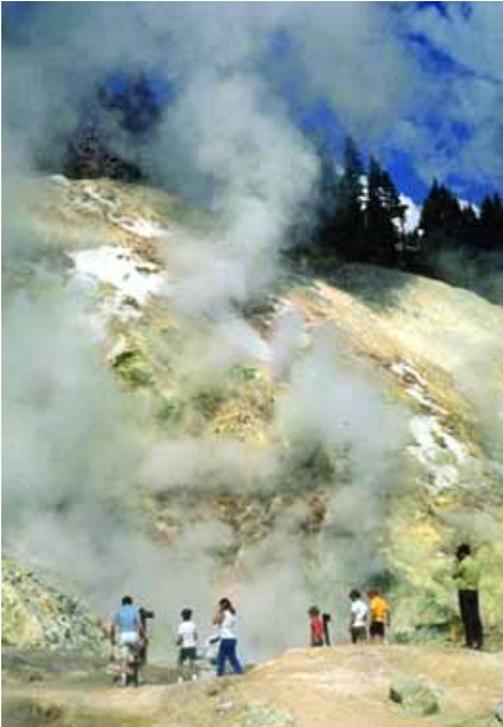
junior ranger program



administration building in winter



BACKGROUND



clockwise from left: park visitors at Devil's Kitchen, King's Creek Meadow
Manzanita Lake, and Mt. Harkness



Background

Lassen Volcanic National Park, established in 1916, is located in northeastern California in portions of Shasta, Lassen, Plumas, and Tehama counties. The 106,372-acre park is located about fifty miles east of both Red Bluff and Redding and is within a day's drive of two major California metropolitan centers, the Sacramento and San Francisco Bay areas. (See Map 1, Regional Map.) The park accommodates about 400,000 visits each year, providing opportunities for visitors to learn about volcanism and other park phenomena and enjoy various recreation pursuits such as sightseeing, camping, picnicking, and hiking. Over 75 percent of the park is congressionally designated wilderness.

Purpose of the General Management Plan

The National Park Service maintains an up-to-date general management plan (GMP) for each unit of the National Park System. The purpose of the plan is to provide long-term direction for resource preservation and visitor use. The plan was developed in consultation with servicewide program managers, interested parties, and the general public, and is based on an analysis of existing and projected resource conditions, visitor experiences, environmental impacts, and costs.

General management planning constitutes the first phase of a tiered planning and decision making process. It focuses on what resource conditions and visitor experiences should be achieved and maintained over time. The GMP takes a long-term view, which may be many years into the future when dealing with the time frames of natural and cultural processes. The plan considers the park in its full ecological and cultural contexts as a unit of the national park system and as part of a surrounding region.

The general management plan primarily provides a vision of the future. It does not include detail on how to achieve that vision. A number of action plans and development designs will be prepared subsequently to implement the GMP and provide more specific guidance on how to achieve the vision. Plans will be completed for various park programs, for example, natural and cultural resource management, interpretation, land protection, and fire management. Site plans and designs will be completed for proposed development. All of these plans will reflect the

management direction and the vision articulated in the approved GMP. These implementation plans and designs will include additional public review and environmental compliance as appropriate.

The impacts of all construction projects and various other park programs/projects to be implemented under the approved general management plan will be considered in subsequent implementing plans in order to comply with National Environmental Policy Act (NEPA,) Section 106 of the National Historic Preservation Act (NHPA), and the implementing regulations set forth in the Code of Federal Regulations.

The Government Performance and Results Act (GPRA) has instituted a government-wide performance management system with requirements for the preparation of five year strategic plans and annual performance plans and reports. The National Park Service approach to compliance with GPRA requires the completion of such plans at the park level as well as at the servicewide level.

The NPS approach to GPRA uses an 8-step process as follows:

1. Review Servicewide Strategic Plan
2. Establish Park Mission
3. Develop Park Mission Goals (Desired Future Conditions)
4. Determine Long-Term Goals (Measurable 5-year goals)
5. Assess Resources
6. Develop Annual Performance Plan
7. Implement Annual Plan
8. Develop Annual Performance Report

The first three steps of the GPRA process have been completed in this general management plan.

The California Region of the U.S. Forest Service is undertaking a major collaborative natural resource planning effort for the Sierra Nevada region, including the area of the park and the adjacent Lassen National Forest. This effort, referred to as the Sierra Nevada Ecosystem Framework, is intended to facilitate resource

decision-making on an ecosystem basis. Cooperative working relationships have been established under the umbrella of this effort and a number of collaborative projects are underway. The National Park Service will participate actively in this program over the next several years.

Legislative and Administrative Basis for the General Management Plan

Park Mission

Congress established the park in 1916 "for recreation purposes by the public and for the preservation from injury or spoliation of all timber, mineral deposits and natural curiosities or wonders within said park and their retention in their natural condition and...[to] provide against the wanton destruction of the fish and game found within said park and against their capture or destruction. . . ."

The park's mission as stated in the approved Strategic Plan is "to conserve, preserve, and protect Lassen Volcanic National Park and its geological, biological, and cultural resources for the enjoyment, education, and inspiration of present and future generations." The goals associated with this mission are:

- Natural, cultural, and wilderness resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem and cultural context.
- The park contributes to knowledge about cultural and natural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.
- Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and recreational opportunities.
- Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.
- The park uses current and sustainable management practices, systems, and technologies to accomplish its mission.
- The park increases its managerial capabilities through initiatives and support from other agencies, organizations, and individuals.

Legal Mandates and Servicewide Policies

Several laws and policies specify how parks will be managed. They must be adhered to under any plan approved for park management.

Park Management Policy: National Park Service Management Policies, most recently updated in 2001, provides comprehensive policy guidance for all aspects of National Park management.

Laws Generally Governing Park Management: The most important statutory directive for the National Park Service is provided by interrelated provisions of the NPS Organic Act of 1916, and the NPS General Authorities Act of 1970, including amendments to the latter law enacted in 1978.

The Organic Act of 1916 requires that the National Park Service "... promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified... by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

Congress supplemented and clarified these provisions through enactment of the General Authorities Act in 1970, and again through enactment of a 1978 amendment to that law. The key part of that act, as amended, is:

Congress declares that the national park system, which began with establishment of Yellowstone National Park in 1872, has since grown to include superlative natural, historic, and recreation areas in every major region of the United States, its territories and island possessions; that these areas, though distinct in character, are united through their interrelated purposes and resources into one national park system as cumulative expressions of a single national heritage; that, individually and collectively, these areas derive increased national dignity and recognition of their superlative environmental quality through their inclusion jointly with each other in one national park system preserved and managed for the benefit and inspiration of all the people of the United States; and that it is the purpose of this Act to

Congress has provided that when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation is to be predominant.

include all such areas in the System and to clarify the authorities applicable to the system. Congress further reaffirms, declares, and directs that the promotion and regulation of the various areas of the National Park System, as defined in section 1c of this title, shall be consistent with and founded in the purpose established by section 1 of this title [the Organic Act provision quoted above], to the common benefit of all the people of the United States. The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress.

The "fundamental purpose" of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. This mandate is independent of the separate prohibition on impairment, and so applies all the time, with respect to all park resources and values, even when there is no risk that any park resources or values may be impaired. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, so long as the impact does not constitute impairment of the affected resources and values.

The fundamental purpose of all parks also includes providing for the enjoyment of park resources and values by the people of the United States. The "enjoyment" that is contemplated by the statute is broad; it is the enjoyment of all the people of the United States, not just those who visit parks, and so includes enjoyment both by people who directly experience parks and by those who appreciate them from afar. It also includes deriving benefit (including scientific knowledge) and inspiration from parks, as well as other forms of enjoyment. Recognizing that the enjoyment by future generations of the national parks can be ensured only if the superb quality of park resources and values is left

unimpaired, Congress has provided that when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation is to be predominant.

While Congress has given the National Park Service the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement (enforceable by the federal courts) that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. This cornerstone of the Organic Act establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The impairment of park resources and values may not be allowed by the National Park Service unless directly and specifically provided for by legislation or by the proclamation establishing the park. The relevant legislation or proclamation must provide explicitly (not by implication or inference) for the activity, in terms that keep the Service from having the authority to manage the activity so as to avoid the impairment.

The impairment that is prohibited by the Organic Act and the General Authorities Act is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.

An impact to any park resource or value may constitute an impairment. An impact would be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is: necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or identified as a goal in the park's general management plan or other relevant National Park Service planning documents. An impact would be less likely to constitute an impairment to the extent that it is an unavoidable result, which cannot reasonably be further mitigated, of an action necessary to



Juniper Lake

preserve or restore the integrity of park resources or values.

The "park resources and values" that are subject to the no impairment standard include:

The park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;

Opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing any of them;

The park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and

Any additional attributes encompassed by the specific values and purposes for which it was established.

Park Planning: *Director's Order # 2*, promulgated in May 1998, provides overall guidance for National Park Service planning, integrating general management planning, strategic planning, and implementation planning. This general management plan conforms to the requirements of this order.

Wilderness: Congress designated 78,982 acres of Lassen Volcanic National Park as wilderness in October, 1972. National Park Service wilderness management policies are based on provisions of the 1916 National Park Service Organic Act, the 1964 Wilderness Act, and legislation establishing individual units of the national park system. These policies establish consistent servicewide direction for the preservation, management, and use of wilderness.

National Trails System: The park includes portions of two Congressionally designated trails, the Nobles Emigrant Trail, a component of the California National Historic Trail, and the border-to border Pacific Crest National Scenic Trail. Federal law and policy require the park to coordinate with other jurisdictions in the management of all national trails. The National Park Service is the designated administrator of the California Trail. The U.S. Forest Service administers the Pacific Crest Trail.

National Wild and Scenic Rivers System: The park includes the headwaters and a short reach of Mill Creek, which has been identified as having potential for designation as a component of the Wild and Scenic Rivers System. National Park Service policy requires that no actions be taken that would adversely affect the values that qualify a stream for designation.

Cultural Resources: The National Park Service preserves and fosters appreciation of the cultural resources in its custody through appropriate programs of research, treatment, protection, and interpretation. All National Park Service programs affecting cultural resources are subject to the provisions of the National Historic Preservation Act, the National Environmental Policy Act, the American Indian Religious Freedom Act, the Advisory Council on Historic Preservation's regulations regarding "Protection of Historic Properties," and the Secretary of the Interior's "Standards and Guidelines for Archeology and Historic Preservation."

Air Quality: The National Park Service seeks to perpetuate the best possible air quality in parks because of its critical importance to visitor enjoyment, human health, scenic vistas, and the preservation of natural systems and cultural resources. Vegetation, visibility, water quality, wildlife, historic and prehistoric structures and objects, and most other elements of a park environment are sensitive to air pollution and are referred to as "air quality related values." The National Park Service takes an aggressive role in promoting and pursuing measures to safeguard these values from the adverse impacts of air pollution. In cases of doubt as to the impacts of existing or potential air pollution on park resources, the Park Service errs on the side of protecting air quality and related values for future generations.

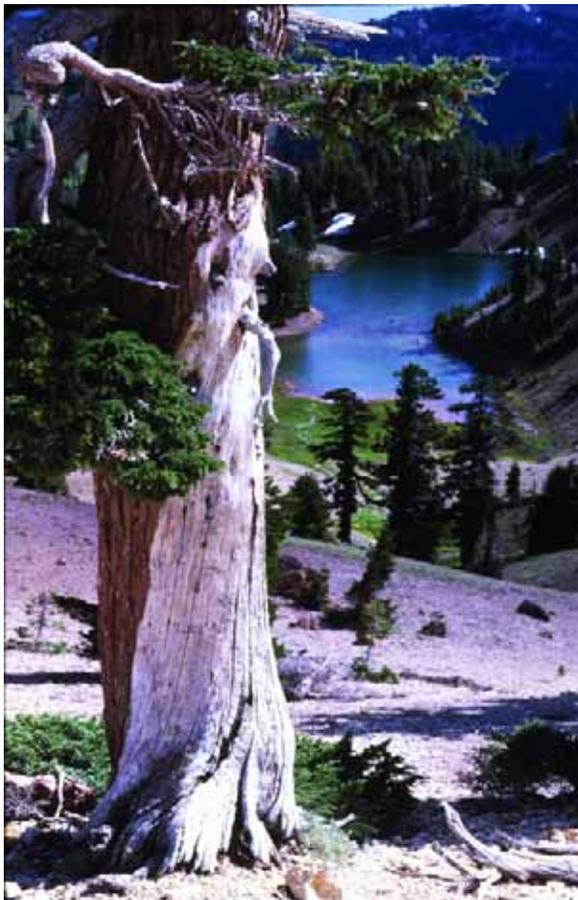
The National Park Service has a responsibility to protect air quality under both the 1916 Organic Act and the Clean Air Act. The Clean Air Act requires superintendents to take actions

consistent with their affirmative responsibilities to protect air quality related values in class I areas. Class I areas include all National Park Service units designated as national parks with more than 6,000 acres and all national wilderness areas with more than 5,000 acres that were in existence on August 7, 1977, and any other area redesignated as class I by the governing state or Native American authority. The act also establishes a national goal of preventing any future and remedying any existing man-made visibility impairment in class I areas.

Threatened or Endangered Plants and Animals: Consistent with the purposes of the Endangered Species Act, the National Park Service identifies and promotes the conservation of all federally listed threatened, endangered, or candidate species within park boundaries and their habitats. As necessary, the National Park Service controls visitor access to and use of habitats, and it may close such areas to entry for other than official purposes. Active management programs are conducted as necessary to perpetuate the natural distribution and abundance of threatened or endangered species and the ecosystems on which they depend. The U.S. Fish

and Wildlife Service and the National Marine Fisheries Service are the lead agencies in matters pertaining to federally listed threatened and endangered species. The National Park Service cooperates with those agencies in activities such as the delineation of critical habitat and recovery zones on park lands and participates on recovery teams.

The National Park Service also identifies all state and locally listed threatened, endangered, rare, or candidate species that are native to and present in the parks, and their habitats. These species and their habitat needs are considered in National Park Service planning activities. Based on an analysis of the status of state and locally listed species throughout their native ranges and throughout the National Park System, the National Park Service may choose to control access to habitats essential for maintaining viable populations. It may also conduct active management programs similar to activities conducted to perpetuate the natural distribution and abundance of federally listed species. The National Park Service preserves to the greatest extent possible state and locally listed species as part of the park's ecosystem.



clockwise: mountain hemlock, guided tour lake, Loomis Museum





An Overview of Lassen Volcanic National Park

Park Purpose and Significance

Lassen Volcanic National Park was established by an Act of Congress on August 9, 1916 "for recreation purposes by the public and for the preservation from injury or spoliation of all timber, mineral deposits and natural curiosities or wonders within said park and their retention in their natural condition...and provide against the wanton destruction of the fish and game found within said park and against their capture or destruction..." Incorporated into the park were Cinder Cone and Lassen Peak National Monuments, which were established by Presidential Proclamations (No. 753 and 754) on May 6, 1907 as part of the Lassen Peak Forest Reserve (established on June 5, 1905 by Presidential Proclamation).

Lassen Volcanic National Park is an outstanding example of a dynamic geologic landscape and is of unquestioned national significance. Lassen Peak erupted over a six- year period between 1914 and 1921. Preserved within the park is the site of the most recent volcanic eruption within the continental United States, prior to the Mount Saint Helens eruption in May, 1980. Lassen Peak is one of the largest plug dome volcanoes in the world. The park is unique in that it also preserves, in a relatively small geographic area, examples of the three other types of volcanoes recognized by geologists: shield volcanoes, composite volcanoes and cinder cones. Also within the park is the most extensive, intact network of geothermal resources west of

Yellowstone National Park, including outstanding examples of boiling springs, mudpots, and fumaroles.

In 1972 Congress designated 75 percent of the park (78,982 acres) as the Lassen Volcanic Wilderness. Appropriate recreation on lands managed for wilderness values include such activities as hiking, backpacking, horseback riding and fishing. The Wilderness Act, passed by Congress in 1964, provides guidance to federal agencies with respect to the management of wilderness areas. This act restricts the construction of roads, buildings, and other man-made improvements and the use of motorized vehicles in wilderness.

In addition to natural resources, the park preserves nationally significant cultural resources including 84 historic buildings that are on the List of Classified Structures (most of which date from the Civilian Conservation Corps era), over 70 Native American archeological sites, and portions of the Nobles Emigrant Trail.

Park Developed Areas

The purpose of this section is to provide a basic orientation on the park's sites and facilities.

Lassen Volcanic National Park is a mountainous, mostly wilderness park. As shown in Map 2, Physical Features, there are six basic developed areas: the main park road, Butte Lake, Juniper Lake, Manzanita Lake, Warner Valley, and Headquarters. These areas are discussed in the next pages.



Main Park Road: The main park road, running from the southwest corner of the park to the northwest corner around three sides of Lassen Peak, is a two-lane paved road which was aligned and constructed subsequent to park designation for the express purpose of providing visitor access to a range of phenomena associated with the eruption of Lassen Peak. The great majority of first-time visitors to Lassen Volcanic National Park drive the length of this road.

The first park facility encountered by the visitor entering at the southwest boundary is the staging area for the Brokeoff Mountain Trail. This area, located approximately half a mile north of the boundary, is currently a minimal unpaved parking lot. A trail to the west climbs to the top of Brokeoff Mountain.

Another half-mile north on the main road takes the visitor to the entrance station, where entrance fees are collected. A short distance north of the entrance station the visitor encounters a very large paved parking lot just east of the road, and a structure known as the Chalet because of its A-Frame design. The two-story Chalet provides restrooms on the lower floor and concession services, including a gift shop and food service, on the upper floor. There is not sufficient space in the Chalet for park information services or interpretive materials, so in summer months the park staffs a small information kiosk adjacent to the Chalet where visitor questions are answered and park materials are provided as needed. This area becomes highly congested during peak summer periods.

The Southwest Walk-In campground is also located in this area. Campers park in the large parking lot.

The first major interpretive stop on the road, the Sulphur Works, is located a short distance north of the Chalet. Here park visitors can see and smell volcanic phenomena on either side of the park road. A short boardwalk provides access to some of the features.

A few more miles of twists and turns on the park road take the visitor to the staging area for the Bumpass Hell Trail. The parking lot is somewhat roughly laid out and subject to severe crowding in summer months. This heavily used trail provides an opportunity to hike in to see a range of volcanic features.

A short distance north is the staging area for the Lassen Peak Trail. This trail, though a long and steep climb to the top, is extremely popular with visitors beginning in the spring even before the snow has melted. A large parking lot is provided.

A few more miles on the main road takes the visitor to the Kings Creek picnic area, and yet a few more miles takes the visitor to Summit Lake. At Summit Lake there are two large campgrounds, a horse corral, a trailhead to Twin Lakes, and a historic ranger station. A historic CCC-built ranger cabin is located at Lower Twin Lake.

A couple of miles west of Summit Lake, the visitor arrives at the interpretive site for the Devastated Area, the area that was most dramatically affected by the eruption. This area





Horseshoe Lake Ranger Station

offers interpretive displays on the eruption, a large parking lot, restrooms, and a short interpretive trail.

Several miles further northwest is the Lost Creek group campground. The seven sites at this campground will serve up to 25 visitors each. These sites must be reserved in advance.

Crags campground is located just beyond Lost Creek.

Butte Lake: The Butte Lake area is located in the extreme northeastern corner of the park, and is accessible from a spur extending south from State Highway 44. Facilities provided include a campground, horse corral, a ranger station, and a popular trail around and to the summit of Cinder Cone. Map 3 shows the layout of the area.

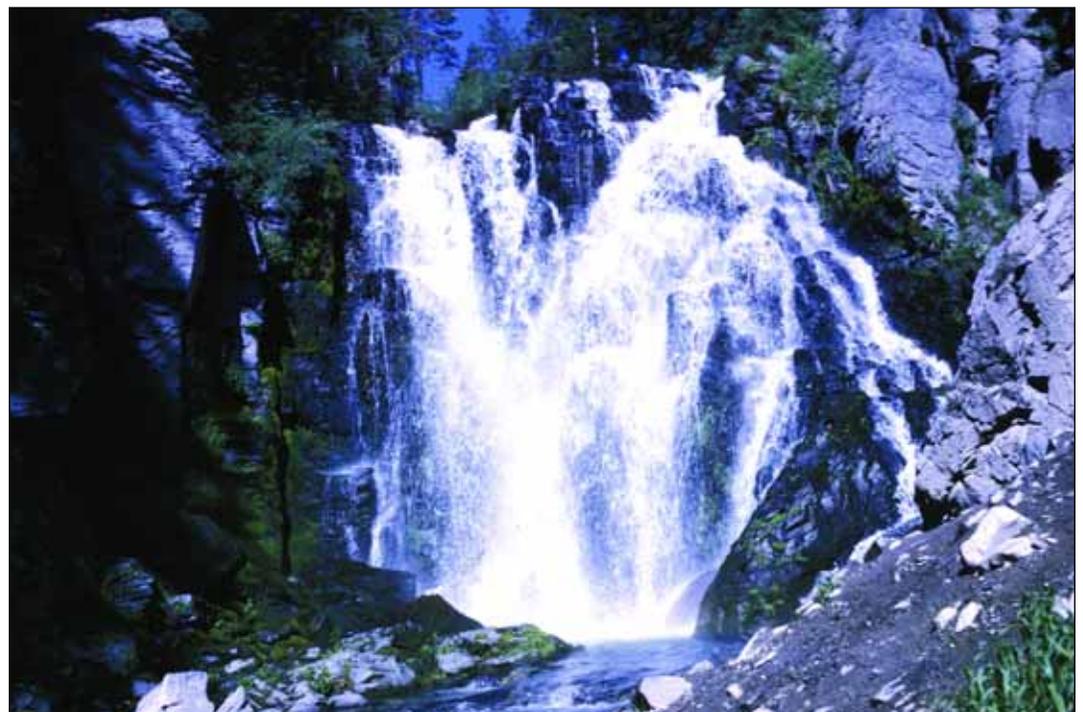
Juniper Lake: The Juniper Lake area is located in the extreme southeast corner of the park. It is accessible by an unpaved and rough road extending north from the town of Chester. Facilities include a family campground, a group campground, ranger station, horse corral, and a staging area for trails leading to popular wilderness destinations such as Horseshoe Lake, site of a historic ranger station, and Mt. Harkness, where a historic fire lookout is located. Map 4, Juniper Lake Unit, displays the layout.

Manzanita Lake: The Manzanita Lake area is the first developed area encountered by the visitor

entering the park via the northwest entrance. Manzanita Lake is the largest developed area in the park with a large campground, picnic area, museum, and general store. The National Park Service also has administrative and maintenance facilities in this area. Map 5, Manzanita Lake Unit, shows the overall layout of this area.

Warner Valley: This area is located in the south central part of the park. See Map 6, Warner Valley Unit. It is accessible by a fairly rough, mostly unpaved road extending northwest from the town of Chester. This area provides a wide range of visitor facilities and attractions including a small campground, the historic Warner Valley Ranger Station, a trailhead providing access to volcanic phenomena and wilderness destinations, and the Drakesbad Guest Ranch, a concession-operated facility which offers rustic lodging, horseback riding, pool swimming, and dining. Many of the structures in this area are historic.

Headquarters: Park headquarters is located outside the park on a separate parcel straddling State Highway 36 in the town of Mineral. The main park administrative offices and maintenance facilities are located here, along with a number of units of employee housing. This area includes several rustic structures constructed in the Civilian Conservation Corps era. See Map 7, Headquarters Unit, for the layout of the area.



Kings Creek Falls