

*Oregon Caves  
National Monument*

*General Management Plan*

*August  
1999*

*The Klamath-Siskiyou Bioregion  
Of Northern California and Southern  
Oregon is one of the wildest places left on the West  
Coast of the United States. It is also one of the least  
appreciated wild places—perhaps because its  
treasures are more hidden than the wonders  
of a Yosemite or a Yellowstone.*

David Rains Wallace  
*The Klamath Knot*  
1983

Cover: Linda M. Feltner, Seattle, Washington

# **General Management Plan**

**for**

## **Oregon Caves National Monument**

Prepared by  
U.S. Department of the Interior  
National Park Service

This final *Oregon Caves National Monument General Management Plan* (GMP) is the Proposed Action of the National Park Service and was derived from four draft alternatives presented to the public during a two year planning process. (Refer to the *Oregon Caves National Monument Draft General Management Plan and Environmental Impact Statement*, December 1997 and the *Oregon Caves National Monument General Management Plan and Environmental Impact Statement*, Volume I and Volume II, November 1998.) With the signing of the Record of Decision on December 23, 1998, this alternative became the general management plan for the park.

This GMP responds to both the National Park Service planning requirements and to the issues identified during the public scoping process. It emphasizes enhanced protection of the Monument resources and visitor experiences. The plan provides for increased protection of the Monument's cave hydrology, surface forest environment and public water supply through a proposed, approximately 3,410 acre addition to the Monument. This will be accomplished through a transfer of Siskiyou National Forest land to the National Park Service. Legislation will be sought to implement this aspect of the proposal. Actions in the GMP enhance present visitor experiences through park ranger-led tours of the cave, development of an on-site visitor center through the adaptive reuse of an existing historic property, establishment of a cave tour reservation system, and enhancement of a system of non-motorized trails in a protected forest setting.

In addition, the general management plan contains two development concept plans: 1) Administrative Site Development Concept Plan, and 2) Parking and Entry Area Development Concept Plan.

For additional information contact the Superintendent, Oregon Caves National Monument, 19000 Caves Highway, Cave Junction, Oregon; telephone: (541) 592-2100.

# Summary

This document is the general management plan (GMP) for Oregon Caves National Monument (Monument). The plan provides National Park Service management with the necessary framework to guide the management of the Monument for the next 15 years. The plan is intended to be a useful long-term decision-making tool, providing National Park Service managers with a logical and trackable rationale for decisions about the protection and public use of Monument resources.

In 1907, four sections of land, encompassing approximately 2,560 acres were withdrawn from the operation of the public land laws of the United States for study for the purposes of establishing the Monument. Two years later, a 480 acre Monument was established by proclamation of President William H. Taft. In 1978, eight additional acres were authorized in the community of Cave Junction for purposes of developing a visitor information center. Only four were added to the Monument, bringing the total Monument acreage to 484 acres. The Monument also utilizes an 80 acre administrative site within the Siskiyou National Forest which is provided to the National Park Service under interagency agreement with the U.S. Forest Service.

At the beginning of the planning process, a series of public scoping meetings were held to present the purpose and significance of the Monument to the public, to outline Monument mission goals, and to present issues that would be addressed in the plan. Input was solicited from the public and other governmental agencies to discern if there were other issues that needed to be addressed in the plan which were not initially listed. Among the issues brought up during the public scoping process were the protection of cave ecology and surrounding forest resources, the protection of area watersheds and the public water supply, the inadequacy of the existing boundary to protect resources, the current manner of interpretation of the cave to the public, and the inadequacy of present visitor services and facilities.

In response to these issues, and cognizant of the mission goals established for the Monument, the draft general management plan provided four alternative approaches for the protection, public use and management of Monument resources. One of these proposals, Alternative C, became the general management plan for Oregon Caves National Monument with the release of the final general management plan and the signing of the Record of Decision on December 23, 1998. (For more information on the three other alternatives originally proposed, refer to the *Oregon Caves National Monument Draft General Management Plan and Environmental Impact Statement*, December 1997 and the *Oregon Caves National Monument General Management Plan and Environmental Impact Statement*, Volume I and Volume II, November 1998.)

The actions in this GMP provide for adequate administrative and collection storage at the administrative site. The National Park Service interpretive rangers will operate cave tours, instead of concessions staff. The National Park Service (NPS) staff will establish a cave tour reservation system based at the Illinois Valley Visitor Center and the visitor center will continue to serve as a key point for initial visitor contact and information.

The National Park Service staff will protect the Lake Creek and upper Cave Creek watersheds, the public water supply, and foreground and middleground viewsheds as seen from the Monument through the transfer of 3,410 acres to the Monument from Siskiyou National Forest. The Monument staff will provide

additional hiking, horseback riding, and other recreational opportunities to the public, and maintain public road access to adjacent national forest lands. Monument staff will open the cave to public use from the middle of March to middle to late December. A concession service will continue to provide lodging, food service and gift sales, and will be located at the Chateau. The use of the lower level of the Chalet will be converted from the current concession operated gift shop to the Monument visitor center and staffed with National Park Service and cooperating association employees.

Other actions in the GMP include the continued rehabilitation of the cave trail, the continued use of the Illinois Valley Visitor Center for visitor orientation and information, protection of the Oregon Caves Historic District, and ongoing regional cooperation on various issues such as fire management and tourism.



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This historic photo shows the Oregon Caves Chateau pictured on the left and the Chalet at center.

# Background of the Park

Oregon Caves National Monument (Monument) is located within the Siskiyou Mountains of southern Oregon in Josephine County, about 20 miles east from its gateway community of Cave Junction. The Monument is accessed at the terminus of State Highway 46 (Caves Highway). The California-Oregon border is seven miles to the south and the Pacific Ocean lies 40 miles to the west. The Monument is situated within Oregon's Second Congressional District. (See Figure 1, Greater Siskiyou Ecoregion.)

## Background

### Discovery of Oregon Caves

Elijah Davidson and his dog, Bruno, were hunting in 1874 when Bruno chased a bear into a dark hole in the side of a mountain. Davidson followed to rescue his dog, and in doing so, discovered Oregon Caves. After all his matches were exhausted, he was able to find his way out of the cave—with his dog—by following the sound of the creek which flowed in the passageway.

In 1907, Joaquin Miller toured the cave with other visitors and was impressed. Miller, a well-known poet and writer, publicly referred to the cave as the “Marble Halls of Oregon.” In 1915, in his book of poetry, *Song of the Sierras* (Volume Two), he wrote the following reference to the cave (Miller 1915: p.210):

The next great wonder of our undiscovered Oregon is still less known to the world and almost entirely unknown to ourselves. This is the great Marble Halls of Oregon; a cavern, greater, so far as yet known, than the great Mammoth Cave of Kentucky. Its existence was first known only a few years back and, to this hour, has been explored for the depth of but a few miles.

Miller and others helped promote the caves to the national public. Attention about the caves grew which led to the establishment of Oregon Caves National Monument.

### Establishment of Oregon Caves National Monument

On August 12, 1907, by order of the Secretary of the Interior, Sections 9, 10, 15, and 16 of unsurveyed Township 40 S., Range 6 W. (Willamette Meridian), Oregon, were withdrawn from operation under the public land laws, including mineral entry, for the purpose of establishing a proposed national monument. This withdrawal totaled approximately 2,560 acres. (See Figure 2, Withdrawal and Status of Oregon Caves National Monument.)

On July 12, 1909, President William H. Taft signed a proclamation [No.876—July 12, 1909—36 Stat. 2497] establishing Oregon Caves as a national monument within the Siskiyou National Forest (SNF), to be administered by the United States Forest Service (USFS). The proclamation states:

The reservation made by this proclamation is not intended to prevent the use of the lands for National Forest purposes under the proclamations and Executive Order establishing the Siskiyou National Forest, but the two reservations shall both be effective on the land withdrawn, but the National Monument hereby established shall be the dominant reservation and any use of the land which interferes with its preservation or protection as a National Monument is hereby forbidden.

### *Background of the Park*

The lands referred to in the proclamation, the existing Monument, cover only 480 acres compared with the 2,560 acres originally included in the 1907 withdrawal. (The total acreage for the Monument today is 484 due to the addition of four acres for the Illinois Valley Visitor Center in 1978.) (See Appendix A: Oregon Caves National Monument Proclamation and 1978 Boundary Change.)

Today, the 1907 withdrawal remains—2,080 acres surrounding the Monument—and precludes mining, but not mineral leasing or timber harvest. This withdrawal outside the 1909 proclamation is administered by the USFS as a part of the SNF.

## **Actions Affecting Oregon Caves National Monument After Proclamation**

The Oregon Caves Highway was completed in 1922 allowing for easier access into the rugged topography and providing for increased visitation to the caves.

In 1923, local businessmen applied for a permit to build a resort at Oregon Caves. The Chalet was built in the rustic architecture style using Port Orford cedar bark as sheathing. Other buildings were soon constructed, including the Chateau.

Executive Order 6166 was signed transferring the administration of the Monument to the National Park Service from the USFS on July 10, 1933.

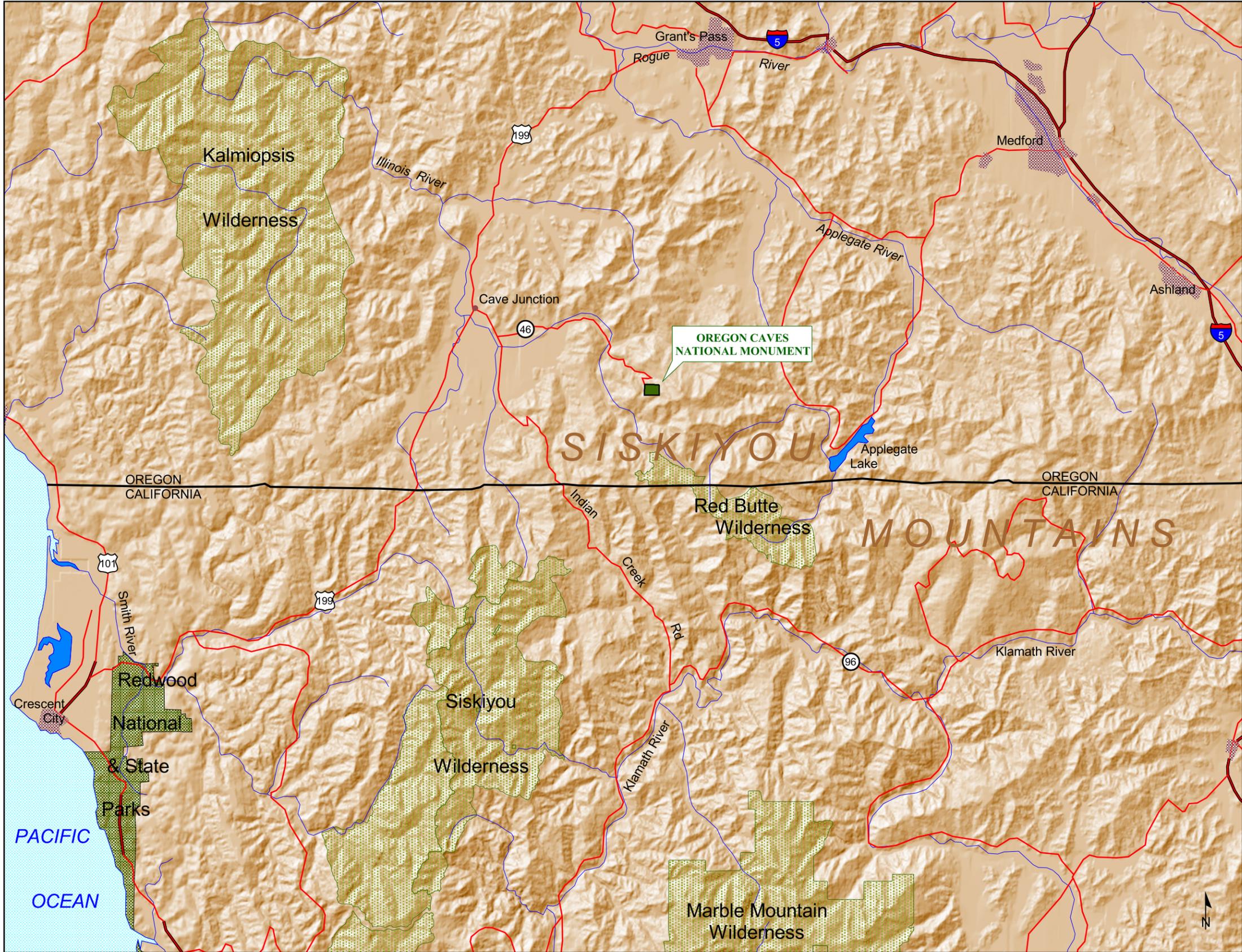
In August 1939, a report was prepared by Monument staff for the Regional Director on recommending extensions to Oregon Caves National Monument. The recommendations included extending the boundary an additional 2400 acres raising the total area of the Monument to 2880 acres. The extension was based on the following reasons: to conserve the upper Lake Creek watershed and water supply for Monument use, to provide greater recreational opportunities such as hiking and horseback riding, and to protect the geological and botanical features, and views of the rugged Siskiyou Mountains.

Ten years later, in August 1949, a boundary extension of over 4,500 acres was recommended for the Monument by the Oregon Caves Boundary Study Committee, represented by the USFS, Bureau of Land Management (BLM), and the National Park Service (NPS). Included in that document was a Memorandum for the NPS Regional Director, Region Four, San Francisco stating:

In 1936 an extension of Oregon Caves National Monument would have been highly desirable and far-sighted; in 1949 it has become urgent. So great have been the changes in the economic and physical aspects of the land that the present opportunity to carry out what was proposed twelve years ago probably represents the last chance. Since the war the number of lumber mills in the vicinity has increased tenfold. Logging destruction of the surrounding forest in the last three years has been enormous. Cutting already has approached to within a half mile of the Monument.

The issue transcends considerations merely of making Oregon Caves National Monument a more attractive area. At the rate the face of the land is changing now, in thirty years (probably less) this area, if saved now, will be an outstandingly beautiful remnant of a unique mountain forest region that elsewhere will have largely vanished forever.

Mentioned by the committee's report were stands of Port Orford cedar to be included in the adjusted boundary. The cedar stands were outstanding examples in southwest Oregon with only a few left in the world. The boundary expansion did not occur and the Port Orford cedar stands were cut.



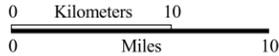
ORCA GMP/EIS



FIGURE 1  
**Greater Siskiyou Ecoregion**

**Legend**

- National Monument
- National Park
- Wilderness
- City
- State Boundary
- Divided Highway
- Highway



Data Sources:  
 ESRI Digital Chart of the World: hydrography, roads  
 The Wilderness Society: wilderness boundaries  
 USGS: topography, park boundaries  
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 Ecoregion

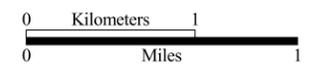




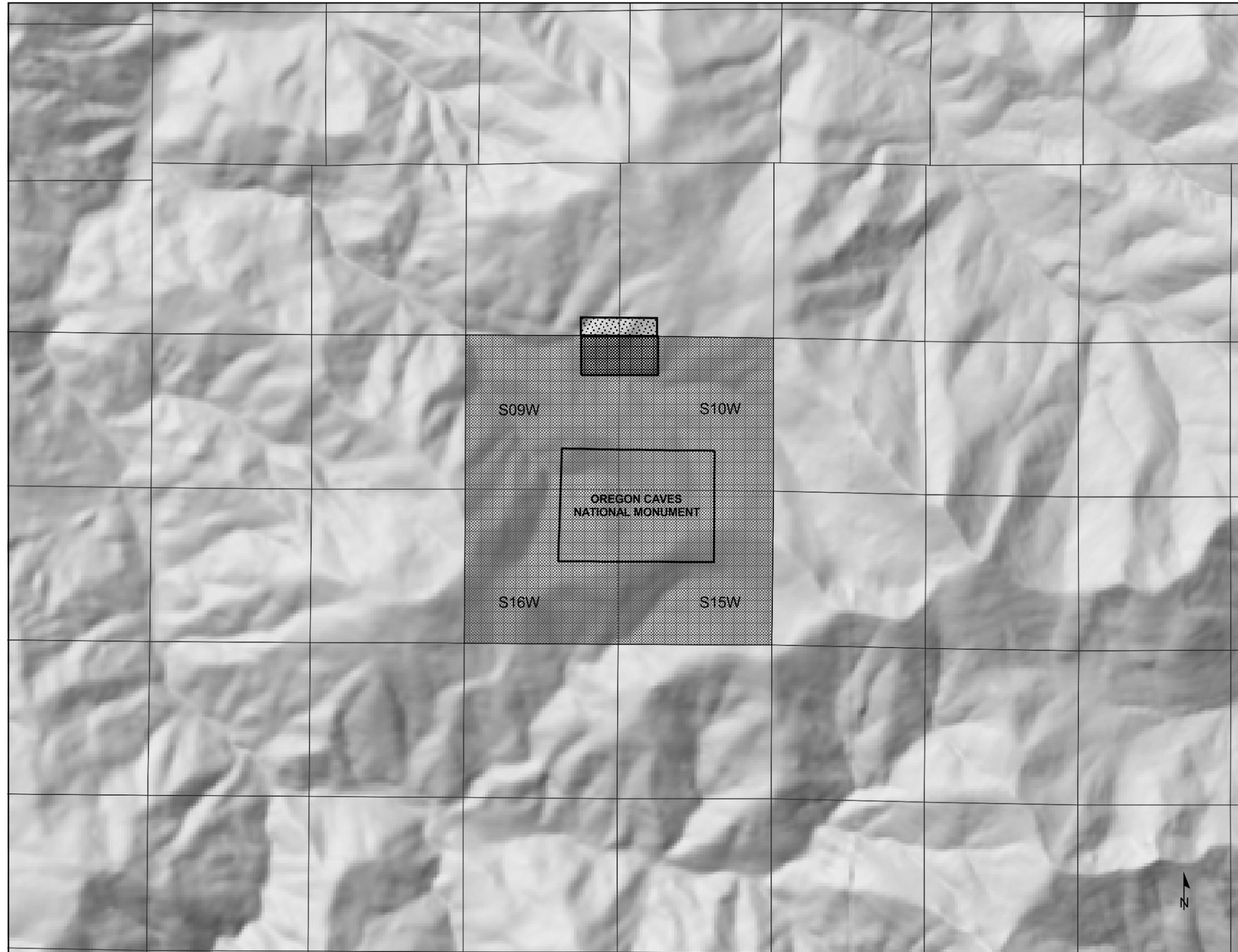
FIGURE 2  
**Withdrawal &  
Status of  
Oregon Caves  
National  
Monument**

**Legend**

-  Withdrawal (40 acres) made by Public Land Order No. 5226 of July 14, 1972
-  Withdrawal (2560 acres) made by the Secretarial Order of August 12, 1907
-  Oregon Caves National Monument (480 acres) Withdrawn by Presidential Proclamation No. 876 of July 12, 1909
-  Memorandum of Understanding NPS Administrative site (80 acres) within withdrawal by Secretarial Order of August 12, 1907
-  Public Land Survey System Section Lines



Data Sources:  
SISKIYOU NF: PLSS  
USGS: topography, park boundary  
NPS: administrative site boundary,  
withdrawal boundary



On July 20, 1972 an Administrative Site Withdrawal (Public Land Order 5226) was designated outside of the original four section withdrawal to protect a potable water source for NPS at the administrative site on USFS land. The area described contains 40 acres in Josephine County (Township 40 S., Range 6 W., Section 3, S ½ SW ¼ SW ¼; Section 4, S ½ SE ¼ SE ¼). The withdrawal states:

The withdrawal made by this order does not alter the applicability of those public land laws governing the use of the national forest lands under lease, license, or permit, or governing the disposal of their mineral or vegetative resources other than under the mining laws. However, leases, licenses, or permits will be issued only if it is determined that such use will not interfere with the use of the land for the purposes for which they are withdrawn by this order.

These 40 acres are administered under the jurisdiction of the Department of Agriculture; however, the withdrawal is for the benefit of NPS.

On November 10, 1978, a boundary change (Public Law 95-625) authorized 7.98 acres in Cave Junction for the purpose of establishing an information/visitor center for Monument visitors. Construction for this proposed visitor center was never funded. However, in August 1990, construction of the Illinois Valley Visitor Information Center (IVVC) was completed under a challenge cost share agreement among the USFS, State of Oregon, Josephine County, City of Cave Junction, the Illinois Valley Chamber of Commerce, and Rough and Ready Lumber Company. The NPS entered into an interagency agreement with the SNF for operation and management of the center. The NPS administers 4.03 acres of this land. The remaining acreage (3.95 acres) was sold because the NPS determined that the need for a visitor center could be accomplished within the smaller, four acre parcel.

The Chateau was designated a National Historic Landmark (NHL) in 1987 because of its significance as an example of the rustic style of architecture. Later, in February 1992, the historic buildings within the Oregon Caves Historic District were listed on the National Register of Historic Places. This included the Chateau, Chalet, Guide Dormitory, Ranger Residence, and Checking and Comfort Station. Also included were the small scale features and plantings associated with the historic designed landscape.

### **USFS Special Use Agreements**

A variety of agreements exist between the NPS and the USFS. Most noteworthy is the Memorandum of Understanding (MOU) that allows NPS facilities on lands managed by the USFS. Monument residence and maintenance facilities are situated on a portion of an authorized 80 acre tract of USFS land (approximately 40 acres are currently being used). The agreement allows for the use, improvement, and maintenance of buildings and associated utilities, as well as the construction and maintenance of additional facilities. The agreement has had several addenda that provide for telephone lines and a potable water supply and lines. A separate agreement covers VHF antennas on USFS land. The SNF assists the Monument with wildland fire efforts through a cooperative agreement. This agreement also allows NPS staff to respond to USFS fires that threaten the Monument and to provide response and assistance in a designated mutual aid area.

## **Purpose and Significance of Monument**

## **Purpose of Monument**

According to the NPS Organic Act of August 25, 1916, the NPS is to promote and regulate the use of park areas in conformance with their purpose which is:

...to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations.

The 1909 proclamation established the purpose of Oregon Caves National Monument. The proclamation states:

Whereas, certain natural caves, known as the Oregon Caves, which are situated upon unsurveyed land within the Siskiyou National Forest in the State of Oregon, are of unusual scientific interest and importance, and it appears that the public interests will be promoted by reserving these caves with as much land as may be necessary for the proper protection thereof, as a National Monument; ...

Specifically, the primary purpose of the Monument is to protect the natural processes of Oregon Caves as well as any new caves found within the boundaries of the Monument. Protection includes management of old-growth forest and its associated species and natural processes within the watershed of the caves to assure that the chemistry of the water entering the cave is reflective of natural cycles associated with the region. Visitors to the Monument have an opportunity to tour through the cave and experience the twisted catacombs and cave formations created by water tables and aquifers of ancient watersheds while at the same time to observe the behavior of water under the conditions of the current ecosystem above and surrounding the caves. The caves are managed to preserve the collection of Pleistocene fossil bones and footprints as well as its endemic, cave dwelling life that is found there.

## **Significance of Monument**

Oregon Caves is a 484 acre national monument within the Siskiyou Mountains. The Monument is significant for its representation of back-arc basin geology and its close association with a volcanically active oceanic rift zone. The marble outcrop appears to have formed on this volcanically active island chain as is evidenced by the presence of vesicular pillow basalt that sits directly beneath the marble outcrop and, in some cases, invades into the limestone demonstrating contemporary development of each. This is possibly the only cave system in the country with this type of geologic history and is one of the few marble caves in the nation available for public tours.

The cave tour route, with its twists, turns, climbs, descents, narrowness, low ceilings and length is one of the most adventurous cave tour routes in North America. Construction of the new trail has retained these features although some of the stairs and steps were modified to reduce slipping, and part of the trail was rerouted to reduce head knocks. The tour route itself is an historic artifact and is more like real cave exploration than perhaps any other cave tour in the country.

This is the longest tour cave west of the Continental Divide. In the largely volcanic and metamorphic West, solution caves (caves formed by dissolution of carbonate rocks) are much smaller and rarer than in the largely sedimentary Midwest and East. Until the discovery of Bigfoot Cave in northern California, Oregon Caves was the longest solution cave in a 1,000 mile radius.

Oregon Caves had a high percentage of decorated passages when discovered, exhibiting delicate formations like soda straws and crystal-lined pools. The caves also possess a more extensive and varied display of “clay worms” (vermiculations) of silt and clay than that known in any other cave in the West.

Recent discoveries indicate that this network of caverns possesses a significant collection of Pleistocene aged fossils, including jaguar, grizzly, bobcat, mountain beaver, and black bear. (The Pleistocene lasted two million years, ending about 11,000 years ago, and included the most recent Ice Age.) In the summer of 1995, bones from a grizzly bear and jaguar were discovered in the cave. Jaguar bones are scarce in North America. The grizzly bones, which are at least 50,000 years old, are the oldest known from either North or South America. These fossil remains contribute to making the Monument a nationally significant site for well preserved Pleistocene mammals.

Cave deposits are currently being examined for small vertebrate fossils, such as bats, rodents, and amphibians, that are representative of the region’s fauna during the last Ice Age. These fossils, along with the recently discovered grizzly bear marks in the vicinity, are likely to represent Pleistocene mammal activity which entered the cave by an opening that has since been sealed. The bones were preserved in the undisturbed confines of the cave environment for thousands of years.

A perennial stream, the River Styx, (the underground portion of Cave Creek) flows through part of the cave as one of the dynamic natural forces at work. Many hydrological processes occur in the cave and are visible here.

The cave ecosystem provides habitat for numerous plants and animals. Although not noted for large, cave-adapted animals, these caves do support some state sensitive species such as Townsend’s big-eared bat and several cave-adapted arthropods endemic to the Monument.

The significance of the land surface above the cave cannot be overlooked. Many of the processes occurring within the cave are closely influenced by surface processes, especially through the exchange of air, water and food.

The Monument, in addition to national forest research natural areas, national forest botanical areas, and wilderness areas, preserves an excellent example of the Siskiyou Mountain’s primeval forest: an area with one of the highest percentages of endemic plants in the country. The native vegetation and fauna may become increasingly significant for scientific studies as the surrounding national forest land is utilized under multiple use management.

Five buildings and their associated landscape features and public use areas are listed in the National Register of Historic Places as an historic district. The centerpiece of the historic district is the Chateau, a National Historic Landmark. This unique six-story, cedar bark-sided building was built in 1934 and still operates today providing lodging and food service to Monument visitors. Other buildings in the National Register historic district include the Chalet, Guide Dormitory, Ranger Residence, and Checking and Comfort Station. (See Figure 3, Physical Features.) (Refer also to Figure 16, Oregon Caves Historic District in the *Oregon Caves National Monument Draft General Management Plan and Environmental Impact Statement*, December 1997 and the *Oregon Caves National Monument General Management Plan and Environmental Impact Statement*, Volume I, November 1998.)

## Monument Mission Goals

Mission goals describe the desired resource conditions and visitor experiences, that taken together, fully achieve the Monument's purpose, maintain its significance, and are consistent with NPS management policies. The relationship of Monument goals to service wide goals contained in the *National Park Service Strategic Plan* is also noted. (See appendix B: National Park service Mission Goals.) Oregon Caves National Monument currently has six major goals which are tiered off of the service wide strategic plan. The major category goals, listed below, and their park specific subset of goals may be found in the *Oregon Caves National Monument Strategic Plan* for FY 1998-2002:

- Oregon Caves National Monument's natural and cultural resources and associated values are protected and maintained within their broader ecosystem and cultural context;
- The Monument increases and maintains scientific baseline data used in management decisions;
- Visitors to the Monument safely experience and are satisfied with the availability, accessibility, diversity, and quality of the Monument's facilities, services, and appropriate recreational opportunities;
- Visitors understand and appreciate the preservation of the Monument's resources and associated values;
- Natural and cultural resources are conserved through formal partnership programs such as the Illinois Valley Visitor Center and cooperative agreements with Siskiyou National Forest;
- The Monument uses effective and appropriate management practices, systems, and technologies to accomplish its mission.

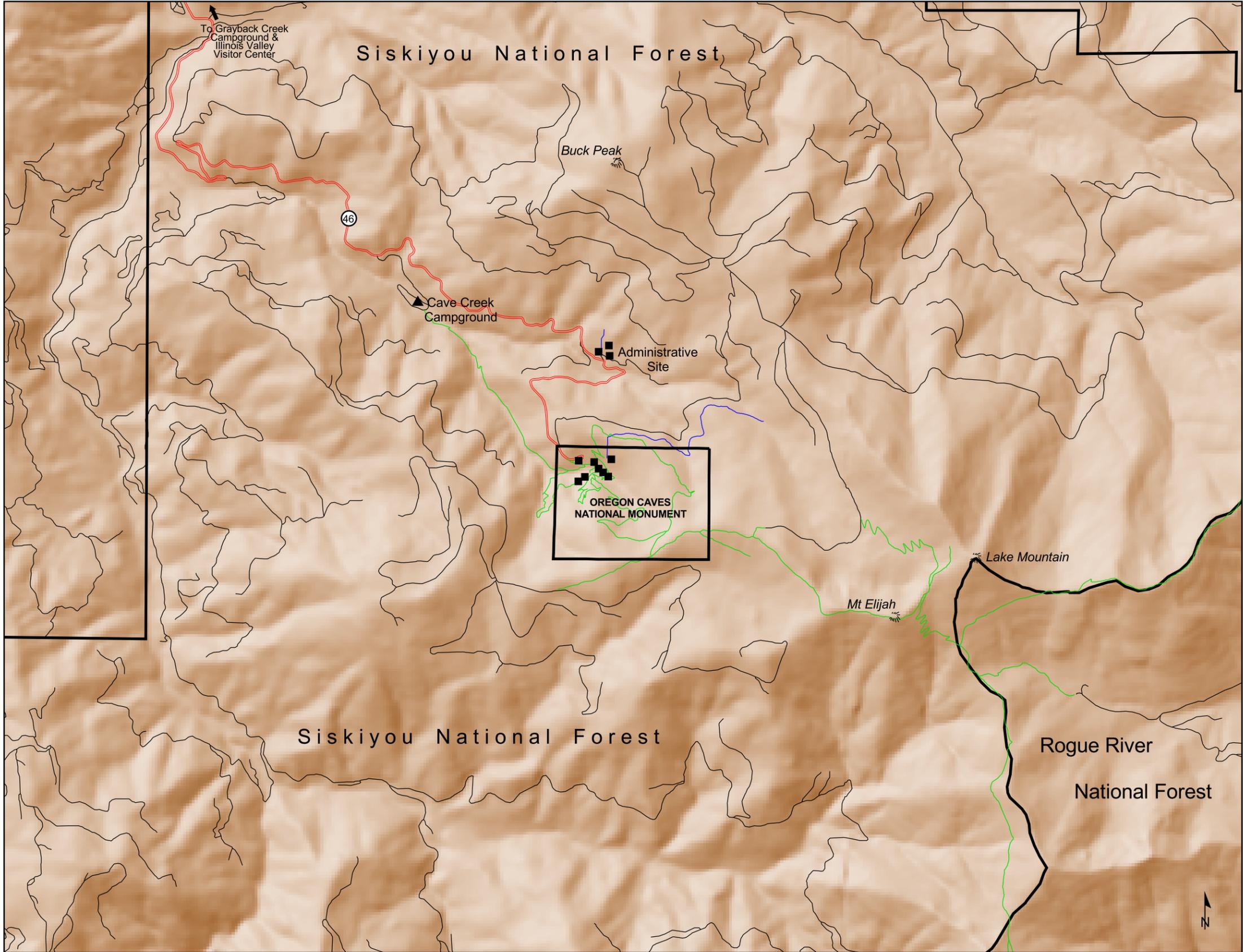
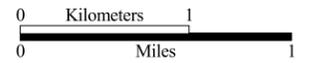


FIGURE 3  
**Physical Features**

**Legend**

- Park Boundary
- Waterline
- Trails
- Highway
- Other Roads
- Campground
- Buildings
- Mountain Peaks



Data Sources:  
 Siskiyou NF: roads, forest boundaries  
 USGS: topography, park boundary  
 NPS: trails, waterline, buildings, campground, mountain peaks

# Purpose and Need for the Plan

The purpose of this general management plan is to guide the management of natural and cultural resources and visitor services at Oregon Caves National Monument during the next 15 years.

Successful implementation of the GMP will result in the preservation of natural and cultural resources and the enhancement of the quality of the visitors' experience.

Public Law 95-625, the National Parks and Recreation Act of 1978, requires the preparation and timely revision of general management plans for each unit of the national park system. The NPS management policies call for each GMP to "...set forth a management concept for the park [and] establish a role for the unit within the context of regional trends and plans for conservation, recreation, transportation, economic development, and other regional issues..." Congress has also specifically directed (16 U.S.C. 1a-7[b]) the NPS to consider, as part of the planning process the following:

General management plans for the preservation and use of each unit of the National Park System, including areas within the national capital area, shall be prepared and revised in a timely manner by the Director of the National Park Service. On January 1 of each year, the Secretary shall submit to the Congress a list indicating the current status of completion or revision of general management plans for each unit of the National Park System. General management plans for each unit shall include, but not be limited to:

- (1) measures for the preservation of the area's resources
- (2) indications of types and general intensities of development (including visitor circulation and transportation patterns, systems and modes) associated with public enjoyment and use of the area, including general locations, timing of implementation, and anticipated costs;
- (3) identification of an implementation commitments for visitor carrying capacities for all areas of the unit; and
- (4) indications of potential modifications to the external boundaries of the unit, and the reasons therefor.

While it is the policy of the NPS to prepare or revise a GMP for units of the national park system every 15 years, the last comprehensive plan (Master Plan) for Oregon Caves National Monument was revised in 1975, 23 years ago. Many issues have changed since the last plan was written or need to be reevaluated based upon new information or circumstances.

The draft GMP reflected a range of alternatives which would provide for the future protection, management and public use of the Monument. A Preferred Alternative was selected from this range of alternatives and has become the final general management plan. In addition, since the GMP incorporates land that has been subject to the *Northwest Forest Plan*, some analysis contained in this plan tiered off and incorporated the *Northwest Forest Plan*.

## Planning Issues and Concerns

The general management planning process required considering issues that are outside the scope of the original purpose of the Monument because of legislation passed after establishment of the Monument. These specific needs or problems to be addressed in this GMP are reflected in the following array of

issues specific to the Monument. These issues were developed by NPS staff and the public through the public participation process. They are listed by category. (For a more detailed description of these issues, refer to “The Affected Environment” chapter in the *Oregon Caves National Monument Draft General Management Plan and Environmental Impact Statement*, December 1997 and the *Oregon Caves National Monument General Management Plan and Environmental Impact Statement*, Volume I and Volume II, November 1998.) .

## **Issues Relating to Natural Resource Management**

### **Protection of Cave Resources**

Cave resources are directly affected by water entering the cave. Surface water percolates through the soil, acquiring carbon dioxide from sources such as decaying plant material. This interaction forms a weak carbonic acid which dissolves calcium carbonate from the bedrock as it percolates downward. When this solution reaches the cave, the calcium carbonate is deposited, thus creating the formations inside the cave. Changes in the chemical and biological composition of the water can permit changes in the processes affecting the cave. Chemical changes in water entering the cave can be caused by altering the natural cycles (fire) or composition (logging) of the forest that exist within the watershed of the caves.

Visitor use can also have an impact on the cave resources. For example, visitors unintentionally carry organic matter into the cave on their shoes and clothing. Artificial lights in passageways cause algae to grow which would not otherwise be found in a cave environment. The optimum number of cave tours and number of visitors in each tour needs to be addressed for both resource protection and visitor experience concerns.

### **Protection of Water Resources**

Water quality is a major concern due to the significant ecological relationship that exists between the perennial stream, the River Styx, that flows through the cave and the surface environment. The recharge area, or source of the perennial stream that flows through the cave, comes in part from intermittent streams on the surface.

The Oregon Caves are located approximately 1,200 feet below the ridge of Mt. Elijah (See Figure 4, Natural Features). Two surface water sources used for the Monument’s potable water supply are located on SNF land. Water is piped to the Monument and administrative site where it is treated. Actions affecting drainage in the national forest—upslope from the Monument—have the potential to impact the Monument. Activities such as mining, logging, grazing and stock use, have the potential for impact on the water resources within the Monument.

Water quantity and water integrity are also a major concern. During the summer months, the rate of water flow is at its lowest level for streams around the Monument. This coincides with maximum visitor use during the year and maximum water demand. In addition, water also supports habitats for native species of plants and animals including aquatic invertebrates which represent the lower tier of food chains upon which many species of animals, fish and insects depend for their survival.

### **Relationship of Forest Ecology to Cave Ecology**

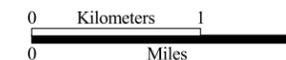
Any change in the forest ecology in the surrounding landscape can potentially affect the ecology of the cave. Changes which can affect the cave include: altering of plant and animal species composition, groundwater quality and quantity, air quality, and changes in forest structure. For example, timber cutting



FIGURE 4  
**Natural Features**

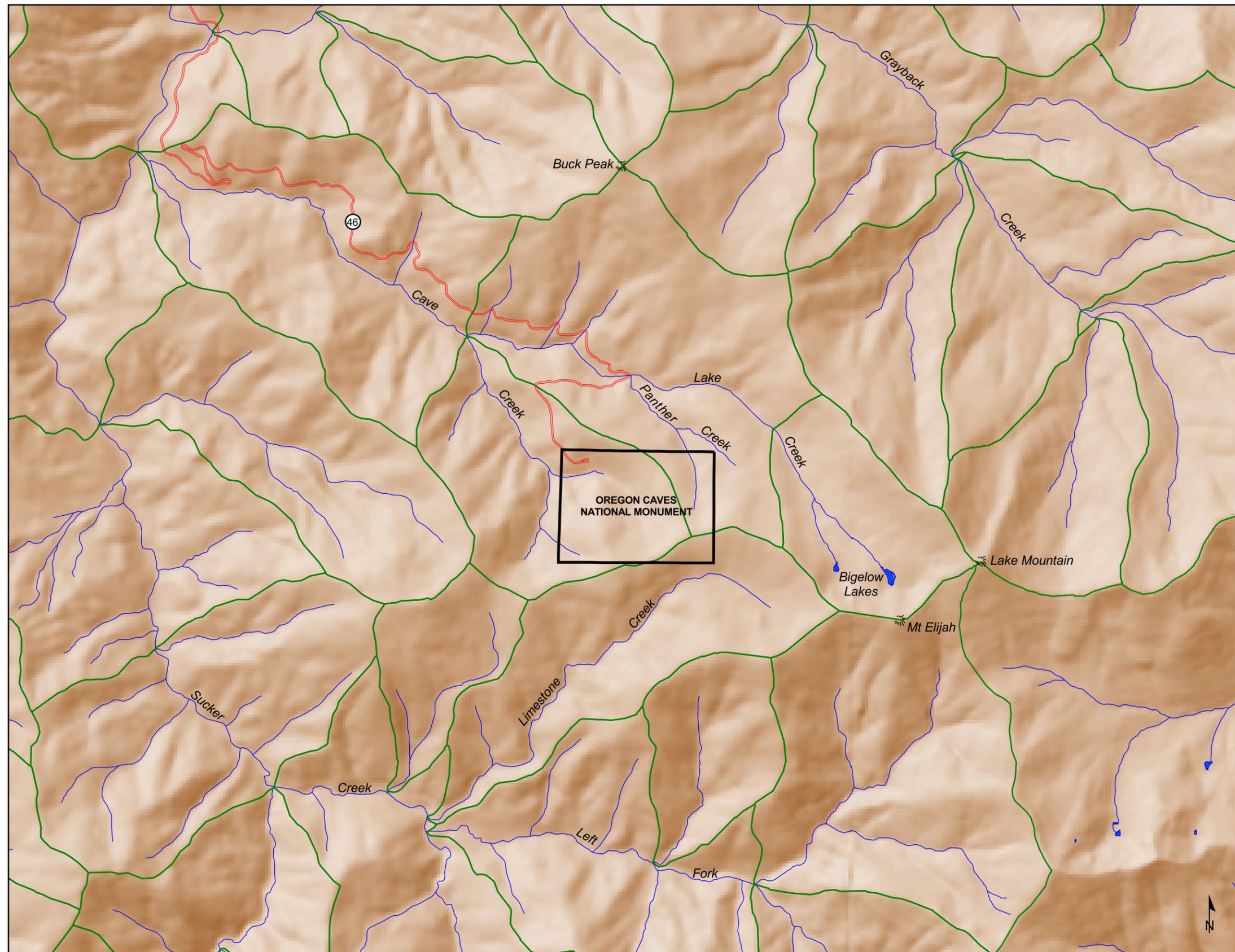
**Legend**

-  Park Boundary
-  Highway
-  Watersheds
-  Lakes
-  Streams



Data Sources:  
SISKIYOU NF: hydrography, watersheds  
USGS: Rogue River NF hydrography,  
topography, park boundary, highway

K:\GIS\AVPROJ\ORCA\GMP\PLANS.APR  
Natural Features



on lands managed by the USFS adjacent to the Monument can have a direct impact on the cave ecology by altering the soil structure and composition of decaying plant material, thereby altering the amount and quality of runoff into the cave.

### **Management and Control of Fire**

The current objective of the fire management program for the Monument is to allow fire to play a natural ecological role while protecting human life, facilities, and cultural resources. The current fire management program has been very active in fuels treatment and implementing prescribed fire in predetermined high hazard areas. All wildfires (any fire that is not a hazard fuel reduction or prescribed fire) within the Monument will be managed with “Appropriate Management Response,” which will be full suppression strategy.

The last fire occurrence in the Monument was a prescribed fire in the fall of 1997. Before then, a large prescribed fire occurred in 1921. The period between 1921 and 1997 has been the longest fire-free period in more than 300 years. This period of fire exclusion has contributed to a significant fuel loading on the Monument today. It has also resulted in a change in the dominant vegetation and forest types. White fir and associated species are replacing the Douglas fir forest which was prevalent at the establishment of the Monument.

Presently, there is an interagency agreement between SNF and the Monument which provides crucial fire suppression resources as well as assistance in implementing prescribed burns. Within this agreement the annual operating plan will define the appropriate management strategy that each agency will undertake given a fire event either within the Monument or on lands adjacent to the Park that are managed by the U.S. Forest Service. This agreement is annually reviewed and updated. This coordination has been essential for the Monument due to its remoteness and small staff.

Presently, the fire management program has the following needs: providing protection of human life while providing protection of the historic structures, sustainable funding for manipulation of fuels, and additional staff support as the prescribed burning program develops in the Monument. The current *Oregon Caves National Monument Fire Management Plan* (March 1995) is presently being reviewed to reflect the new Wildland Fire Management Policy adopted by the NPS in the spring of 1998.

## **Issues Relating to Cultural Resource Management**

### **Maintenance and Use of Cultural Resources**

Issues facing the Monument’s cultural resources revolve around how the historic buildings will be used and maintained. Changes may affect the National Register historic district, and have a negative impact on the National Historic Landmark, the Chateau, in particular. Historic buildings need to be continually upgraded for health and safety reasons. This includes providing for barrier-free access, and meeting code requirements for fire extinguishers, smoke detectors, and fire exits. These changes or alterations can also adversely impact the historic designed landscape of the district (such as replacing steps with ramps, adding lighting, railings or other non-historic features). Questions include how the buildings and landscapes will be managed and how varying functions can occur within the buildings without a loss of historic integrity. Appropriate locations also need to be determined where Monument staff can interact with the public through ranger interpretive programs. (See Appendix D: Letters, 106 Compliance with Oregon State Historic Preservation Officer and Advisory Council on Historic Preservation in the *Oregon Caves National Monument Draft General Management Plan and Environmental Impact Statement*,

December 1997 and the *Oregon Caves National Monument General Management Plan and Environmental Impact Statement*, Volume I, November 1998.)

## **Issues Relating to Interpretation and Visitor Use**

### **Restoration of Cave and Rehabilitation of Cave Trail and Lighting System**

Rehabilitation of the cave trail and lighting system was completed in 1998. The old cave trail system and lighting was improved for visitor use and safety, mitigation of human impacts, and protection of cave resources.

### **Interpretation of Cave**

Oregon Caves National Monument is the only unit in the National Park System in which the primary resource, the cave, is not interpreted directly by NPS staff. This is in conflict with NPS management policies. Personal interpretation of the main resource is conducted by a concessioner through a guided cave tour. The NPS creates standards and guidelines, and tours are subject to evaluation by the NPS. Direct operation of interpretive tours will allow the NPS to quickly adapt the interpretive program to changing resource protection and visitor needs. Additional alternatives for delivery of basic interpretation will be considered, such as the use of exhibits and films.

### **Appropriate Use of the Illinois Valley Visitor Center**

The IVVC is located in Cave Junction, about 20 miles from the caves. Currently, one-third to one-half of all visitors to the Monument stop at the visitor center to get information about the Monument. The size of the visitor center and types of services provided should be evaluated.

### **Effects of Monument Operations on Regional Tourism**

According to a 1994 *Illinois Valley Tourism Assessment* developed for the Oregon Economic Development Department Rural Development Initiatives program, Oregon Caves is a “centerpiece attraction” for the tourism industry of the Illinois Valley area. Issues for the general management plan relating to tourism and the regional economy included how the various aspects or components of the alternatives contribute to, or detract from, the economic benefits provided by the presence of Oregon Caves National Monument, its staff, and the expenditures of the visitors who come to appreciate and enjoy its resources. The various plan alternatives addressed topics such as employment, facilities, interpretation and education programs, and recreational opportunities in different ways. At issue is what affect will the application of these various approaches have on tourism in the Illinois Valley and the related affect on the economy of the region. The NPS also is coordinating the Monument staff’s interpretive efforts with the goals and objectives of the Illinois Valley Interpretive Plan currently being developed by the Illinois Valley Community Response Team.

## **Issues Relating to Recreation Resource Management**

### **Management and Maintenance of Surface Trail System**

The Monument’s surface trail system is not wholly contained within the Monument boundaries. Trails exit and re-enter the Monument, crossing onto the SNF along the northern and western Monument boundary. The NPS currently has no control over activities outside the Monument which might affect these trails.

## **Issues Relating to Scenic Resource Management**

### **Protection of Viewshed**

Lands surrounding the Monument are managed by the USFS for multiple use. Land visible from various locations in the Monument's developed area has been selectively cut, clearcut, thinned, or replanted. The 1988 *Siskiyou National Forest Land and Resource Management Plan* recognizes the Monument and provides some protection such as limited visual retention zones. However, past timber management practices and logging operations have had a significant visual impact on the visitor experience and will continue to do so for years to come. The application of new standards and practices within adjacent Late-Successional Reserves will improve upon visual qualities as seen from the Monument's primary visitor use areas. However, some visual impacts may still result from various management activities in these areas.

## **Issues Relating to Park Facilities**

### **Deficiencies in Visitor Services**

Visitor centers are the cornerstone of interpretation and visitor services at most NPS sites. Presently, there is no on-site visitor center at the Monument, where visitors can receive basic orientation, learn from interpretive exhibits, view an audio-visual program, ask questions of a ranger, or assemble school groups. Under current conditions, ranger-conducted programs must be delivered where space is available. Hence, most programs are forced to be presented in locations exposed to heat, rain, or snow. Other distractions occur from visitors walking through the program site on their way to the ticket sales booth and noise from vehicles driving to and from the Chateau parking lot. Evening programs are delivered in the Chalet guest lobby where distractions and noise from the registration desk commonly detract attention from the programs. Under the current conditions, it is very difficult for Monument rangers to deliver effective safety and resource-related interpretive programs.

### **Inadequacy of Administrative Support**

Inadequate work and storage space for Monument staff, as well as the need for adequate housing, have been ongoing concerns. Appropriate locations for these administrative functions and their site relationships need to be identified and addressed in accordance with applicable NPS policies.

## **Issues Relating to Monument Boundary and Land Protection**

### **Inadequacy of Existing Boundary**

In 1909, when the Monument was created, the boundary—in the shape of a rectangle—was thought to be adequate to protect the cave. Through the years, scientific research and technology has provided NPS with new information about how a cave system functions, how it is influenced by the surface environment, and related hydrological processes (Droege 1998; Roth 1996, 1998). The current Monument boundary may not be configured adequately to allow for the protection and efficient management of cave resources. In addition, the public water supply for Monument visitors and staff is located outside the Monument on adjacent USFS land. Land activities, such as logging and grazing occurring around and within the watershed may have an impact on the water supply. Also, various forest practices on surrounding SNF lands have effects on the old-growth forest ecology within the existing Monument. Boundary modifications are addressed in this document as part of the required general management planning process.

## **Development and Maintenance of Stronger Ties with Siskiyou National Forest**

Oregon Caves National Monument staff has identified the need to encourage stronger cooperative ties with the adjoining land managers of the Illinois Valley Ranger District, SNF. Communication between the two federal agencies will be on a variety of resource, administrative and visitor use issues. Coordination has occurred in the past on natural resource, recreation and visitor use issues, including the management and operation of the IVVC. Existing agreements should be examined for their effectiveness and perhaps new ones created.

## **Pertinent Laws, Policies, and Procedures**

This section summarizes the laws, executive orders, NPS policies, and operational procedures related to the preparation of park planning documents. The following highlights those which are most pertinent to the planning for the future protection, use and management of Oregon Caves National Monument.

### **The National Park Service Organic Act**

The NPS Organic Act of August 25, 1916 (16 USC 1), established the National Park Service. “The service thus established shall promote and regulate the use of the Federal areas known as national parks, ...by such means and measures as conform to the fundamental purpose of said parks, ...which purpose is to conserve the scenery and the natural and historic objects and the wildlife 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.”

### **National Parks and Recreation Act of 1978**

Public Law 95-625, the National Parks and Recreation Act of 1978, requires the preparation and timely revision of general management plans for each unit of the National Park System. The NPS *Management Policies* (U.S. Department of the Interior 1988) calls for each GMP to “...set forth a management concept for the park [and] establish a role for the unit within the context of regional trends and plans for conservation, recreation, transportation, economic development, and other regional issues...” Congress has also specifically directed (16 U.S.C. 1a-7[b][4] ) the NPS to consider, as part of the planning process, what modifications of external boundaries might be necessary to carry out park purposes.

### **General Authorities Act of 1970**

This act defines the national park system as including “...any area of land and water now or hereafter administered by the Secretary of the Interior through the NPS for park, monument, historic, parkway, recreational, or other purposes:...” (16 USC 1c[a] ). It states that “...each area within the national park system shall be administered in accordance with the provisions of any statute made specifically applicable to that area...” (16 USC 1c[b] ) and in addition with the various authorities relating generally to NPS areas, as long as the general legislation does not conflict with specific provisions.

### **Redwood Act of 1978**

The Redwood Act (16 USC 1a-1) in 1978 further states “...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... The authorization of activities shall be construed and the protection, management, and administration of the 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 they have been or shall be directly and specifically provided by Congress.”

## **National Historic Preservation Act of 1966**

The National Historic Preservation Act of 1966 (as amended) requires that proposals and alternatives relating to actions that could affect cultural resources, and the potential effects of those actions, be provided for review and comment by the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation. Therefore, this document will be submitted to the appropriate offices for review and comment according to procedures in 36 CFR Part 800 and delineated in the 1990 Programmatic Agreement signed by the NPS, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation.

## **Oregon Caves National Monument Proclamation**

The presidential proclamation establishing Oregon Caves National Monument (No. 876—July 12, 1909—36 Stat. 2497) states that the Oregon Caves “...are of unusual scientific interest and importance, and it appears that the public interests will be promoted by reserving these caves with as much land as may be necessary for the proper protection thereof, as a National Monument;...”

The proclamation further states, “The reservation made by this proclamation is not intended to prevent the use of the lands for National Forest purposes under the proclamations and Executive Order establishing the SNF, but the two reservations shall both be effective on the land withdrawn, but the National Monument hereby established shall be the dominant reservation, and any use of the land which interferes with its preservation or protection as a National Monument is hereby forbidden.”

## **Executive Orders 11988 and 11990**

The objectives of Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands) are to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and wetlands. Application of the final NPS procedures for implementing those Orders will occur if a NPS proposal would affect a 100-year floodplain (500-year for critical actions), coastal high hazard zone, flash flood area, or wetland. If a proposed action involves adverse impacts to floodplain or wetland areas, a Statement of Findings (SOF) will be prepared that documents the rationale for the determination that there is no practicable alternative to locating in or impacting these areas. The SOF will be prepared for concurrence signature by the Chief, Water Resources Division (WRD), and approval by the Regional Director, Pacific West Region.

## **Endangered Species Act**

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Section 7 of the Endangered Species Act requires that when a project or proposal by a federal agency has the potential to impact a known endangered, threatened or candidate plant or animal species, that agency must enter into formal consultation with the U.S. Fish and Wildlife Service (USFW). The NPS *Management Policies* direct the NPS to give the same level of protection to state-listed species, as is given to federally listed species. Prior to implementing any development proposals at the Monument, the NPS will consult with the USFW to obtain species listings, and to ascertain the need to prepare a biological assessment of the proposed actions. Similar contact will be made with the appropriate state agencies if information on state-listed species is not available through the USFW.

## **National Environmental Policy Act of 1969**

The National Environmental Policy Act (NEPA) of 1969 requires the preparation of either an environmental assessment (EA) followed with either a finding of no significant impact (FONSI) or an environmental impact statement (EIS), or an EIS without an EA, for all federal proposals that may have significant environmental and/or sociological impacts on park resources or adjacent areas. A February 22, 1991 policy memorandum from the NPS's Associate Director for Planning and Development specifies that EISs are to be prepared in conjunction with general management plans. That position reinforces the policies and procedures of the Departmental Manual which state that EISs will be the normal rule in preparing GMPs rather than the exception. This EIS describes potential impacts that might result from implementation of any of the alternatives discussed. Following public and agency review of the draft and final EIS, the Superintendent, Deputy Regional Director, and the Regional Director of the NPS's Pacific West Region, will sign a Record of Decision indicating the alternative selected and the rationale for its selection. Implementation of the GMP may then proceed.

## **Executive Order 12898**

Executive Order 12898 requires an analysis of impacts on low income populations and communities, as appropriate. The Department of the Interior's policy on environmental justice (No. ECM95-3) is based on this Executive Order and requires the NPS in all environmental documents to "...specifically analyze and evaluate the impacts of any proposed projects, actions, or decisions on minority and low income populations and communities, as well as the equity of the distribution of the benefits and risks of those decisions." If significant or no impacts are predicted on minority/low income populations, then this should be stated and the reasons given.

## **Federal Cave Resources Protection Act of 1988**

The purpose of the 1988 Federal Cave Resources Protection Act is to secure, protect and preserve significant caves on federal lands for the benefit of the public. It was also enacted to encourage increased cooperation and exchange of information between governmental authorities and those who utilize caves located on federal lands for scientific, education, or recreational purposes. The act defines "significant" caves and gives criteria for a determination of significance. The NPS has determined that all caves occurring within the boundaries of units of the system are deemed to be significant.

## **Public Law 89-249**

The Concessions Policy Act of 1965 (79 Stat. 969, 16 U.S.C. 20) applies to all concession contracts and

permits issued within the National Park System. These authorizations typically cover rustic overnight lodging, food service, gift and retail sales, and other “necessary and appropriate” services to meet basic visitor needs at a given NPS unit. Rates for goods and services provided by concessioners are controlled by NPS personnel, who also evaluate the performance of operators. Satisfactory concessioners are rewarded with preferential rights to contract renewal.

## **National Park Service Management Policies**

The NPS publication, *Management Policies* (1988), is the basic service-wide document that sets the framework and provides guidance for management of the National Park System. (It is currently under revision.) The *Management Policies* state that all parks are complex mixtures of values and resources, each with its own unique qualities and purposes, each requiring specific treatment in the development and implementation of management strategies and operational plans. However, the managers of all parks are required to apply policies in a consistent and professional manner to achieve the congressional mandate for management of the National Park System. General management planning is guided by these management policies.

### **Cave Management**

NPS policies state that caves will be managed to perpetuate their atmospheric, geologic, biological, ecological and cultural resources in accordance with approved cave management plans (action plans appended to approved resource management plans). Natural drainage patterns, air flows, and plant and animal communities will be protected. Developments will be permitted only where necessary for general public use and when it’s determined that development will not significantly alter any conditions perpetuating the natural cave environment or harm cultural resources. No potentially harmful development or use will be undertaken in, above, or adjacent to caves until it can be demonstrated that it will not significantly affect natural cave conditions, including subsurface water movements. Developments already in place above caves will be removed if they are significantly altering natural conditions.

Caves or portions of caves will be closed to public use, or use will be controlled, when such actions are required for human safety or the protection of cave resources. Some caves or portions of caves may be managed exclusively for research, with access limited to approved research personnel.

## **National Park Service Strategic Plan**

The NPS publication, the *National Park Service Strategic Plan* (1997) includes the NPS mission statement, mission goals, and gives five-year long-term goals to help the agency measure performance and guide the allocation of available human and financial resources. The *NPS Strategic Plan* incorporates the requirements of the Government Performance and Results Act (GPRA).

In addition to service wide strategic planning, staff at individual NPS units are required to also produce mission goals and a five-year strategic plan for their unit. In planning for parks, both strategic planning and general management planning share the need to articulate the purpose and significance of the park unit, and to define park mission goals in relationship to overall service wide goals. In strategic planning, parks must translate mission goals into five-year long-term goals and allocate human and financial resources accordingly. In general management planning, which is provided for the Monument through

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this document, managers and park planners must insure that proposed actions in the plan are in harmony with park mission goals, and help to implement their various provisions by articulating actions and strategies which are utilized by park managers to guide the long term preservation and public use of the Monument.

## **The Northwest Forest Plan**

Designation of Late-Successional Reserves (LSR) is the main method that the *Northwest Forest Plan* proposes to protect old-growth forests. LSRs are large tracts of federal land managed to protect habitat for late-successional (old-growth dependent) species and their respective ecosystems. They provide core habitat for the threatened northern spotted owl and marbled murrelet. Only management activities that overall protect and enhance conditions of late-successional and old-growth forest ecosystems will be allowed. The Monument is situated in the center of the East IV/Williams-Deer LSR within the SNF. Land management activities that could occur in the LSR under the *Northwest Forest Plan* have been analyzed within this GMP.

# The General Management Plan

The general management plan for Oregon Caves National Monument was selected from four draft alternatives during the public review process. The general management plan emphasizes the optimal protection of the Monument resources and enhanced visitor experience. The following information describes the actions that constitute the general management plan.

## General Description of the Plan

Implementation of the general management plan will result in the NPS assuming a larger role in the provision of education and interpretive services to Monument visitors. The NPS will provide staff for operation of regularly scheduled public guided tours of Oregon Caves. The NPS will acquire all existing possessory interest in all Monument buildings—the Chalet, Chateau, and Guide Dormitory, and a garage building. The lower level of the Chalet will be converted into a staffed visitor center complete with exhibits, audio-visual programming, information desk, and cooperating association sales area. The existing housing on the upper levels of the Chalet will be upgraded for use by seasonal employees.

Visitor services, including lodging and food service, will continue to be provided in the historic Chateau through a concessioner. Concession gift sales will be moved to the lower level of the Chateau from their current location in the Chalet. The Guide Dormitory will remain available to the concessioner and/or the NPS as space for employee housing.

The NPS will construct replacement museum collection storage, administrative offices and housing at the existing administrative site.

In coordination with Illinois Valley Visitor Center partners, the IVVC will be retained and enlarged. The IVVC will be the initial point of visitor contact for Oregon Caves—a place to obtain general information about the Monument—and will serve as the primary location to purchase cave tour tickets.

Congressional approval will be proposed to make the 3,410 acre boundary modification. The boundary change is proposed in order to protect under NPS administration, the ecology of the cave and its environs including the Lake Creek and Cave Creek watersheds, and expand recreational opportunities for visitors. The expanded boundary under NPS administration will also protect the Monument's public water supply, surrounding forest ecology, and the foreground and middleground viewsheds as seen from the Monument's developed area and adjacent trails.

## Actions to be Incorporated into the Plan

The following actions will be incorporated into the general management plan for Oregon Caves National Monument:

- 1) Cave and rehabilitation of cave trail and lighting system—Rehabilitation of the cave trail and lighting system began in 1993 and was completed in 1998. Included in the work is establishment of a new trail

surface, burying new electrical and communications lines in a conduit, improving cave lighting, continued removal of concrete and other rubble material from earlier trail use, and general enhancement of both the natural environment of the cave and the visitor experience.

2) Use of Ranger Residence above the Chalet—The historic Ranger Residence on the slope above the Chalet will continue to be used for a field office.

3) Illinois Valley Visitor Center—The IVVC will continue to provide visitor orientation and information services about Oregon Caves National Monument, recreation activities in the nearby SNF, and recreational and tourism opportunities in and around the Illinois Valley area. Production of a new Long-Range Interpretive Plan will include the IVVC.

4) Environmental education/outreach programs at the Monument—Monument staff will expand environmental education programs for students to learn about the Monument, its resources and history, and the cave and surface ecology.

5) Protection of the historic structures within the Oregon Caves Historic District—The five historic buildings within the National Register historic district, including the Chateau, will be retained and protected through appropriate preservation maintenance measures. The visual ambiance and character of the historic district will also be retained, enhanced, and protected in compliance with the National Historic Preservation Act and NPS policies.

6) Other cultural resource management actions—All the galvanized iron railings in the historic district will be replaced with material sensitive to, and compatible with, the historic designed landscape. All use of modern commercial signs will be limited or restricted. New signs will be in keeping with the historic character of the district.

7) Natural resource management—Within the cave, the Monument staff will continue to monitor the level of use, and inventory cave biota. The Monument staff will also develop a list of species endemic to the cave. An inventory and monitoring of flora and fauna will continue on surface lands, and the removal of exotic plants and animals from the Monument will be pursued in accordance with NPS policies. A geographic map of the administrative site will be prepared.

Implementation of the *Fire Management Plan* and fuel reduction in the existing Monument boundary will continue in order to decrease the possible occurrence of catastrophic fire. Management for prescribed burns will reduce hazardous fuel loads (accumulation of live or dead vegetative matter which is combustible) within the Monument and lower the chances for an uncontrolled fire that might damage the integrity of the Oregon Caves Historic District. Visitor safety will be enhanced by the reduction of fuels along the escape route on USFS Road 960 and 070 that serve as the alternative evacuation route for the Monument in the event that wildfire should close State Route 46.

Consultation with the public, USFS, National Marine Fisheries Service (NMFS), US Fish and Wildlife Service (USFWS), Environmental Protection Agency (EPA), and Oregon Department of Fish and Wildlife (OFW) will continue as required by state and federal law. All threatened and endangered (T&E) species will be protected under consultation with USFWS and NMFS. (See Appendix C: Letter, Section 7 Consultation with U.S. Fish and Wildlife Service, Endangered Species Act in the *Oregon Caves National Monument Draft General Management Plan and Environmental Impact Statement*, December 1997 and the *Oregon Caves National Monument General Management Plan and Environmental Impact Statement*, Volume I, November 1998.)

- 8) Monument administration and maintenance—Replacement of the eight miles of primary service lines for the Monument telephone system will provide for basic and emergency communications and technological upgrades of computers, telephones, and other communication equipment.
- 9) Accessibility—The NPS will provide the highest feasible level of physical access to historic structures for persons with disabilities. A transition plan will be initiated to determine which buildings could be adapted for accessibility consistent with the preservation of the properties' significant historical attributes. Any new concession contract will contain provisions for accessibility. The Monument staff is currently planning to convert an existing trail to a wheelchair accessible trail.
- 10) Water conservation—Water conservation measures will be taken at all facilities at Oregon Caves National Monument, as prescribed by NPS management policies. Water conservation practices, such as mitigating possible water distribution system leaks, low-flow shower heads, and low-flow flush toilets, will be explored and in place prior to seeking increased water quantities.
- 11) Suitable alternative for Port Orford cedar siding—As Port Orford cedar is becoming more difficult to locate due to the Port Orford cedar root disease and exportation of logs, a suitable alternative may be proposed in consultation with the State Historic Preservation Officer to replace Port Orford cedar for use as siding for the historic buildings in the National Register historic district.
- 12) Regional cooperation—Communication between the Illinois Valley Ranger District SNF, and the Monument staff will be on a variety of resource, administrative and visitor use issues. Coordination has occurred in the past on natural resource, recreation and visitor use issues, including the management and operation of the IVVC. However, existing agreements should be examined for their effectiveness and perhaps new ones created.

Monument staff will be available to serve as a member on the Illinois Valley District, SNF Interdisciplinary (ID) Team, the Southwest Oregon Province Advisory and the Southwest Oregon Provincial Interagency Executive Committees, which assist USFS managers and other neighboring land management agencies in the sound stewardship and management of forest resources (including input on timber harvest areas). Of primary concern to NPS as a participating member of the SNF ID team will be forest plans, programs and practices on national forest lands surrounding the Monument that will potentially affect Monument resources. The NPS will continue studies of edge effects to ascertain impacts associated with clear cutting, selective cutting, or management toward attaining or accelerating old-growth characteristics within Late-Successional Reserve (LSR) areas.
- 13) Student Conservation Association and Student Intern Program—Volunteers have been instrumental in the success of the cave restoration program and in the operation of the IVVC. Assistance is needed with items such as the preparation of prescription burn areas, removal of exotic plants and trail maintenance on the Monument's trail system. A program also needs to be developed to offer on-the-job-training for Student Conservation Association (SCA) or student interns who are interested in developing careers in the NPS or other government agencies. There is an opportunity for these programs to employ minority students or local minority populations, thus contributing potentially to the ethnic diversity in the NPS's future workforce.
- 14) Child and pet care—Available literature and personal services at the IVVC will emphasize that there are minimum height restrictions for children at the cave. Information will also be provided to visitors concerning appropriate pet use, which generally provides for leashed pets on paved surfaces. This information also will be made available on the Internet as well as distributed to key tourism centers along

“corridors” commonly used by tourists in the region.

15) Decommissioning of USFS Road 070—The SNF is in the process of closing and decommissioning a portion of USFS Road 070 outside the Monument’s present boundary. The decommissioning may occur south of the intersection of USFS Road 079 and 070, approximately one-half mile north of the trailhead for the Meadow Mountain Trail.

## **Management Areas**

Management zoning designates where various strategies for management and use will best fulfill management objectives and achieve the purposes of the Monument. Management zoning is a tool for park planners to assign appropriate uses within specific areas of a park and to manage visitor use and resource protection towards those uses. In the general management plan there will be three zones within the Monument.

### **Natural Zone**

The Natural Zone will include two subzones: the Cave Subzone and the Surface Subzone. The Cave Subzone will be defined as the cave and cave trail within the cave. The Surface Subzone will include the remaining land area within the expanded Monument, including forested slopes, the Cave Creek and Lake Creek watersheds, remnants of the horse trail and portions of the trail to the Town of Williams that are included within the Monument boundary.

All lands added to the Monument boundary, which do not involve former USFS Roads or the administrative and residence area listed as part of the Park Development Zone, will be included within the Natural Zone of the Monument.

### **Historic Zone**

This zone will incorporate the National Register historic district of the Monument; the cave entrance; the Civilian Conservation Corps (CCC) stone steps; and historic inscriptions within the cave.

### **Park Development Zone**

Within the Monument’s boundary this zone will include the main parking lot, the upper parking area adjacent to the Chateau, the sewage galleries, water treatment facilities and Monument roads, and the helipad adjacent to USFS Road 960. Also included in this zone are both existing and proposed improvements to Monument housing, maintenance area, and the administration, maintenance, and collection storage areas located at the administrative site. The IVVC located in Cave Junction will also be included in the Park Development zone.

Regarding the lands proposed for transfer to the Monument from the SNF, the Park Development Zone will include current USFS Road 960 for fire access and public access to the Town of Williams and USFS Road 4611/070. Current USFS Road 4614/048 will also be included in this zone and will remain open for public use and access to adjacent forest areas. An interagency agreement will be developed to permit continued use of USFS Road 4612 for USFS management purposes. Such purposes will include access to

timber management areas and transportation of materials, equipment and supplies by the USFS or their contractors, permittees or commodity purchasers. Through this agreement, the USFS will also be requested to continue maintenance of this short section of road through the expanded Monument.

## Natural Resource Management

Though additional acreage will be transferred to the Monument, NPS resource management guidelines will apply and the existing NPS natural resource management program will continue to be implemented. In addition, in order to better protect the cave, the cave may be closed to guided cave tours between approximately middle to late December and late March for cave research, any necessary maintenance of the cave trail, and to allow the cave periods of extended darkness; restoring natural conditions during this period. This seasonal closure will also be expected to benefit the resident and migratory bat population of the cave by reducing the amount of artificial light and human activity in the cave during this period.

Inventories in the past have included grasses, bryophytes, vascular plants, cave formations, surface geology, amphibian and reptile inventories, cave and stream biota, snails and slugs; future studies will continue to fill in knowledge gaps, especially in biology. Monitoring in the past has looked at the effects of edges (snails, orchids, lichens, rodents), feeding of animals (rodents), cave trail impacts (biodiversity, lint deposition, formation darkening) and prescribed fire (rodents, vascular plants, cave drip rates, evapotranspiration) and will continue in the future by adding on more groups of animals.

Since the public water supply for the Monument is located in the upper Lake Creek watershed, the Monument will prepare and submit a detailed watershed protection plan stating how watershed protection will be achieved, as required by the Surface Water Treatment Rule of the Safe Drinking Water Act of 1982 (reauthorized in 1996). Also, mining will be excluded from within the Monument under existing statutes and regulations.

## Fire

In order to restore natural conditions, fire will continue to be introduced in the Monument. This is necessary to reduce the likelihood of catastrophic fire affecting human life, property, designated resources, and to reestablish native vegetation types. Fire suppression over the past 80 years may have also contributed significantly to the increase of beetle and mistletoe infestations that are causing damage to the existing old-growth forest. It is also uncertain how the chemistry and volume of cave water entering the cave has changed due to the increased availability of decayable materials on the forest floor or the proliferation of shade tolerant plant species.

Under the general management plan, the transfer of additional acreage will change the complexity of the fire management program for the Monument. Fire Management strategies will differ with the additional acreage. All wildfires within the new boundaries will be managed under the “Appropriate Management Response” strategy. This will mean that fire events may be managed for resource benefits or fully suppressed depending on the values at risk as well as the present fire danger or escape potential. A fire program (FIREPRO) budgeting analysis will be needed to address future fire funding for the Monument. The analysis will redefine values at risk and add the needed complexity to the present day analysis. Staff will be needed to implement an approved fire management plan as well as supervise an additional seasonal ranger who will assist in initial attack, implementing fire prevention programs, and emergency

presuppression programs.

An enhanced fire cache will be developed in the maintenance area concurrent with the relocation of the parking and storage area for the wildland fire engine. A secondary fire cache will be developed in the existing garage to the south of the Chateau.

The fire hazard to the administrative site and the Chateau is still high and a balanced and active fuels management program is needed in order to protect Monument resources while still allowing fire to play an ecological role where appropriate. Management of fuels in areas that have been previously treated will be required due to the natural succession of vegetation that takes place. Management activities should be planned every three to five years as an on-going program in order to maintain resource protection needs. A “sustainable” fuels program is needed in order to avoid loss of capital investment by the occurrence of just one catastrophic fire.

## Cultural Resource Management

At the administrative site, the quonset hut, currently used for collections and other storage, will be removed and replaced by a permanent structure. The new structure will be used for the storage of Monument specific museum collections, library, and archive and manuscript collections. The lower level of the Chalet will be used as a visitor center, with the exterior of the building retained in its historic appearance. The upper levels of the Chalet will be converted into housing for NPS seasonal employees. The Chateau will be retained for its historic use, as a lodge and coffee shop/restaurant. Concession gift sales will be located in the lower level of the Chateau. The Guide Dormitory will be retained and used for NPS and/or concessioner employee housing. The Checking and Comfort Station adjacent to the main parking lot will retain its historic use. The historic Ranger Residence will continue to be used as office space for a park field office.

Rehabilitation and maintenance work by the concessioner and NPS on historic buildings within the Oregon Caves Historic District will be performed in accordance with the Secretary of the Interior’s Standards for Archeology and Historic Preservation (FR 48:44716-40). Historic compliance in this area will continue to be monitored by Monument staff.

Recommended cultural action plans that will assist in implementing various provisions of the GMP are: Cultural Landscape Report, Historic Structures Reports for National Register Listed Structures, Historic Furnishings Report, and an Historic Resource Study.

Projects which will require further 106 consultation include: Rehabilitation of the Chalet for a visitor center, housing or other uses; change of uses within the Chateau; railing replacement within the historic district; traffic management on the drive between the main parking lot and upper parking lot; and design concepts to meet ADA compliance regarding access to historic buildings.

## Interpretation and Visitor Use

Oregon Caves will be available to the public for regularly scheduled guided cave tours between approximately middle of March and middle to late December of each year. National Park Service managers may adjust tour schedules due to resource protection issues. Tours will be operated by the NPS with direct supervisory control over cave guides. Basic public orientation, information, and on-site interpretation of the cave and other Monument resources will be met by converting the lower level of the Chalet into a visitor center. The visitor center will be a staffed center, with exhibits, interactive displays, and a moderately-sized audio-visual room/theater for multi-media presentations. An orientation audio/visual program will be provided for visitors. NPS will thoroughly investigate the feasibility of developing alternative tours through the cave including special children's tours, "wild caving" experiences, and candle light tours. Such tours will be limited in number and likely have fees different from that of the standard tour.

The audio-visual room will also serve as a classroom for staff-led environmental education programs. A staffed desk and cooperating association sales area will also be included in the center. The visitor center and breezeway of the Chalet could serve as a meeting place for commencing cave tours.

Extended interpretive programming will be included in this GMP. During the summer peak season this may include evening programs, morning and afternoon nature walks, special cave tours, nightly interpretive campground programs at the USFS Grayback Campground as staffing permits, weekend guided hikes to Bigelow Lakes, and cave guide seminars. During the spring and fall seasons, special topic cave tours, nature walks, guide seminars and weekend guided Bigelow Lakes hikes could be included. The NPS will provide personal and non-personal interpretation of the forest/surface resources of the Monument, including the ecological and biological values in this area, as well as the geological story.

The Junior Ranger program will be expanded to include an activity book with age-appropriate activities for children visiting the Monument. Some activities will be designed to encourage visitors to interact with other parts of the Monument including trails, streams and the historic Chateau. Emphasis will be placed on addressing common resource problems such as feeding wildlife, cutting switchbacks, and touching cave formations.

With administrative offices moving to the administrative site, the temporary trailer for the former Monument headquarters building next to the main parking lot will be removed. An entry plaza on the site of the Monument headquarters building will be developed and used for orientation for Monument visitors. It will feature an information kiosk and interpretive panels.

The IVVC will remain a key point of contact for visitors, providing important information and orientation concerning the Monument and the interpretation plan for the center will be implemented. Visitor information services will be enhanced at the existing building by providing permanent exhibits. Funding will be sought to enlarge the building to provide meeting room space, and space for a small Chamber of Commerce office, and enhanced space for information about recreation and tourism opportunities in the surrounding USFS, BLM, state and county lands. Interpretive displays explaining the unique geology and biology of the region will be developed. Emphasis will be directed toward providing alternate activities for people who have a long wait for cave tours or will like to stay longer in the area.

Special emphasis will be placed on development of interpretive displays and handouts that inform the public about the geologic and botanical uniqueness of this region with emphasis on recreational and

tourism opportunities that help visitors find and enjoy these resources. Recreation and tourism opportunities include those found in federal, state and county managed lands within the Illinois Valley region as well as those that link to this area along the Highway 199 corridor or that share common botanical or geologic links to Oregon Caves National Monument. The NPS interpretation staff will also make efforts to improve and expand information about the Monument and surrounding region through the Internet which will provide users with details including local events, tours, seminars, seasonal flower displays, berry season, as well as information on trails and back country roads in the area.

The NPS will work with the USFS, the Illinois Valley Chamber of Commerce and other IVVC partners to seek funding sources to build an addition to the IVVC. The IVVC will be the principal place for visitors to purchase cave tour tickets. Both IVVC signing and staff will encourage visitors to purchase cave tour tickets at the IVVC before proceeding to the Monument. The NPS staff, augmenting others at the IVVC, will include ticket sales personnel for cave tours and a visitor use assistant during the summer peak season. Other IVVC staff will provide this function during the non-peak season. Visitor orientation and information services will be enhanced at the existing building by adding permanent exhibits; space will remain available to provide information about other area attractions and visitor services in coordination with IVVC partners.

The NPS interpretation staff at Oregon Caves will expand interagency cooperation and partnerships by developing Internet information that provides users with information about regional opportunities for recreation and tourism. Emphasis will be to provide tourism and recreation on federal, state and county lands within an area defined by the following areas: 1) the Illinois Valley, 2) Highway 199 corridor as it relates to tourist traffic between Redwood National Park, Oregon Caves National Monument and Crater Lake National Park, and 3) federal, state and county recreation opportunities within the Klamath-Siskiyou region that share a common biology and geology with Oregon Caves. The focus will be to develop an interpretive package that will unfold the uniqueness of this region and make it an appealing destination for American and international visitors who want to enjoy a vacation in an area with unique and diversified resources.

In addition, specific actions to improve the IVVC will be undertaken. To improve visitation, the landscape will be altered to make the building more visible by moving the current flag pole closer to the road and reconfiguring signs and landscaping elements. There is also a need to establish guidelines with the City of Cave Junction to trim branches of trees that obscure NPS signs along Highway 199 so visitors will know where to turn well in advance, giving them plenty of time to switch lanes safely.

The interagency agreement for the IVVC will be evaluated to ensure that the focus of this visitor center is on the promotion of tourism and recreation in southwest Oregon and the Siskiyou-Klamath geologic-biologic region. Emphasis will be on providing information for tourists traveling through the Illinois Valley between Redwood National Park and Crater Lake National Park. Interpretation emphasis at this facility should be to cover topics common to USFS, BLM and NPS units in this area (geology, botany, watersheds, and fire management) with emphasis on developing an understanding of why this region is unique.

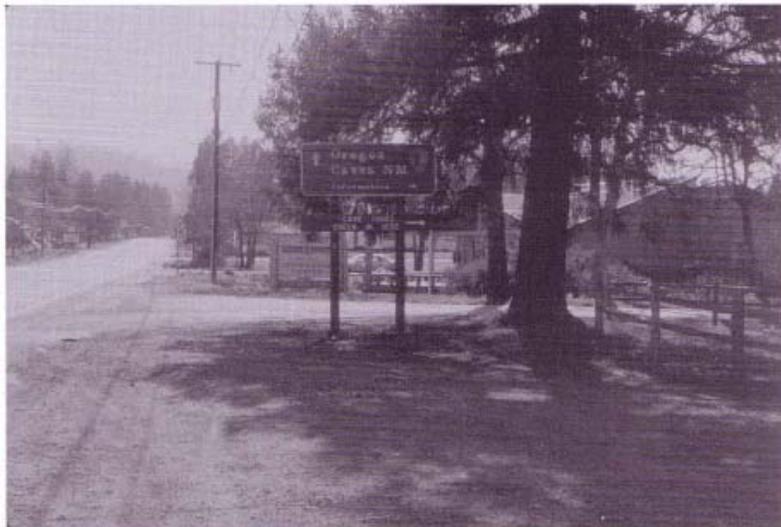
Additionally, the center will provide information concerning state and county recreation units along with any cultural or interpretive activities they offer. The IVVC staff will compile and make available information about educational field trips or classes offered within the “designated region” (including environmental or native plant society tours, bird watching outings, and geologic seminars). The visitor

center will also provide the Illinois Valley Chamber of Commerce limited space to disseminate information on private recreation and tourism opportunities that exist in the Illinois Valley area.

The Monument currently does not have a formal, designated interpretive program site in the historic plaza between the Chateau and the Chalet. Efforts will be made to select an adequate site or sites for these activities.



Expanded IVVC will allow for enhanced exhibit and information space



Improved signing will direct visitors to the IVVC for cave tour reservations and general information about the area

## Recreation Resource Management

Oregon Caves will be closed to guided cave tours from approximately the middle to late December to late March. During this time the NPS will encourage outdoor winter activities including cross country skiing, and snowshoeing. If overall use of the Monument during the winter increases, there will be a need for developing winter related interpretive literature and outdoor signing.

Various recreational activities will be available to visitors on the 3,410 acres within the expanded Monument boundary. Non-motorized recreational opportunities, such as hiking, nature walks, and cross-country skiing and snowshoeing, will be available to Monument visitors. Motorcycles, snowmobiles and other motorized vehicles will be permitted within the expanded Monument, but will be limited to vehicular roads. No motorized vehicles of any kind will be permitted on Monument trails or off-road. In cooperation with the SNF, all of Limestone, Mt. Elijah, and Cave Creek trails, and the connecting trail to Boundary Trail will be closed to motorized use. The Boundary Trail (not in the expanded Monument) will still be available for motorized use.

The expanded boundary will include those entire sections of No Name, and Big Tree trails that formerly were on USFS managed lands. Meadow Mountain and Lake Mountain trails will be entirely within the expanded boundary. These trails will be brought under NPS management. Limestone, Mt. Elijah, and Cave Creek trails are still located on both USFS and NPS managed land. However, the NPS will seek an agreement with SNF so that hikers will no longer be subject to USFS trail use fees on those trails. The Monument will continue its policy of not charging for trail use. The formal agreement will also include cooperative management and maintenance of these trails.

The upper Lake Creek watershed is approximately 730 acres (21.4% of the total expanded Monument area). Since the public water supply for the Monument is located here, certain uses may be restricted for both humans and animals. Animal use will be restricted to horse use on horse trails. The NPS will close USFS Road 070 from the intersection of USFS Road 079 and 070 to Bigelow Lakes. The closed road will be rehabilitated for a non-motorized trail for hiking and horse use.

Horse use will be permitted within the expanded Monument on those trails which have traditionally been available for horse use. This includes Mt. Elijah Trail, Lake Mountain Trail, Meadow Mountain Trail, and Limestone Trail and the decommissioned USFS Road 070 to Bigelow Lakes. (See Figure 5, Hiking and Horse Trails.) The NPS management of horse use will strive to provide for a high quality recreational experience for horse trail users while protecting Monument resources and public water supplies. Items such as protection of stream crossings and working with outfitters to utilize weed-free hay are examples of the measures that will be considered. The NPS will work closely with horse user groups on these and other issues. Future site planning will be needed to establish the precise location for trailhead facilities for horse use. Trailhead locations may include sites at the beginning at Limestone Trail off of USFS Road 4614 and at the intersection of USFS Road 079 and 070.

No overnight campground facilities will be added by NPS. Adequate campground space is available at USFS Grayback and Cave Creek campgrounds. The NPS will work with the USFS to maintain the campground programs and amphitheatre setting at Grayback Campground. Audio/visual storage and use will be provided at the amphitheatre. A formal agreement with the USFS for interpretive programs will be sought by NPS. Backcountry camping will be permitted within the 3,410 acre addition.



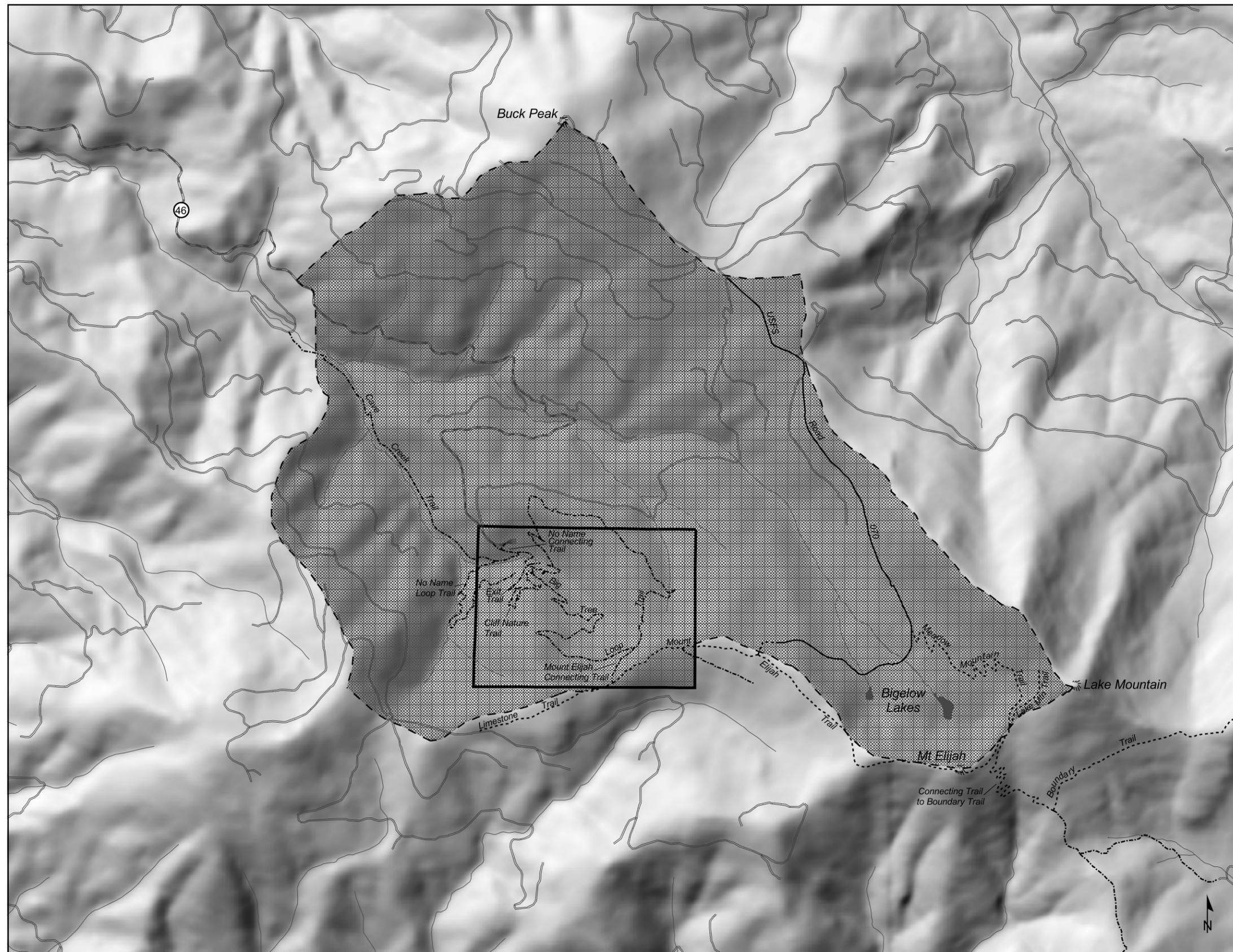
FIGURE 5  
**Hiking and Horse Trails**

**Legend**

- Existing Park Boundary
- Proposed Park Boundary
- Hiking Trails
- Horse-use Trails
- Highway
- Horse-use Road
- Other Roads
- Streams
- Lakes
- Mountain Peaks

0 Kilometers 0.5  
0 Miles 0.5

Data Sources:  
USGS: topography, existing park boundary  
SISKIYOU NF: roads, hydrography  
NPS: trails, mountain peaks, proposed park boundary  
K:\GIS\AVPRO\ORCA\GMP\PLANS.APR  
Hiking and Horse Trails



The picnic areas at the Monument will be upgraded and expanded. Benches and rest areas will be provided on the Cliff Nature Trail. The benches will be compatible with the historic CCC benches.

The Monument will work to establish an interconnected system of trails with the adjacent Rogue River National Forest (RRNF) and SNF. To provide movement through the area by horse users, one or more trails will be available to horse use as appropriate.

No hunting is currently permitted within the existing Monument boundary. According to NPS policies, hunting restrictions will be extended onto lands added to the Monument. Other allowable USFS uses such as mushroom and berry picking within the expanded boundary will be determined on a case by case basis by the NPS superintendent.

## Scenic Resource Management

The transfer of 3,410 acres of land into the Monument from the adjoining SNF will extend scenic viewshed protection under NPS administration to the foreground (extending up to one-half mile) views to include 100% of the Level I Sensitivity areas and 67% of the Level II Sensitivity areas.

The GMP will protect 62% of the Level I

Sensitivity areas and 37% of Level II Sensitivity areas of the middleground viewshed

(extending up to four miles) into the forest canopy and ridgetops as seen from the Monument's most important viewpoints including the National Register historic district and adjacent trails.



Foreground and much of the middleground views within the Lake Creek watershed will be added to the Monument

The GMP provides a high degree of total viewshed protection since timber cutting will be precluded within the expanded Monument. Actions in the GMP will increase protection from visual impacts as seen from important viewpoints within the Monument and on adjacent trails. Viewpoint #1 at the main parking lot is probably the most visited viewpoint. All foreground and middleground views from this critical viewpoint are contained within the Monument and the additional area proposed for inclusion within the Monument.

## Park Facilities

Monument operated facilities will include administrative offices, collection storage and a maintenance area located at the administrative site; a visitor center and cooperating association sales outlet located in the Chalet; restrooms and an information kiosk located in the Checking and Comfort Station at the head of the main parking lot; and the IVVC located in Cave Junction.

All possessory interest in Monument buildings will be acquired according to NPS policies. The Chateau will continue to be operated by a concessioner for lodging, food service and gift sales. The upper level of

the Chalet will be rehabilitated for NPS seasonal housing. The lower level of the Chalet will be converted from a gift shop into the Monument's visitor center, complete with cooperating association sales area. The visitor center will be primarily for interpretation and education about the caves and the overall Monument resources. In the rehabilitation of the lower level of the Chalet for this function, there will not be enough space to include visitor center functions such as exhibits, audio-visual materials, an information desk and book sales, and also retain gift sales in their current location.

The general management plan will call for moving gift sales to the lower level of the Chateau adjacent to the dining room. (The existing square footage for the gift shop located in the Chalet encompasses 1,835 square feet. The area that will be available for a gift shop in the Chateau adjacent to fine dining will be approximately 1,600 square feet.) If fine dining is retained by the concessioner at the Chateau, effort will be made to minimize the impact of gift sales on the dining room experience. In this event, items such as gift shop hours and looking at auxiliary gift sales locations, such as the current cave tour sales area of the Chalet, will be fully examined.

While providing the public with quality food service will be a condition of the new concession contract, the retention of fine dining at the Chateau will be based on a consideration of profitability, marketing strategies, historical integrity, and other factors.

The NPS will construct replacement collection storage, administrative offices and housing at the existing administrative site. (See Figure 6, Development Concept Plan: Administrative Site, and Figure 3, Physical Features, for location of Administrative Site in relationship to the Monument.) The two rental trailers currently used for seasonal housing will be removed and replaced with two duplex housing units to serve seasonal and/or permanent staff needs. The existing single family residence will be retained. The quonset hut, currently used for collection storage, Monument records, interpretative materials, wildland fire truck and cache, and EMS/SAR equipment, will be replaced by a permanent building. Additionally, the maintenance yard area will be reconfigured to provide covered storage space for equipment and materials. One bay will also be added to the garage area to house the fire truck.

The temporary trailer replacing the Monument headquarters building next to the main parking lot will be removed and the function moved to the administrative site. An entry plaza will be created for visitor orientation, interpretation, and information in that location. Signs in the proximity of the entry plaza, and entry to the drive and pedestrian walkway will help guide visitors to the Chateau complex and cave entrance.

The adequacy of the water and sewage treatment systems at the Monument for employee and visitor use (both quantity and quality) will be investigated for possible future increases in use.

The IVVC will be retained and enlarged. The IVVC will be the initial point of visitor contact for Oregon Caves—a place to obtain general information about the Monument—and will serve as the primary location to purchase cave tour tickets. Information signs for the IVVC will be improved and could include such information as ticket sales, and vehicle limitations of Highway 46.



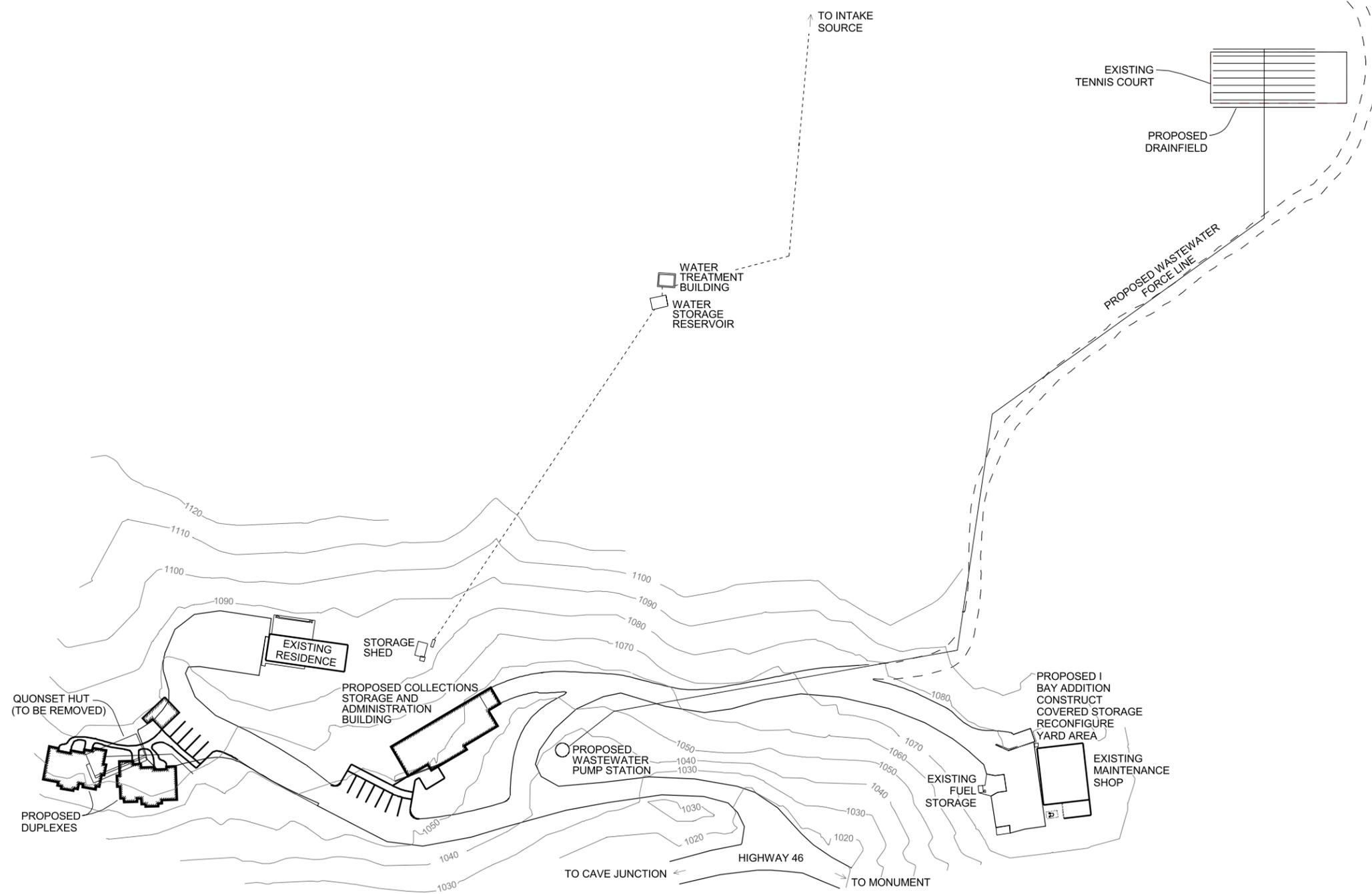
FIGURE 6  
**Development  
Concept Plan:  
Administrative  
Site**

**Legend**

-  Contours (meters)
-  Asphalt Road
-  Gravel Road
-  6" Waterline



Data Source:  
NPS: Administrative Site  
AutoCAD Drawing  
K:\GIS\AVPROJ\ORCA\GMP\PLANS.APR  
DCP: Administrative Site





Collection storage in quonset hut will be replaced by a new structure at the administrative site



A bay will be added to the garage area to house the fire truck, and the maintenance yard area will be reconfigured

Existing trails will be maintained. The Big Tree, No Name, Meadow Mountain, Lake Mountain and portions of the Mt. Elijah Trail, Limestone, and Cave Creek trails will be maintained as part of the non-motorized trail system within the Monument. Maintenance and management of the section of the Mt. Elijah Trail within the SNF to the top of the peak will be coordinated with the USFS by a formal written agreement. Additionally, in cooperation with SNF staff, portions of Limestone Trail, Cave Creek Trail, Mt. Elijah Trail and the connecting trail from the Mt. Elijah Trail to the Boundary Trail within the SNF will be designated for non-motorized use.



A portion of USFS Road 960 is within the proposed Monument expansion and will remain open to public use

The NPS will maintain roads within the expanded Monument. This will include current USFS Road 960 for fire access, as well as to allow public access to and from the Town of Williams and access to USFS Road 4611/070. Through an interagency agreement, the USFS will be requested to continue maintenance of a short section of USFS Road 4612/13 through the expanded Monument, which will remain open for public access and use. The USFS Road 070 spur into the upper watershed of Lake Creek will be closed at the intersection of USFS Road 079 and 070 to vehicular use to protect the upper Lake Creek drainage and Bigelow Lakes. Hiking and horse trails will allow for continued visitor access into this area.

Wherever possible, all above-ground utility lines will be buried for maintenance, visitor safety and aesthetic reasons.

## Development Cost Estimates

<b>Administrative Area</b> (collection storage, administrative offices, staff housing, maintenance area, rehabilitation, utilities and roads)	\$ 1,330,000
<b>Chalet Visitor Center</b> (rehabilitation, exhibits, staff housing )	\$ 2,825,000
<b>Illinois Valley Visitor Center</b> (addition, exhibits)	\$ 100,000
<b>Total Estimated Net Development Costs</b> (FY 1998 Dollars)	\$ 4,255,000

## Park Operations and Staffing

The present administrative site will be included in the expanded Monument. Operational staffing needs will support Monument administration, maintenance, interpretation, resource management, and visitor and resource protection. Additional interpretive staff are required because of greater emphasis upon

environmental education programs and other educational activities. There are also additional maintenance expenditures associated with the conversion of the upper level of the Chalet into housing, and road and trail maintenance on added lands.

The NPS will maintain a visitor protection presence on the Monument staff. The Monument will have 24 authorized full-time equivalent (FTE) staff with an average of 39 staff positions including permanent, permanent subject to furlough, seasonal, and temporary positions.

Full consideration will be given to hiring seasonal and permanent positions from the local area. The NPS believes from past experience that there should be a local group of qualified candidates in the area that will be able to compete successfully for the new NPS positions.

### Total Staffing Needs

Administration	Maintenance	Interpretation	Resource Management	Total	FTE
2 Permanent	3 Permanent	4 Permanent	2 Permanent	<b>11</b>	<b>11.0</b>
0 Permanent/ Furlough	0 Permanent/ Furlough	10 Permanent/ Furlough	0 Permanent/Furlough	10	7.5
1 Seasonal	3 Seasonal	9 Seasonal	3 Seasonal	16	4.5
0 Term	2 Term	0 Term	0 Term	2	1.0
<b>3 Total</b>	<b>8 Total</b>	<b>23 Total</b>	<b>4 Total</b>	<b>39</b>	<b>24.0</b>

### Estimated Operating Costs

(FY 1998 Dollars)

Operating Base:	\$ 541,000
Cave Tour Operations:	\$ 280,000
Administration/Resource Management Enhancement:	\$ 49,000
Additional Resource Management (New Area):	\$ 86,000
Additional Maintenance (New Area):	\$ 22,000
Visitor Center Maintenance and Operation:	\$ 153,000
<b>Total</b>	<b>\$1,131,000</b>

Estimated Revenues from Cave Tours:	\$ -320,000
Operating Cost After Offset:	\$ 811,000

Difference in Operating Cost Between Current Base: \$ 270,000

Income from the conduct of cave tours by park rangers will be expected to fully cover the operational cost of the tours, including supervision. Additional non-cave interpretation, such as guided nature walks and campfire programs, also will be expected to be funded through this income. The additional \$270,000 in estimated annual operating cost is attributable to increased visitor protection, maintenance and resource

management staffing costs, including operational costs associated with the proposed on-site visitor center. A portion of these added costs is directly related to the expansion of the Monument boundary.

## Fees

There will be no entry fee to the Monument itself. Actions in the GMP will allow the NPS to use most or all of the fees generated by cave tours to directly support interpretation, cave protection and maintenance, research and other projects at the Monument through the fee interpretation program. This is consistent with the findings of the 1995 Oregon State University visitor survey in which the public overwhelmingly indicated (84 % of respondents) that cave fees should go to the Monument to maintain the area. In addition, no fees for parking at trailheads will be charged within the expanded Monument.

## Concessions

Concession services will include lodging, food service, and sales of sundries and gift items. Lodging and food service will be provided to the public in the historic Chateau. Since the Chalet will be converted into the Monument visitor center, the gift sales area will be moved out of the Chalet into the lower level of the Chateau. A gift shop mission statement will be developed so as to help ensure that both the operation and sales items were appropriate for the Monument and the historic setting. The coffee shop will remain open for its traditional food service use.

Required services for food, lodging, gift and sundries sales will be during the peak summer season. The concessioner will be encouraged to provide some or all of these services during the non-peak times of the year, as conditions warrant, and at their discretion. The food service priority will be to serve the peak hour needs of the visitor.

The Guide Dormitory will continue to be used by the concessioner as space for concession and/or NPS employee housing according to the terms of a new concession contract.

During the off-season between middle to late December and middle of March, no concession services will be provided. However, limited food service may be established for researchers, and park and concessioner maintenance and administrative employees during this period.

The NPS will proceed to acquire any existing possessory interest held by the concessioner within the Monument as prescribed by NPS policy. Highest priority for acquisition of interest will be the Chalet since the structure will be adapted for use as the Monument visitor center.

## Monument Hours and Seasons of Operation

The Monument will be open for cave tours from approximately late March to middle to late December of each year, seven days a week. It will be closed to public cave tours in the winter in order to provide a resting period for the cave resources (especially bats), to conduct cave research and any necessary maintenance. The concessioner may also choose to conduct scheduled maintenance and repair items for the Chateau and Guide Dormitory during this period. Except for cave tours, the Monument will be open for visitation the entire year. Contracted concession services will be provided to the public. Guided cave

tours will be provided by NPS personnel.

Proposed maximum hours of guided cave tour operation per day:

- 11.5 hours maximum in the summer season
- 10.5 hours maximum in the spring and fall seasons
- 0 hours in the winter season (Monument closed to cave tours from middle to late December to middle of March)

Seasons of operation and schedules are subject to change by NPS due to resource protection or visitor use considerations.

## Shuttle Systems

No regularly scheduled shuttle van service for the general public will be proposed. However, the concessioner may provide on-demand shuttle service for lodge patrons and day visitors, as possible. As funding is available, a shuttle van for NPS, cooperating association and concession employees will be provided. It will be expected to leave each morning from the Cave Junction area and return in the late afternoon/early evening. Depending upon demand and work schedules, the shuttle may make more than one run per day. The employee shuttle will also stop at the administrative site. Various funding sources will be explored to assist in the operation.

## Parking, Access and Circulation

The general public will continue to access the Monument from State Highway 46 and be directed to park in the main parking lot. The State of Oregon will retain the right-of-way for State Highway 46 as it currently exists under agreement with the SNF. The NPS will become the managing authority for future easements of right-of-way extensions within the expanded boundary, but no additional permits or agreements will be required for the existing highway.

Visitor parking within the National Register historic district will be restricted to designated spaces adjacent to the Chateau for persons with disabilities and those visitors having confirmed lodge reservations at the Chateau. No general visitor vehicular access will be permitted on the drive between the main parking lot and the upper parking lot. Except for permitted vehicles involving mobility impaired visitors, all day-use visitor vehicles will be eliminated from the National Register historic district. Lodging patrons and visitors with disabilities will use designated parking spaces adjacent to the Chateau. On-duty staff will also be assigned parking, and provisions will be made for delivery and maintenance vehicles. A few spaces for official U.S. government and concession vehicles will also be designated near the Chateau as part of the employee parking area. An employee shuttle van may be employed to transport concession, cooperating association, and NPS employees to and from the Monument, the IVVC in Cave Junction, and the administrative site. Concession and NPS employees with similar scheduled work days and hours will be highly encouraged to take the shuttle van from Cave Junction if it becomes operational.

To help ease vehicular and pedestrian traffic conflicts between the main parking lot and the upper parking lot, a one-way traffic system will be established along with a delineated pedestrian walkway on the hillside of the drive. This one-way traffic system will prevent cars from passing each other on the drive by

allowing traffic flow in only one direction at a time. The current paved driveway into the historic district and cave entrance area will be modified into a one-way drive. If other options, such as posted signs do not achieve the desired results, stop lights at each end will be used. This one-way traffic system will prevent cars from passing each other on the drive by allowing traffic flow in only one direction at a time. (See Figure 7, Development Concept Plan: Parking and Entry Area.)

## Carrying Capacity

In order to provide for the protection of cave resources and an optimal visitor experience, the following carrying capacity targets for Oregon Caves will be established as the new standard for public use and access to the cave, based upon the optimum model following:

- Tour length: varied by NPS guides
- Group size limit: 14 persons maximum per tour group, plus guide
- Group size minimum: one person, plus guide
- Target interval between tours: 15 Minutes minimum between tours
- Target maximum number of cave visitors per day: 700 persons

Other capacities:

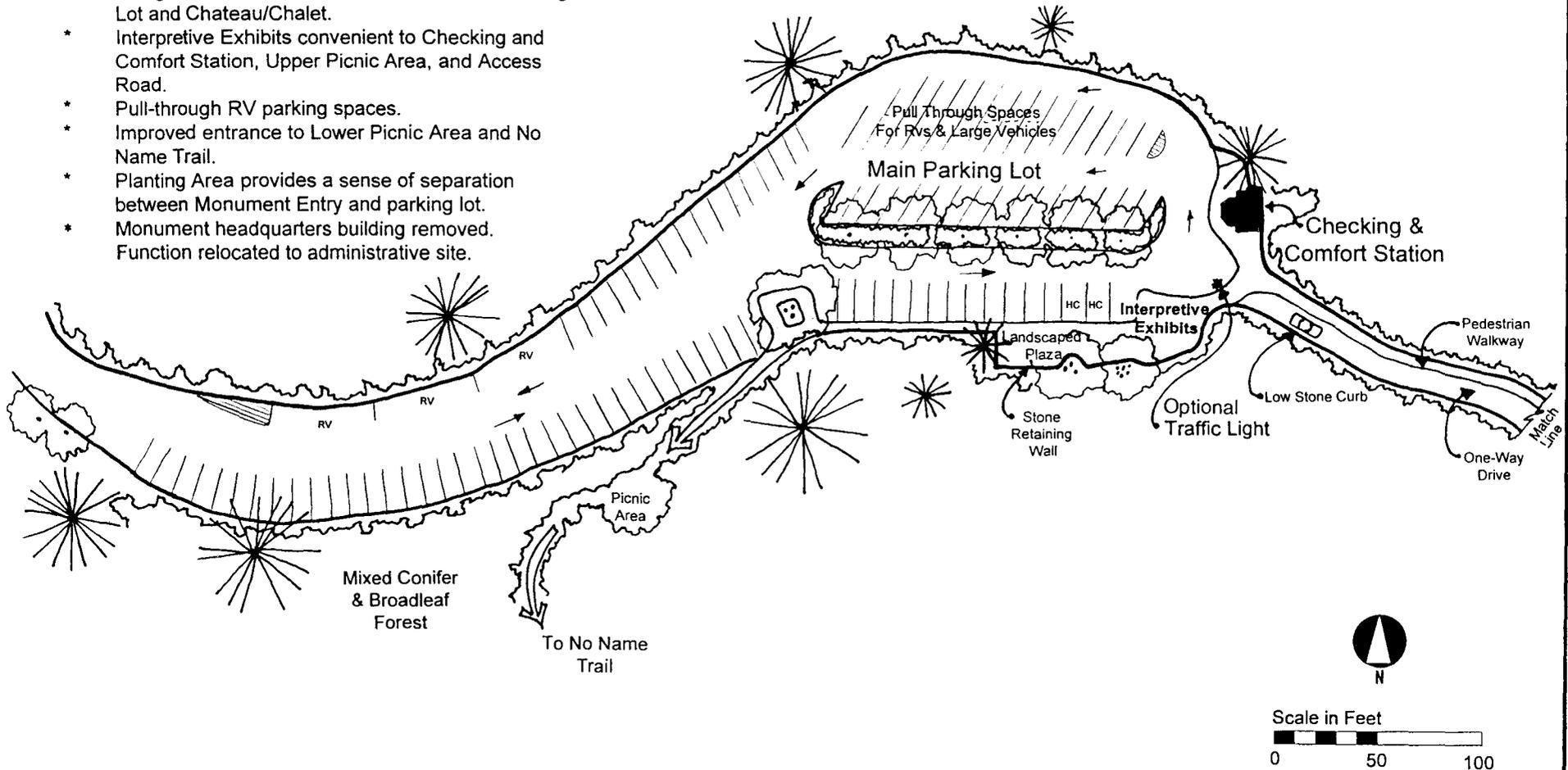
- Main parking lot: 99 spaces including 11 RV spaces and 2 spaces for visitors with disabilities
- Upper (Chateau) parking lot: 48 spaces including 2 spaces for visitors with disabilities
- Illinois Valley Visitor Center parking lot: 30 spaces including 4 RVspaces and 2 spaces for visitors with disabilities

Public use of the Monument will be monitored for impacts, and further adjustments affecting public access and use may be established as appropriate. It is acknowledged that a transition period may be necessary to accommodate the establishment of the cave tour reservation system and NPS ranger-led tours. If parking lot capacities at the Monument and the IVVC are reached on a continuing basis, then alternative strategies to accommodate Monument visitors will need to be pursued. This may include institution of a shuttle van system during peak periods.

**Key Features:**

- \* One-Way traffic on access road between Main Parking Lot and Chateau/Chalet regulated by traffic light.
- \* Upper Parking Lot restricted to Lodge patrons, on-duty staff and mobility impaired visitors.
- \* Designated Pedestrian Path between Main Parking Lot and Chateau/Chalet.
- \* Interpretive Exhibits convenient to Checking and Comfort Station, Upper Picnic Area, and Access Road.
- \* Pull-through RV parking spaces.
- \* Improved entrance to Lower Picnic Area and No Name Trail.
- \* Planting Area provides a sense of separation between Monument Entry and parking lot.
- \* Monument headquarters building removed. Function relocated to administrative site.

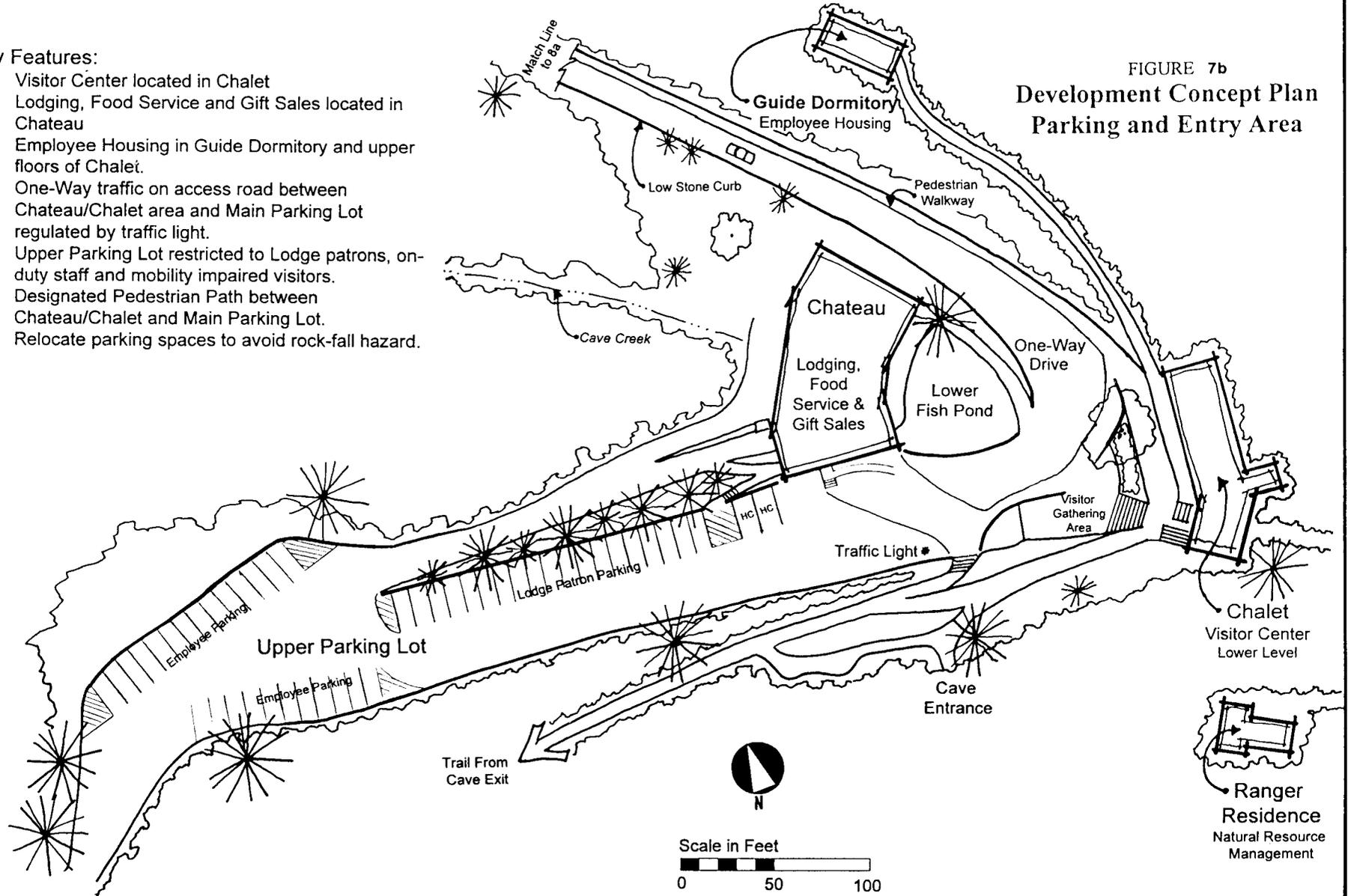
**FIGURE 7a**  
**Development Concept Plan**  
**Parking and Entry Area**



**Key Features:**

- \* Visitor Center located in Chalet
- \* Lodging, Food Service and Gift Sales located in Chateau
- \* Employee Housing in Guide Dormitory and upper floors of Chalet.
- \* One-Way traffic on access road between Chateau/Chalet area and Main Parking Lot regulated by traffic light.
- \* Upper Parking Lot restricted to Lodge patrons, on-duty staff and mobility impaired visitors.
- \* Designated Pedestrian Path between Chateau/Chalet and Main Parking Lot.
- \* Relocate parking spaces to avoid rock-fall hazard.

**FIGURE 7b**  
**Development Concept Plan**  
**Parking and Entry Area**





Main parking lot will be reconfigured



Pedestrian access for picnic area and No Name Trail will be improved



Traffic management techniques will be used to reduce pedestrian-vehicle conflicts



Upper parking lot will be reconfigured for lodge patrons and employees

## Monument Boundary and Land Protection

In order to protect cave ecology, surface and subsurface hydrology, forest ecology, foreground and middleground viewsheds, and the public water supply used by employees and visitors to Oregon Caves National Monument, a boundary modification will be recommended. Including the 484 acres already within the Monument, the modified boundary will encompass approximately 4,375 acres, or an addition of 3,410 acres. All lands proposed for inclusion in the revised boundary are federal lands within the SNF. No private lands are involved and no acquisition funds are needed. The transfer will include the Monument's 80 acre administrative site presently used by the NPS under an existing agreement with the USFS. (See Figure 8, Boundary Modifications.)

Lands to be added include managed LSR lands of the upper watersheds of Cave and Lake Creeks and portions of the lower watershed for Lake Creek adjacent to Oregon Caves National Monument. This includes Meadow Mountain Trail, and Lake Mountain Trail, portions of the Mt. Elijah, Limestone, and Cave Creek trails, the remaining sections of No Name, and Big Tree trails, and the Bigelow Lakes. There are also two small matrix sections included on Buck Peak, approximately

188 acres in size. They are designated on the Siskiyou Management Forest Management Zones map (Refer to Figure 17 in the *Oregon Caves National Monument Draft General Management Plan and Environmental Impact Statement*, December 1997 and the *Oregon Caves National Monument General Management Plan and Environmental Impact Statement*, Volume I, November 1998.) as Partial Retention Visual. The small unit to the east includes an 11 acre Special Wildlife Site designated by the USFS as Meadows. According to the SNF *Land and Resource Management Plan*, "this habitat type is an important integral component of overall habitat diversity on the Siskiyou. Meadows and meadow/forest edge areas provide hiding and thermal cover, nest and den trees, and food for wildlife species." Prior to transfer, the NPS will complete a Level I Survey to determine if hazardous wastes are present.

Through this change, greater protection under NPS administration will be afforded to the upper Lake Creek watershed. Since the public water supply for the Monument is located in the upper Lake Creek watershed, grazing will be eliminated as a permitted use. Human use of the watershed area will be limited to those uses that will be compatible with the protection of a public watershed. As required by the Surface Water Treatment Rule of the Safe Drinking Water Act of 1982 (reauthorized in 1996), the Monument will prepare and submit a detailed watershed protection plan stating how this protection will be achieved.

Greater protection will also be afforded to upper Cave Creek watershed as well, which is the principal water source of the River Styx and subsurface hydrological flows into the marble cave.

The boundary adjustment will incorporate the administrative site into the expanded Monument which will



Public forest lands between Buck Peak summit and the Monument will be added

allow for more efficient management and protect NPS investment of construction funds needed to enhance administrative facilities.

Finally, since the boundary change is primarily topographically based, it will also provide greater protection for the foreground and most middleground views from the Monument's developed area and adjacent trails. This will include protection of lands within Level I Sensitivity (those viewpoints closest to Oregon Caves) of the middleground composite viewshed. (See Figure 9, Watershed Resources.)

In a separate minor boundary adjustment action, a total of 3.95 acres will be recommended for deletion from the Monument boundary in Cave Junction adjacent to the IVVC. (This land was authorized, but never became part of the 484 acre Monument.) This land was never acquired as part of the IVVC site and is now owned by the City of Cave Junction which developed a water treatment facility at the site. This additional authorized land is not needed over and above the 4.03 acres currently within the Monument at the IVVC. Future anticipated public land needs at Cave Junction do not require that this area remain a part of the Monument, and therefore allow for deletion of this authorized area from the existing Monument boundary. For further analysis of boundary adjustment and land protection criteria, see Appendix C: Analysis of Boundary Adjustment and Land Protection Criteria.

## Opportunities for Regional Cooperation

The NPS will continue to participate as an ex-officio board member of the IVVC to continue to promote regional tourism, recreation, and visitor information. The NPS will maintain a working relationship with the Illinois Valley District Office of the SNF and the Grants Pass Resource Area Office of the Medford District, BLM.

The NPS will work with SNF to create new agreements to include the following: 1) Provide special cave tours for SNF volunteer trail crews. 2) Develop park-to-wilderness trail systems in conjunction with wilderness areas adjacent to the Monument (for example, Red Buttes Wilderness, Siskiyou Wilderness). 3) Assist with the development of the "Coast to Caves" mountain bike trail currently being spearheaded by Del Norte County, California and Six Rivers National Recreation Area (USFS), also in California, in conjunction with SNF.

The NPS will work with the USFS to ensure preservation of the scenic entry corridor to the Monument through the national forest portion of the drive. Before it enters the national forest, Caves Highway is also part of the visitor experience. The Caves Highway is also part of the visitor experience from the IVVC to the SNF boundary. The NPS will encourage Josephine County and the gateway City of Cave Junction to protect the scenic values along the highway as part of the visitor experience. In addition, full consideration will be given to the establishment of Caves Highway as a National Scenic Byway. This designation will draw together Josephine County, the City of Cave Junction, the USFS and the NPS in partnership with each other in the long-term management of the Caves Highway for the retention of its scenic values for the traveling public without changing any jurisdictional authority or the private ownership of land along the route.

Additionally, opportunities for enhanced visitor experiences could be explored within a broader regional context to link significant and ecologically diverse natural features between the Pacific coast and the Cascade crest. This could include bicycle or automobile touring of the area. Through this broader regional

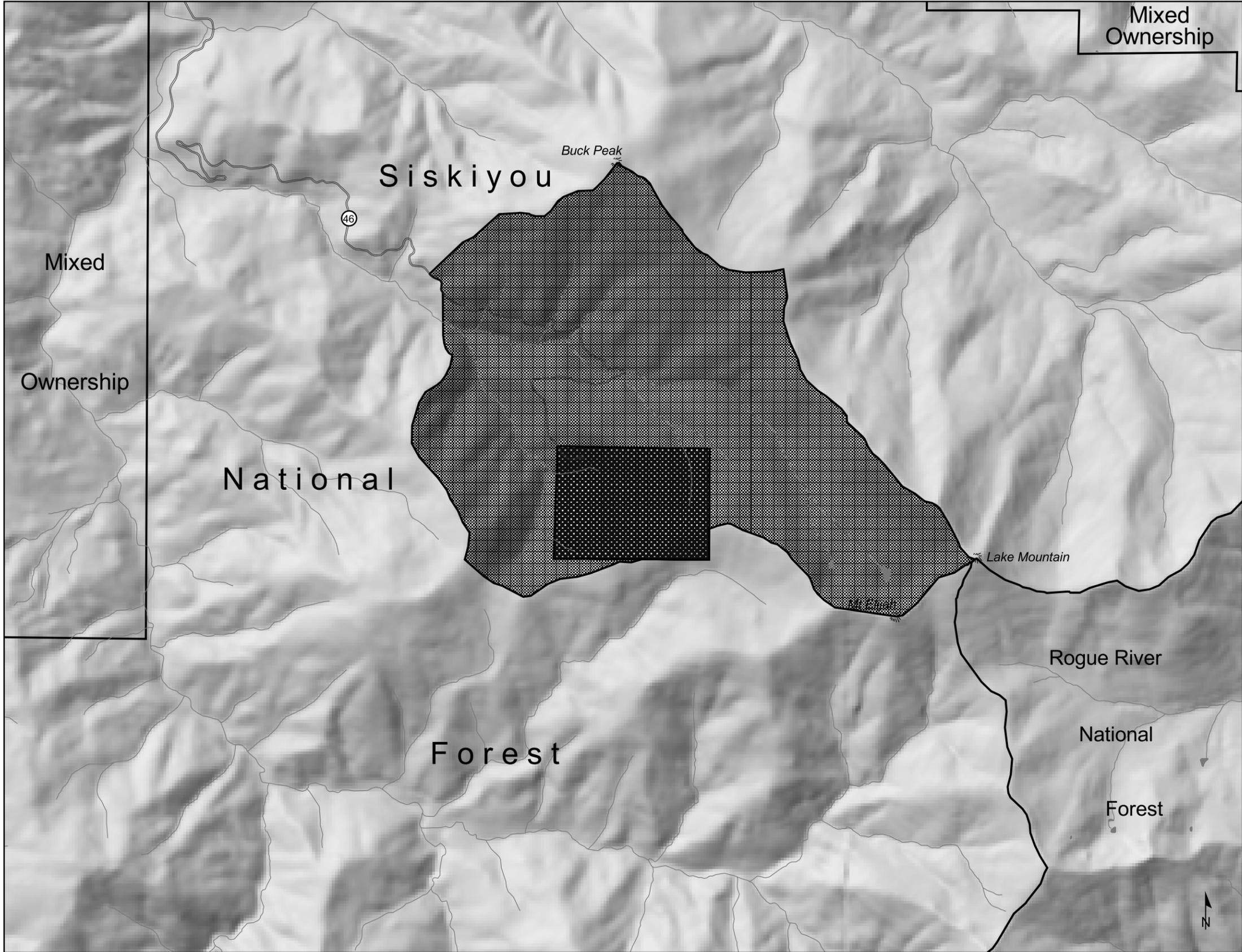
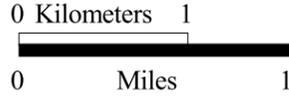


FIGURE 8  
**Boundary  
 Modifications**

**Legend**

-  Existing Park Boundary - 480 acres
-  Proposed Park Boundary - 3410 acres
-  Highway
-  Streams
-  Lakes
-  Mountain Peaks



Data Sources:  
 Siskiyou NF: Siskiyou NF Boundary, highway, hydrography  
 USGS: topography, existing park boundary  
 NPS: proposed park boundary, mountain peaks



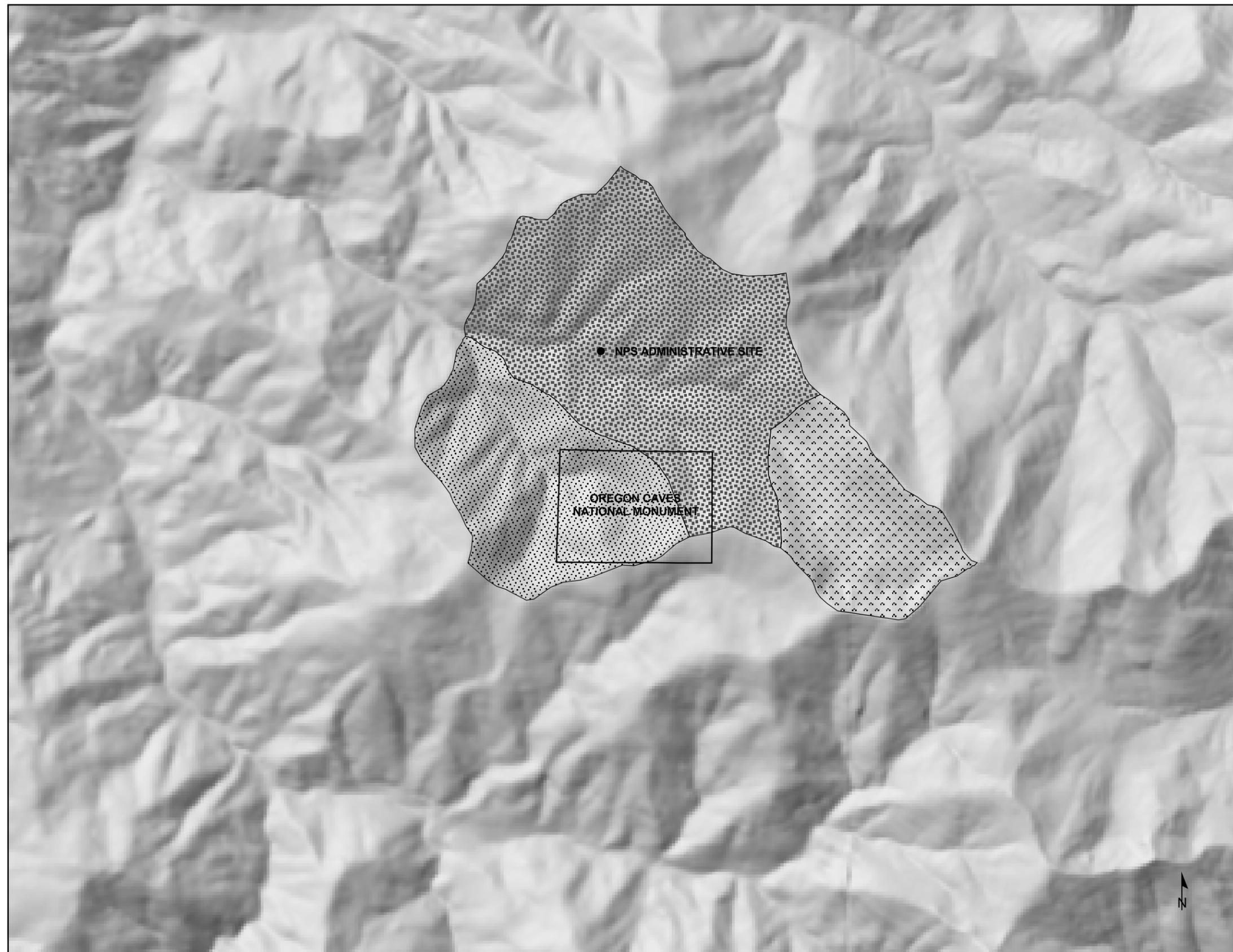
FIGURE 9  
**Watershed Resources**

**Legend**

-  Existing Park Boundary
-  Upper Cave Creek Watershed & Oregon Cave Resources
-  Lower Lake Creek Watershed, Middleground Viewshed, & Applegate Marble
-  Upper Lake Creek Watershed & Public Water Supply



Data Sources:  
SISKIYOU NF: watersheds  
USGS: topography, park boundary  
NPS: administrative site  
K:\GIS\AVPROJ\ORCA\GMP\PLANS.APR  
Watershed Resources



perspective, Oregon Caves and the Illinois Valley are centrally positioned to take advantage of these opportunities.

*The General Management Plan*

## Summary of Public Involvement

For a complete summary of public involvement, please refer to Volume II , “Comments and Responses,” section in the *General Management Plan and Environmental Impact Statement for Oregon Caves National Monument*, November 1998. It is an essential part of the final *Oregon Caves National Monument General Management Plan and Environmental Impact Statement*. Volume II should be read in conjunction with Volume I, which includes the final general management plan, development concept plans, and environmental impact statement.

Information in Volume II includes information on scoping meetings, the distribution and notice of availability of the draft general management plan and environmental impact statement, public workshops held on the draft general management plan and environmental impact statement, and finally, written comments and responses by the National Park Service.

*The General Management Plan*

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# Appendices

**Appendix A:** Oregon Caves National Monument Proclamation and 1978 Boundary Change

**Appendix B:** National Park Service Mission Goals

**Appendix C:** Analysis of Boundary Adjustment and Land Protection Criteria

**Appendix D:** Record of Decision

**Appendix A: Oregon Caves National Monument Proclamation  
and 1978 Boundary Change**

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA  
A PROCLAMATION  
(No. 876 - July 12, 1909 - 36 Stat. 2497)

WHEREAS, certain natural caves, known as the Oregon Caves, which are situated upon unsurveyed land within the Siskiyou National Forest in the State of Oregon, are of unusual scientific interest and importance, and it appears that the public interests will be promoted by reserving these caves with as much land as may be necessary for the proper protection thereof, as a National Monument;

NOW THEREFORE, I, William Howard Taft, President of the United States of America, by virtue of the power in me vested by section two of the Act of Congress, approved June eighth, nineteen hundred and six, entitled, "An Act For the preservation of American antiquities," do proclaim that there are hereby reserved from all forms of appropriation under the public land laws, subject to all prior valid adverse claims, and set apart as a National Monument, all the tracts of land in the State of Oregon shown as the Oregon Caves National Monument on the diagram forming a part hereof.

The reservation made by this proclamation is not intended to prevent the use of the lands for National Forest purposes under the proclamations and Executive Order establishing the Siskiyou National Forest, but the two reservations shall both be effective on the land withdrawn, but the National Monument hereby established shall be the dominant reservation, and any use of the land which interferes with its preservation or protection as a National Monument is hereby forbidden.

Warning is hereby given to all unauthorized persons not to appropriate, injure, remove or destroy any feature of this National Monument, or to locate or settle on any of the lands reserved by this proclamation.

IN WITNESS THEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE At the City of Washington this 12th day of July in the year of our Lord one thousand nine hundred and nine, and of the (seal) Independence of the United States the one hundred and thirty-fourth.

Wm. H. Taft.

By the President:  
P.C. Knox,  
Secretary of State

PUBLIC LAW 95-625 - NOV. 10, 1978

TITLE III - BOUNDARY CHANGES

Sec. 301. The boundaries of the following units of the National Park System are revised as follows, and there are authorized to be appropriated such sums as may be necessary, but not exceed the amounts specified in the following paragraphs for acquisitions of lands and interests in lands within areas added by reason of such revisions:

(14) Oregon Caves National Monument, Oregon: To add approximately eight acres as generally depicted on the map entitled "Oregon Cave, Oregon," numbered 20,000, and dated April, 1978: \$107,000.

## **Appendix B: National Park Service Mission Goals**

## National Park Service Mission Goals

The following goal statements are taken from the 1997 *National Park Service Strategic Plan*. These “mission goals,” as they are called, articulate the ideals that the NPS is striving to attain. These goals also provide the basis or cornerstone from which to develop long-term goals which is a key element of the *NPS Strategic Plan*, and NPS compliance with the Government Performance and Results Act (GPRA).

### **Goal Category I: Preserve park resources**

Mission Goal 1a: Natural and cultural resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem or cultural context.

Mission Goal 1b: The NPS contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.

### **Goal Category II: Provide for the public enjoyment and visitor experience of parks**

Mission Goal IIa: Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities.

Mission Goal IIb: Park visitors and the general public understand, appreciate, and support the preservation of parks and their resources for this and future generations.

### **Goal Category III: Strengthen and preserve natural and cultural resources and enhance recreational opportunities managed by partners.**

Mission Goal IIIa: Natural and cultural resources are conserved through formal partnership programs.

Mission Goal IIIb: Through formal partnerships with other federal, state, and local agencies, and nonprofit organizations, a nationwide system of parks, open space, rivers and trails provides educational, recreational, and conservation benefits for the American people.

Mission Goal IIIc: Assisted through federal funds and programs, the protection of recreation resources is achieved through formal mechanisms to ensure continued access for public recreational use.

### **Goal Category IV: Ensure Organizational Effectiveness**

Mission Goal IVa: The NPS uses current management practices, systems, and technologies to accomplish its mission.

Mission Goal IVb: The NPS increases its managerial resources through support from other agencies, organizations, and individuals.

## **Appendix C: Analysis of Boundary Adjustment and Land Protection Criteria**

## Analysis of Boundary Adjustment and Land Protection Criteria

As one of the provisions of Public Law 95-625, the National Parks and Recreation Act of 1978, Congress directed that the National Park Service consider, as part of a planning process, what modifications of external boundaries might be necessary to carry out Monument purposes. Subsequent to this act, Congress also passed Public Law 101-628, the Arizona Desert Wilderness Act. Section 1216 of this act directs the Secretary of the Interior to develop criteria to evaluate any proposed changes to the existing boundaries of individual park units. Section 1217 of the act calls for the NPS to consult with affected agencies and others regarding a proposed boundary change, and to provide a cost estimate of acquisition cost, if any, related to the boundary adjustment.

These legislative provisions are implemented Through NPS *Management Policies* which state that the NPS will conduct studies of potential boundary adjustments and may make boundary revisions:

- To include significant resources or opportunities for public enjoyment related to the purposes of the park
- To address operational and management issues such as boundary
- Identification by topographic or other natural features
- To protect park resources critical to fulfilling park purposes

NPS policies instruct that any recommendation to expand park boundaries be preceded by determinations that the added lands will be feasible to administer considering size, configuration, ownership, cost and other factors, and that other alternatives for management and resource protection have been considered and are not adequate.

The following is a review of the criteria for boundary adjustments as applied to Oregon Caves National Monument, and is included as supporting documentation for the proposed action (General Management Plan) which includes a recommendation for two boundary changes. The first boundary change for the transfer of 3,410 acres would require congressional legislation. The second boundary change is an acreage deletion of 3.95 acres at the Illinois Valley Visitor Center (IVVC) and would be pursued as a minor boundary adjustment.

### **I. Boundary Change Proposal - Lake Creek and Upper Cave Creek Watersheds**

(Transfer of 3,410 acres from Siskiyou National Forest to Oregon Caves National Monument)

#### **1) Significant Resources or Opportunities for Public Enjoyment Related to the Purpose of Oregon Caves National Monument.**

The transfer of the 3,410 acres of adjacent federal land within the SNF to the Monument are included in the proposed action because they are integral to the future management, protection and public use of Oregon Caves National Monument.

The proposed land transfer to the Monument contains the upper watershed of Cave Creek, and the upper and lower watersheds of Lake Creek which are integral to the protection of Monument resources and public use of the Monument. Dye-tracings have shown that upper Cave Creek is a primary source of recharge of the River Styx, the base-level stream of Oregon Caves. Since water is fundamental to both the origin and future development and decoration of Oregon Caves, the protection of the quantity and quality

of water transfer through the karst aquifer, and from surface sources such as Cave Creek, is critical to the long-term protection of the cave.

Additionally, the upper watershed of Lake Creek flowing from Bigelow Lakes, is the source of the public water supply for the Monument, providing potable water to Monument visitors and employees. The boundary change would provide for the permanent protection of the public watershed.

The boundary addition is topographically based, and thus would provide for viewshed protection of both Level I and II Sensitivity foreground viewsheds, and Level I Sensitivity middleground viewsheds from various viewpoints within the Monument and on adjacent public hiking and cross country ski trails. (See the Visual Analysis section in “The Affected Environment” chapter for breakdown of percentages for viewshed protection in the *Oregon Caves National Monument Draft General Management Plan and Environmental Impact Statement*, December 1997 and the *Oregon Caves National Monument General Management Plan and Environmental Impact Statement*, Volume I, November 1998.)

The boundary transfer would perpetuate the opportunity for public use and enjoyment of public land areas for outdoor recreational activities such as hiking, nature study, picnicking, cross country skiing, and other uses.

The delineation of a topographic boundary would provide for more efficient management of the area and better define a public use area within the upper Cave Creek and Lake Creek watersheds, including the Bigelow Lakes area and Mt. Elijah. At the present time, trails traversing this area are in dual management between the NPS and the USFS. (Trails currently leave the Monument and traverse portions of the SNF in the Lake Creek and upper Cave Creek watersheds.) While a positive spirit of coordination is evident between the two agencies, distance factors, and reduced USFS funding levels for trail management and maintenance have resulted in concerns about the long-term viability of those public hiking trails. In addition to these concerns, much of this forest area adjacent to the Monument has been historically managed for its timber production value and not for its scenic and recreational value. While management for Late-Successional Reserve characteristics will reduce the amount of timber harvesting over time, some thinning and timber salvage operations would be expected to continue if this area was not added to the Monument.

## **2) Operational and Management Issues Related to Access and Boundary Identification by Topographic or Other Natural Features**

The present boundary of the Monument at 484 acres is significantly reduced from the 2,560 acres included in the original area withdrawn for study in 1907. The boundary currently established for the Monument is not topographically based, but instead is rectangular in shape, and does not take into account the steep terrain of the general area, which ranges in elevation from 3,680 feet to 5,480 feet. The current boundary configuration serves to compound difficulties in resource management and administration issues of the site due to the varied topography of the area. In many places, slopes exceed 100% greatly limiting both ease of access and possible locations for public and administrative facilities.

Therefore, the present size and rectangular configuration of the Monument at 484 acres is inadequate to provide for the long-term protection and public use of the Monument, and does not provide a logical topographical related boundary that makes sense from a land management perspective. The current Monument boundary does not ensure the long term protection of cave resources, nor does it ensure protection of the Lake Creek and upper Cave Creek watersheds, the potable water supply that serves both

visitors and Monument and concession employees, the scenic foreground and middleground views as seen from various points within the Monument, or the protection of the forest ecology above and adjacent to the cave. The proposed boundary change would address all these current deficiencies by providing a watershed based boundary. The boundary change would also incorporate the Monument's administrative site, presently located within SNF, which would allow for more efficient administrative use and land management of this area.

### **3) Protection of Monument Resources and Fulfillment of Monument Purpose**

The proposed boundary adjustments to Oregon Caves National Monument would help to fulfill the purposes for which Oregon Caves National Monument was established by President Taft. His July 18, 1909 proclamation setting aside the caves noted its "... unusual scientific interest and importance." The proclamation also states that "... the public interest will be promoted by reserving these caves with as much land as may be necessary for the proper protection thereof, as a National Monument."

The boundary change would enable Monument managers to better meet their legal responsibilities for protection of Monument resources, including providing for the important protection of Monument's natural and visual resources and protection to the upper Lake Creek watershed which is the source of the Monument's public water supply. The boundary transfer would specifically assist in insuring that:

- Cave resources and subsurface hydrology are protected.
- The Lake Creek and upper Cave Creek watersheds are protected.
- The potable water supply serving Monument visitors and staff is protected.
- The visual resources encompassing the scenic foreground and much of the middleground views as seen from the Monument are protected.
- A logical topographic boundary for the Monument is established.
- NPS management of the area is more efficient.
- NPS capital investments are protected.
- Outdoor recreational opportunities continue to be provided to the public.

This boundary transfer would provide for the protection of the public water supply in the upper Lake Creek watershed, protection of surface and subsurface hydrological resources in the upper Cave Creek watershed, and protection of the foreground and most middleground views as seen from the present Monument. The NPS would provide interpretive opportunities in the Bigelow Lakes area through both personal and non-personal interpretation to help visitors better understand and appreciate this special botanical resource. This option also provides a more complete topographic boundary for land management purposes, includes the existing administrative area, and provides some additional outdoor recreational opportunities through added trails linking the Monument to SNF day-use and campground sites down valley. Finally, two new unexplored caves, both situated in the same marble outcrop as the Oregon Caves, have been identified within the area. The stratigraphic position and proximity of these caves provide additional rationale for including this area within the Monument.

### **4) Feasibility to Administer the Lands Added through Boundary Adjustment**

The proposed addition to the Monument is feasible for Oregon Caves National Monument to administer. The lands proposed for transfer are contiguous with the present Monument, and form a logical topographical boundary that provides for efficient management of the area. The Monument's current administrative site on USFS land would be incorporated into the boundary expansion allowing for more efficient administrative use and NPS land management. Much of the added land is either accessible by

road or trail, and much of the area is within the viewshed as seen from present Monument lands. With an increase in staff, management of the Monument has the full capability to administer the lands proposed for transfer to the Monument. In order to best manage these lands, staff increases are proposed in this GMP in the areas of resource management, law enforcement and maintenance. Resource management personnel would be involved in fire management, wildlife management and other activities. Maintenance personnel would maintain non-motorized trails in the expanded Monument. The NPS currently operates and maintains several facilities, buildings, and trails within the proposed area.

### **5) Protection Alternatives Considered**

In addition to the proposed action (Alternative C), other protection alternatives were considered in the draft environmental impact statement. (See the *Oregon Caves National Monument Draft General Management Plan and Environmental Impact Statement*, December 1997.) Alternative D would involve the transfer of 2,377 acres to the Monument from SNF to protect the public water supply in the upper Lake Creek watershed and the upper Cave Creek subsurface hydrology. In addition, a designated 1,033 acre protected area within the SNF would remain under SNF management for protection of the scenic viewsheds for a total of 3,410 acres.

Also considered in Alternative B would be a protected area of 3,410 acres whereby land management would remain within the SNF, with a permanent set-aside of the area in a special protective land management category through written cooperative agreement between the USFS and the NPS.

The proposed boundary addition was selected because it is a logical and efficient management unit that provides for the long-term protection of Monument resources, adds the Monument's administrative site to the boundary, and provides outdoor recreation benefit to the public with minimal impact on surrounding SNF lands. It also minimizes economic hardship on Josephine County and the timber industry since (1) no private lands are involved, and (2) the vast majority of lands added to the Monument from within the SNF are managed as LSR, which restricts timber extraction to limited thinning and salvage operations and does not count LSR managed lands within the national forest's general timber quotas. Furthermore, the proposed boundary was selected because it is topographically based, and provides for a more efficient management of public lands between the NPS and the USFS. Finally, all the land area proposed for inclusion in the Monument are federal lands administered by the USFS, and management can be transferred at no land cost to the Federal Government. No private or State of Oregon lands are included in the proposal.

### **(6) Proposed Additions to the Monument Boundary and Other Adjustments**

Under the proposed action, 3,410 acres are proposed for inclusion within the boundary of Oregon Caves National Monument. Congressional authorization would be required to adjust the Monument boundary and transfer management of the land from the SNF to the Monument. Management of both the surface and subsurface mineral estate would be transferred under the proposal. USFS roads would be retained after the transfer, and would continue to be maintained by the SNF under written agreement with the National Park Service. The NPS would close Road 070 (from its intersection with USFS Road 079 to its terminus near the eastern boundary of the Monument and USFS Trail 1206) located in the upper Lake Creek watershed in order to provide further protection to the public water supply.

Other than some expected administrative costs to carry out the transfer, no land costs would result to the Federal Government under this proposal. As described earlier, in consultation with SNF, there would be no reduction in federal payments to Josephine County resultant from future restrictions on timber

harvesting in the area added to the Monument. Payment in lieu of taxes would continue to be paid to Josephine County.

## **II. Boundary Change Proposal - Illinois Valley Visitor Center, Cave Junction**

(A proposal to delete 3.95 acres from the 7.98 acres authorized by Congress in 1978.)

### **1) Significant Resources or Opportunities for Public Enjoyment Related to the Purpose of Oregon Caves National Monument.**

While 7.98 acres was authorized by Congress in 1978 for the purposes of establishing an information/visitor center in the community of Cave Junction, only 4.03 acres are currently in public ownership today. The existing site is adequate to provide the land necessary for the location of the visitor center, along with the associated parking, landscaping and open space buffer. The remaining 3.95 acres of land was sold by the Federal Government in 1980. The site is now owned by the City of Cave Junction and will be developed for a water treatment plant.

Deletion of the 3.95 acres from the authorized site in Cave Junction will not diminish the opportunities for the public to gain information and orientation services at the present. The parking area adjacent to the center is currently underutilized, even during the peak season, and has adequate capacity to accommodate growth in visitor use of the site. Space in the existing parking area is also adequate for the vehicles of NPS, concession and cooperating association staff who reside in the area and who carpool, or would utilize the proposed employee shuttle between Cave Junction and the main portion of the Monument.

### **2) Operational and Management Issues Related to Access and Boundary Identification by Topographic or Other Natural Features**

The deletion of the 3.95 acres from the Monument boundary will not result in any operational or management issues for the staff. Modest enhancements could be made to the existing open space buffer between the IVVC and the proposed municipal water treatment plant through plantings of native conifers which would provide a year-round vegetative screen and physically separate visitor services from future municipal facilities.

### **3) Protection of Monument Resources and Fulfillment of Monument Purpose**

The proposed deletion will have no effect on the protection of Monument resources and much of the land area deleted provides a public benefit to the people of Cave Junction. The portion of the site already in federal ownership fulfills the purpose Congress intended for this Monument addition as a location for a joint information and orientation center.

### **4) Feasibility to Administer the Lands Added through Boundary Adjustment**

Not applicable.

### **5) Protection Alternatives Considered**

Consideration was given to retaining the acres within the Monument boundary. However, since the land has been bought by the City of Cave Junction, any consideration for purchase by the NPS would not be a prudent use of public funds. Additionally, the land is not needed for Monument purposes.

### **6) Proposed Additions to the Monument Boundary and Other Adjustments**

A deletion of 3.95 acres from the Monument boundary is proposed from the total of 7.98 acres that was authorized by Congress at Cave Junction.

## **Appendix D: Record of Decision**

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

RECORD OF DECISION

FINAL ENVIRONMENTAL IMPACT STATEMENT  
GENERAL MANAGEMENT PLAN

Oregon Caves National Monument  
Oregon

The Department of the Interior, National Park Service (NPS), has prepared this Record of Decision (ROD) on the Final Environmental Impact Statement (EIS) for the General Management Plan for Oregon Caves National Monument, Oregon. This ROD is a statement of the decision made, other alternatives considered, public involvement in the decision making process, the basis for the decision, the environmentally preferable alternative, and measures to minimize environmental harm.

DECISION (SELECTED ACTION)

Oregon Caves National Monument will implement Alternative C, identified as the action that best satisfies the Monument and NPS missions, as well as the Monument's long-term management objectives. Some actions remain consistent with those presented in the draft EIS. Others were modified in the final EIS to respond to public comments and concerns. The selected action recognizes both the need to protect natural and cultural resources and to provide appropriate opportunities for visitors and area residents.

Specific actions to be implemented under the selected action are summarized below:

Adequate administrative and collection storage will be provided at the administrative site. Cave tours will be operated with NPS interpretive rangers, and a cave tour reservation system will be established and based at the Illinois Valley Visitor Center (IVVC). The IVVC will continue to serve as a key point for initial visitor contact and information.

Protection will be provided to the Lake Creek and upper Cave Creek watersheds, the public water supply, and foreground and middleground viewsheds as seen from the Monument through the transfer of 3,410 acres to the Monument from the Siskiyou National Forest (SNF).

Additional hiking, horseback riding, and other recreational opportunities will be provided to the public, and public road access will be maintained to adjacent national forest lands. The cave will be open to public use from the middle of March to mid-December. Concession-provided lodging, food service and gift sales will continue, and will be located at the Chateau. Use of the lower level of the Chalet will be converted from the concession-operated gift shop to the Monument visitor center and will be staffed with NPS and cooperating association employees.

## OTHER ALTERNATIVES CONSIDERED

Alternative A – The no-action alternative represents no change from present management direction. This alternative, therefore, represents the current situation, including retention of concession-contracted services for cave tours, lodging, food service and gift sales. No boundary change would be included, no change to current administrative facilities would occur, and the Monument would remain open to cave tours year-round under Alternative A.

Alternative B – This is the “minimum requirements alternative”, representing the minimum actions necessary to protect the natural and cultural resources of the Monument and protect the health and safety of the public. Alternative B includes the development of adequate administrative and collection storage facilities in the Chateau. Cave tours would be operated with NPS interpretive guides, and a cave tour reservation system would be established and based at the IVVC. A cooperative agreement between the U.S. Forest Service (USFS) and NPS would set aside 3,410 acres as a protected area within the SNF. Under this agreement, protection would be provided to the Lake Creek and upper Cave Creek watersheds, the public water supply, and foreground and middleground viewsheds as seen from the Monument. The caves would be open to public use from mid-March to mid- to late December. However, no concession lodging, dining or gift sales would be provided. The lower level of the Chalet would be used for an on-site visitor center.

Alternative D – Under this alternative, a new on-site visitor center would be developed to provide interpretive services to the public. Concession lodging, food service and gift sales operations would be retained at the Chateau and the Chalet. The caves would be open to the public on a year-round basis, and tours would be conducted by a non-profit institute or similar organization. This alternative would also provide adequate administrative and collection storage at the administrative site, and the IVVC would be used for initial visitor orientation, visitor contact, and cave tour reservations. Protection of the Lake Creek and upper Cave Creek watersheds, the public water supply and foreground viewshed would be accomplished through a transfer of 2,377 acres to the Monument from the SNF. In addition, protection of portions of the middleground viewshed would be accomplished by the establishment of a 1,033-acre protected area within the SNF through a cooperative agreement between the USFS and NPS.

Actions common to all alternatives include the continued rehabilitation of the cave trail, the continued use of the IVVC for orientation and information, protection of the Oregon Caves Historic District, and ongoing regional cooperation on various issues such as fire management and tourism.

## BASIS FOR DECISION

After careful consideration of public comments throughout the planning process, including comments on the draft EIS, the selected action best accomplishes the legislated purpose of the Monument and balances the statutory mission of the NPS to provide long-term protection of the Monument’s resources and significance, while allowing for appropriate levels of visitor use and appropriate means of visitor enjoyment. The selected action also best accomplishes identified management goals and desired future conditions, with the fewest environmental impacts.

## ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The alternative which causes the least damage to the cultural and biological environment, and that best protects, preserves, and enhances resources is Alternative C.

## MEASURES TO MINIMIZE ENVIRONMENTAL HARM

All practicable measures to avoid or minimize environmental impacts that could result from implementation of the selected action have been identified and incorporated into the selected action. Implementation of the selected action would avoid any adverse impacts on wetlands and any endangered or threatened species, or that would result in the destruction or adverse modification of critical habitat of such species.

## PUBLIC INVOLVEMENT

Public comment has been requested, considered, and incorporated throughout the planning process in numerous ways. A Notice of Intent to prepare an EIS was published in the *Federal Register* on January 23, 1996 (vol. 61, no. 15, pgs. 1783-1784). In early March 1996, NPS produced a newsletter that was mailed to a list of interested individuals and was inserted in the *Illinois Valley Newspaper* for distribution to its circulation of 3,400 readers. The purpose of the newsletter was to explain the planning process, provide information, and encourage public participation in the process.

Two public scoping meetings were held in March 1996 in Cave Junction and Grants Pass, OR, to assist in identifying issues to be addressed in the GMP/EIS. A total of 23 people attended the two meetings. Also in March, the planning team met with several interest groups, at their request. The NPS received 88 written comments during the scoping period.

More than 300 copies of the draft GMP/EIS were mailed to government agencies, organizations and interested individuals in January 1998. In addition, the document was posted on the Internet and mailed to local libraries in Cave Junction, Grants Pass, and Portland, OR. The EPA Notice of Availability was published in the *Federal Register* on January 16, 1998 (vol. 63, no. 11, pg. 2676). A Notice of Availability was also published by NPS on January 15 (vol. 63, no. 10, pg. 2412). A second newsletter was prepared that included a summary of the draft plan and information on scheduled public workshops. Each newsletter included a postage-paid response form for people to use in submitting comments if desired. Approximately 3,500 newsletters were inserted into the *Illinois Valley News* on January 14, and another 1,000 were made available to visitors at the IVVC and the Chateau. In addition, newspapers in Grants Pass and Cave Junction published the notices and local radio stations announced locations and times for the public workshops.

Four public workshops were held in Cave Junction and Grants Pass on February 9 and 10, 1998. The purpose of the workshops was to offer the public an opportunity to meet with the NPS planning staff and discuss the draft GMP/EIS. A total of 111 people attended the workshops.

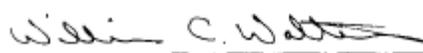
The final GMP/EIS was released to the public on November 10, 1998. The EPA Notice of Availability of the final GMP/EIS was published in the *Federal Register* on November 20, 1998 (vol. 63, no. 224, pg. 64473); the NPS also published a Notice of Availability in the Federal Register. The final document included a summary of the comments received at the public workshops and a summary of the comments received from written responses.

Consultation with the U.S. Fish and Wildlife Service (USFWS) on Section 7 of the Endangered Species Act was undertaken to identify listed plant and animal species that may occur within the Oregon Caves National Monument. In addition, a copy of the draft plan was sent to the USFWS for concurrence that the broad-scale elements of the proposed action would not adversely affect any listed species known or suspected to be in the planning area.

Consultation also occurred with the Oregon State Historic Preservation Office and the Advisory Council on Historic Preservation. A copy of the plan was sent to each of these offices to initiate and plan for coordination of survey, eligibility, effect, and mitigation of cultural resources in the Monument area.

During the comment period, 982 letters were received from government agencies, businesses, special interest groups and individuals. Of these, 735 were individually written letters, individually signed form letters and postcards, 132 E-mail responses through the Internet, and 115 response forms from the newsletter. In addition, a petition with 102 signatures was received. Written responses were prepared for more than 69 substantive questions and/or comments requiring clarification of information contained in the draft plan, changes to the text, or direct responses.

Recommended:  Date: 12-21-98  
 Craig Ackerman, Superintendent  
 Oregon Caves National Monument

Concurred:  Date: 12-22-98  
 William C. Walters, Deputy Regional Director  
 Pacific West Region

Approved:  Date: 12/23/98  
 John J. Reynolds, Regional Director  
 Pacific West Region

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