INTERPRETIVE PROSPECTUS

CRATER LAKE NATIONAL PARK

INTERPRETIVE PROSPECTUS

CRATER LAKE NATIONAL PARK
OREGON

PREPARED BY
DIVISION OF INTERPRETIVE PLANNING
HARPERS FERRY CENTER

DECEMBER, 1991

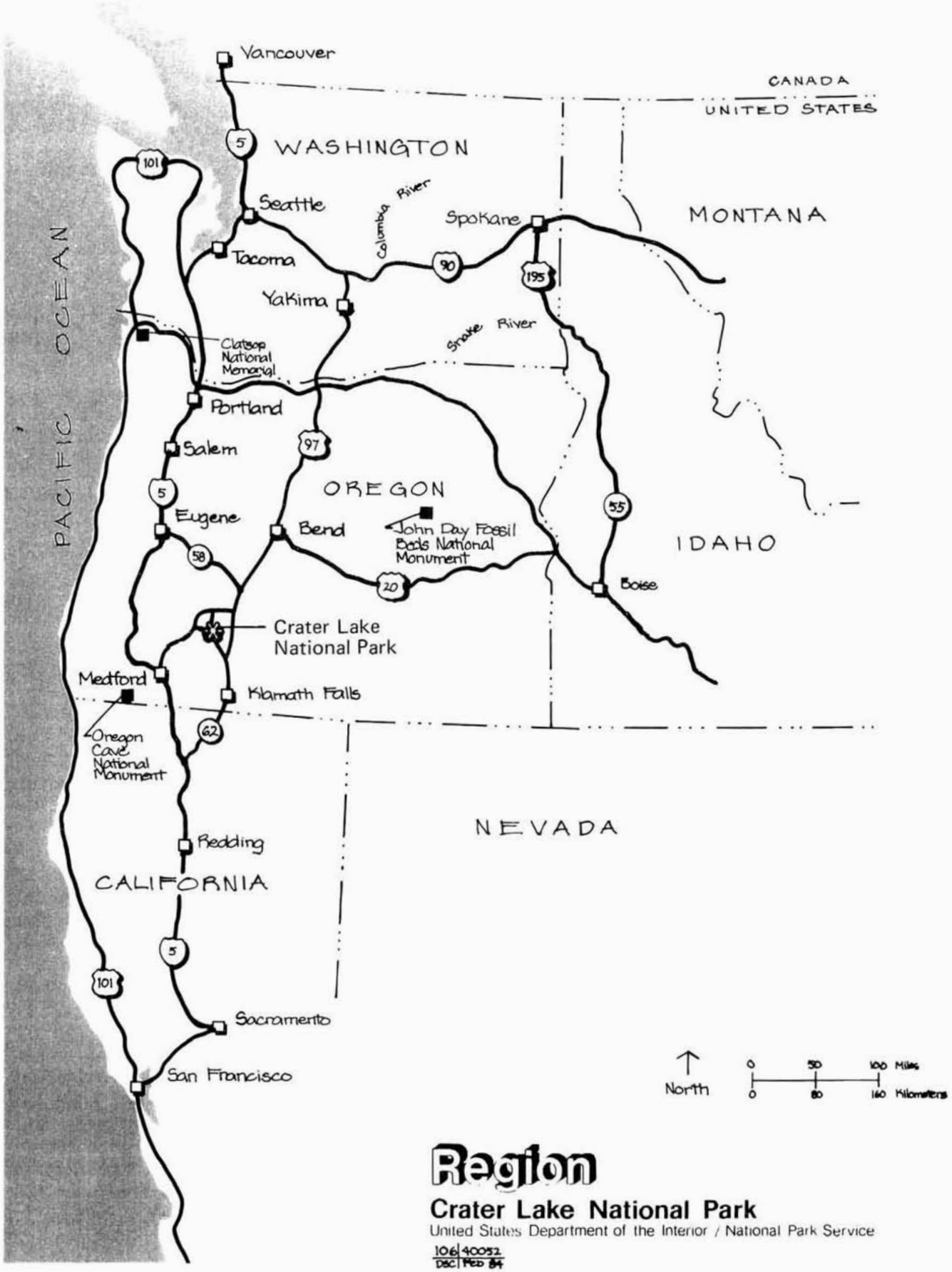
(Approved by memorandum
from Regional Director
Odegaard, Pacific
Northwest Region,
December 23, 1991)

FOREWORD

The Interpretive Prospectus is the key to interpretive planning. It takes its direction from previous planning documents--the 1977 General Management Plan and the 1984 and 1987 Development Concept Plan, Environmental Assessment, and Amendment to the General Management Plan.

The prospectus is primarily a media prescription. It establishes themes and selects the media that are best suited for the interpretation of those themes. It deals with wayside exhibits, audiovisual programs, museum exhibits, publications, and personal services. Personal services to be provided by the park's interpretive staff will be treated in greater depth in an operations plan, prepared by the staff and called Statement for Interpretation.

CONTENTS



Region

Crater Lake National Park

United States Department of the Interior / National Park Service

106|40052
DSC|Feb 84

NATURAL RESOURCES

Crater Lake National Park is in southwest Oregon, in the southern part of the Cascade mountain range. It lies in an area with a long history of volcanic and glacial activity extending from Lassen Peak in northern California northward into Canada.

Crater Lake occupies the caldera of the once majestic Mount Mazama. The collapse of the mountain top has been radiocarbon-dated as occurring about 7000 years ago, accompanied by an ash fall that far surpassed Mount St. Helens in terms of amount of material ejected and distance it was carried. The area is still seismically active but tremors and microquakes are detectable only by delicate instruments. Recently completed research documented hydrothermal features in the lake bottom.

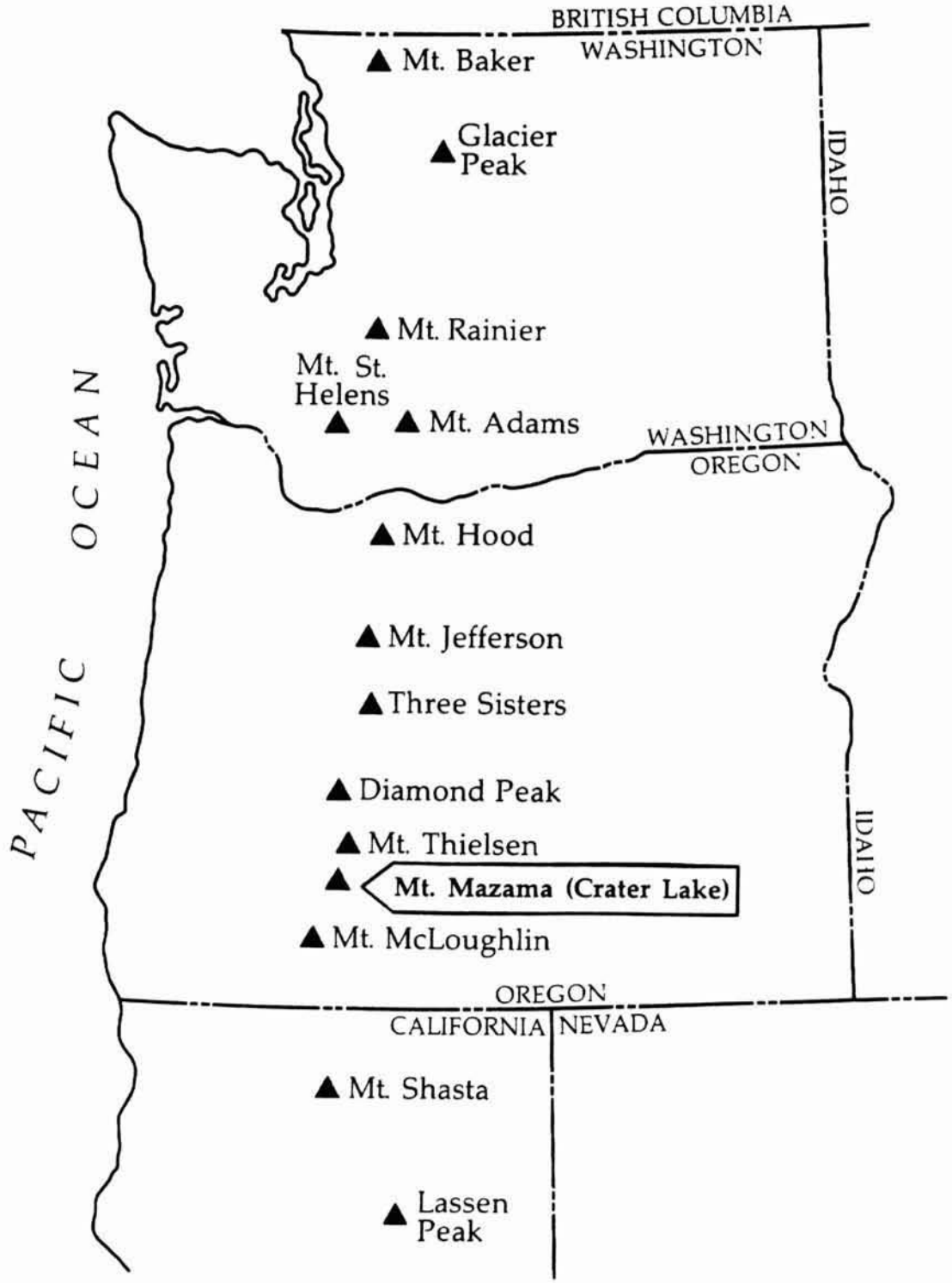
Crater Lake is 4.5 to 6 miles across, has 20 miles of shoreline, and a depth of 1,932 feet at its deepest point. It is the deepest lake in the United States. It is known for the clarity of its waters and the intense blue color. A ten year study which will be completed in September of 1992 is addressing the possibility of decline in water clarity.

The vegetation of Crater Lake National Park is typical of that found throughout the southern Cascades. Generally, it is a mosaic of forested areas and open nonforested areas. Climate, topography, soil development, and fire history all affect the composition and distribution of existing plant communities. The three forest types recognized in the park are: ponderosa pine, lodgepole pine, and mountain hemlock.

Animals seen in the park include black bear, elk, deer, pine marten, porcupine, red fox, squirrel, golden-mantled ground squirrel, pika, marmot, and hare. The most frequently observed birds include Clark's nutcracker, the gray jay, and Steller's jay. Nesting sites of the American peregrine falcon occur in the park.

The summer weather is generally mild with clear skies. Approximately 70% of the annual precipitation falls from November through March. Annual snowfalls have totaled as

Major Volcanic Peaks of the U.S. Cascade Range



The significance of the park's natural resources, then, is -
--as a scenic wonder
--as an assemblage of naturally functioning ecosystems, and an example of primeval America
--as a valuable lesson in volcanic geology.

CULTURAL RESOURCES

Crater Lake National Park has a long history of visitor use; its cultural resources are associated with park development and management. An important collection of historic buildings include those in the Munson Valley Historic District, the Watchman Fire Lookout, and the Sinnott Memorial Overlook and several others in the rim village.

They date from the era of the classic park "rustic" style. Attractive and intriguing for their craftsmanship, they also make a design statement. The philosophy behind this style, according to a 1930s National Park Service publication, was based on several precepts: subordination of structure to environment, achieving sympathy with the natural surroundings, and creating harmony by use of native materials in the proper scale.

The historic "rustic" buildings in the park were built in two separate periods. Crater Lake Lodge and the Kiser Studio were built from 1909 to 1925. The buildings at Munson Valley, the Sinnott Memorial Overlook, the Watchman Fire Lookout, the rim village comfort stations and the landscape of the rim village were built between 1928 and 1941. All these buildings were considered rustic in style, and most are listed on the National Register of Historic Places. The cultural landscape is not yet on the register. Crater Lake Lodge was fashioned after the grand hunting lodges of Europe at the turn of the century. The later structures were designed by landscape architects to fit into the natural environment.

The significance of these buildings lies in what they say about preservation philosophy, about craftsmanship, and also for their value as reminders. These wood and stone structures stimulate thoughts about national parks and

conservation history. The birth of this park and the twentieth century nearly coincided; now the twenty-first century approaches. What will the future bring? History not only tells us much about the past, it encourages thinking about what is to come.

EXISTING CONDITIONS

According to a 1985 study, visitors to Crater Lake can be characterized in these ways-

--Arrive in small family groups (about 75%)
--About half are on their first visit
--Stay in the park one day
--Do not remain overnight (89%)
--Originate in the states of Oregon, California, and Washington (69%)
--Enter the park in summer by the north entrance (40%), south entrance (35%), and west entrance (25%).

Visitation to Crater Lake peaked in the mid-1970s and dropped off during the 1980s. Annual visitation figures for representative years are listed here to show the trend.

1912	5,235
1920	20,135
1930	157,693
1940	252,482
1950	328,041
1960	330,398
1970	534,962
1977	617,479 (peak)
1980	484,256
1988	468,994
1989	454,737
1990	468,526

It could be said that the park has two seasons--snowfall and snowmelt--and so to some extent, weather and access, as well as distance from population centers, have had something of a capping effect on visitation. Busiest are the three summer months, with about 75% of the annual visitation coming at that time. May and September/October are the shoulder seasons. All other months of the year are characterized by much fewer visitors. During this extended off-season, there has been in the past no overnight lodging, much reduced food services, and road access reserved for the stout-hearted, who, even after traveling nearly to the rim might be stopped

short of their lake objective by snow. Snow also closes the north entrance and the rim road. With the year-round emphasis of new development, the distinctly seasonal pattern will be modified to some extent, but summer will always dominate in the annual cycle.

Weather, status of visitor services, and extent of access to park attractions are therefore of prime interest to potential visitors, to those who are enroute, and to visitors who have actually arrived at the park. All of these categories of visitors must be well-served by information and orientation. Crater Lake's geography and weather require an exceptionally good visitor information system.

In summer a variety of interpretive programs is offered. These range from guided walks and boat tours; to traditional campfire programs, geology talks at the Sinnott Memorial Overlook, and information desk services at Munson Valley (Steel Center) and the "Rim Visitor Center" (Kiser Studio). Depending on staffing, roving services are offered at a number of locations.

Winter visitors come for skiing and scenery. During the offseason very little interpretation has been provided in the past because of lack of staff. With overnight lodging to be provided in the future and year-round access, it is expected that these off-season visitors will have more time for and interest in interpretation. Their smaller numbers will offer an ideal situation for communication.

PLANNING AND DEVELOPMENT

Much of the development in the park dates from a half-century ago, or more. Over the years changes were made to accommodate increasing numbers of people and vehicles as well as a shift in visitor expectations. Rim village, the major destination point, was most affected. By the 1980s, it was clearly time to reevaluate the entire park in terms of development, especially rim village.

Accordingly, planning efforts were undertaken, a process that continued for about a decade. Several difficult issues delayed completion: fate of the lodge, closed in the late 1980s because of safety problems; and the question of which facilities were appropriate to locate on the prime rim

landscapes. After lengthy public debate, the major development concept has been determined.

Briefly, the concept is to retain and rehabilitate the Crater Lake Lodge, constructing a new road for access. Then a combination new activity center/hotel will be built. The new structure will contain a visitor center. Most of the parking and roads in the rim village will be removed to provide a safer and more attractive area for visitors on foot. A shuttle system will bring visitors to the rim from a lower lot, which provides parking year-round. Several buildings, including the community building and the current cafeteria/gift shop will be removed. The Sinnott Memorial Overlook and the Kiser Studio will be retained. Camping and cabins, already removed from the rim several years ago, will not be replaced on the rim.

A factor that greatly affects design of the new facilities (as well as interpretation and information) is the heavy snowload. Drifting of snow, length of the winter season, and snowplowing must be considered.

The visitor experience, when all of this work is accomplished, will be much improved, with cars and traffic no longer dominating the village. Walking, viewing, and a slower pace will be hallmarks of the redevelopment. Similarly, interpretation and information functions will, for the first time, occupy adequate space and assume a position of prominence in the hierarchy of visitor services.

Elsewhere in the park other sites and facilities will complement those of the rim village. Administrative functions will continue to be located in Munson Valley.

INTERPRETIVE THEMES

Geologic forces, primarily vulcanism, created the Crater Lake caldera and Cascade Mountains, of which Mt. Mazama was a part. This theme includes the following topics:
--plate tectonics
--formation of Mt. Mazama
--glaciation
--eruption and collapse of Mt. Mazama
--formation of Crater Lake
--geothermal activity.

Scientists and personnel of the National Park Service are studying Crater Lake to gain a better understanding of the lake's natural systems and to aid in future management of the lake and surrounding resources. This theme includes the following topics:
--the Diller and Dutton Surveys
--recent research, including studies of lake water quality and of hydrothermal activity and lake bottom features
--need for continuing studies.

The lake is an incomparable example of a deep, pure caldera lake. This theme includes the following topics:
--water clarity
--water quality
--water chemistry
--hydrothermal activity
--lake limnology
--lake ecology
--water color
--threats to the lake.

Humans have played a significant role in the discovery, preservation, and management of Crater Lake. This theme includes the following topics:
--American Indian legends about Crater Lake
--American Indian use of Crater Lake area
--discovery of Crater Lake
--establishment of Crater Lake as a national park
--Crater Lake and the national park movement
--National Park Service philosophy

--rustic architecture and rim development
--Crater Lake as a tourist attraction.

Crater Lake National Park is home to a diversity of plants and animals including several endangered species. This theme includes the following topics:
--plant life
--animal life
--endangered species
--biodiversity
--role of fire in the ecosystem
--old growth forest ecology
--weather and climate in relation to above.

(Statement for Interpretation, 1991)

INTERPRETIVE OBJECTIVES

Provide adequate information to allow visitors to choose their desired park experience. Varying time budgets and seasonal differences must be accommodated.

Improve understanding of the park's geological past and its volcanic context.

Improve understanding of Crater Lake's limnology and unique optical phenomena.

Encourage appreciation of all the park's natural features.

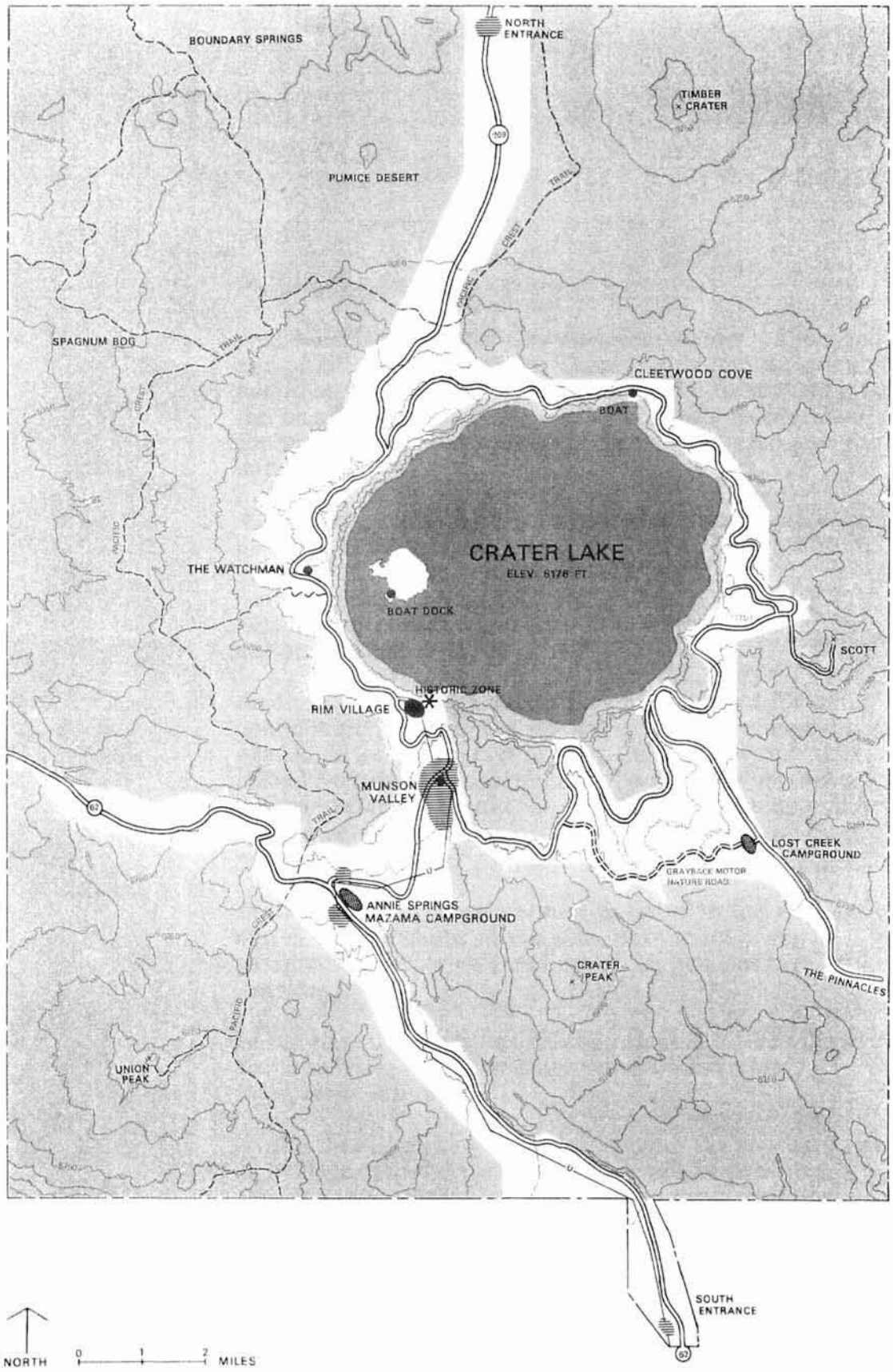
Incorporate the results from on-going research programs.

Encourage appreciation of the park's history and historic structures. Employ this story and these structures to stimulate interest in the future of parks and in the visitor's role in conservation.

Provide adequate interpretation--in personal services and in other non-personal media--for year-round program.

Encourage safe use of park.

Encourage increased use of park areas and resources away from the rim village.


BOUNDARY SPRINGS
NORTH ENTRANCE
TIMBER CRATER
PUMICE DESERT
SPAGNUM BOG
CLEETWOOD COVE
BOAT
CRATER LAKE
ELEV. 6176 FT.
THE WATCHMAN
BOAT DOCK
SCOTT
HISTORIC ZONE
RIM VILLAGE
MUNSON VALLEY
LOST CREEK CAMPGROUND
CRATER PEAK
THE PINNACLES
UNION PEAK
SOUTH ENTRANCE
NORTH
0
1
2
MILES

THE PLAN

PARKWIDE WAYSIDES

In the 1980s a series of new wayside exhibits was planned and produced for the park. These panels provide orientation and interpretation at a variety of locations, many along the rim drive. Bulletin boards display changeable information. Embedded fiberglass panels are nicely illustrated and visually appealing.

Additional panels, to be coordinated in design with existing panels, will be needed -
--as part of the rim village redevelopment
--at the shuttle parking lot
--as a comprehensive and layered orientation system for visitors enroute to the park.

Also, new interpretive panels may be produced for other overlook points along the rim drive. Minor refinements are needed in the package of existing exhibits. Several trails should be surveyed to determine the need for smaller trailside exhibits. Finally, several interim waysides will be needed during the construction phases of the rim village redevelopment.

Further detail on waysides may be found in the Appendix and in other sections of the plan, but the following paragraphs provide an overview of the new package of waysides.

In the rim village, visitors will be oriented to the village visitor services. They will also receive view-related interpretive information.

At the shuttle parking lot, orientation to the shuttle system, rim village, and the park as a whole will be provided. Wayside exhibits should be part of the contact station building--containing public restrooms, shuttle waiting area, and seasonally-manned information point. These same panels may be duplicated elsewhere in the parking area, if there is more than one shuttle stop. Directing visitor flow must be carefully handled here; as many as 4000-5000

persons a day may pass through the area; high volume devices are the key in summer. In winter, the visitor load may shrink to 300 or so per day. Because the parking lot will be used by visitors engaged in winter snow play, this subject should be covered in waysides also.

A package of wayside exhibits will be developed to orient visitors who are on their way to the park. It is vital that people know something about facilities, features, and services before arriving, for more efficient circulation, better-satisfied visitors, less pressure on any one single point of information dispersal, and more informed decision-making by visitors.

It should not be necessary for everyone to go all the way to rim village to obtain information. Visitors will welcome orientation waysides on the periphery and near entrances at times of the year when entrances are partly closed, road access is complicated by snow, and many questions arise concerning status of services and facilities. These "enroute" waysides may be coordinated with travelers advisory radio broadcasts and should be situated, in some cases, where telephones are nearby. Each location must be carefully evaluated to determine feasibility and specific site requirements.

Placement of waysides should not hinder snowplowing activities and should avoid, if possible, the burden of seasonal removal of panels.

RIM VILLAGE

The rim village has been and will continue to be, under the new development concept plan, a center of various visitor services. Visitors will be arriving by shuttle vehicle; up to half of the people will be first-timers and will need clear directions. Therefore, signing, informational waysides, and infrastructure/landscape design should facilitate visitors in their movements. An orientation sign/wayside at multiple locations (shuttle parking lot, shuttle drop-off points in the village, and major points of diverging foot traffic) should diagram the village and clearly indicate the services. Simple signing would then direct visitors to these places. Since most visitors will be on foot, these signs and waysides will be designed for pedestrians. The shuttle stop location and schedule should also be indicated.

Visitors arriving by way of the north entrance will already have had a glimpse of the lake. Others will not. Therefore, for at least half the summer visitors, viewing the lake will be first on their lists, followed by information, interpretation, food services, etc. It will be vital to guide visitor movements by trails, good landscape design, and placement/visual impact of structures, so that they feel the lake is the primary focus of the village, not the man-made elements. In the past visitors have dodged moving traffic and navigated a crowded parking lot to see the lake. Their first views of the village in the past have led, according to a sociological study, to the impression that the most important activities centered on buildings. (And spent their time accordingly.)

With a completely redeveloped rim village, we want to encourage people through design to be able to choose to go to the lake or visitor center first. Care should be given not to cause disembarking bus loads of visitors to go immediately into a building, even a visitor center, and then search for a way to the lake. **It is crucial that visitor movements be planned from the shuttle lot onwards, so that the rim village experience is a quality national park experience and not just another brush with civilization, uncoordinated and confusing.**

Regimentation, in the form of large shuttle parking lots and bus rides, should not carry through the experience once people have arrived at the village. They should wander freely, depending on their interests, on well-designed trails whose width and provision for gathering points are coordinated with the numbers of people using them.

From the shuttle stop a wide trail will funnel large numbers to a sufficiently large gathering point/primary overlook. This overlook could be structured in a connecting series of nodes. Viewing the lake will be the prime activity at the first node. An adjoining area would contain several unobtrusively located wayside exhibits to answer some of the most common questions. A final area could expand into a space designed for informal interpretive talks and roving interpretation. Informal seating will allow family conversations, relaxing in the beautiful surroundings, adjusting cameras, and eating snacks.

It will be evident at this place that trails lead to other destinations: the lodge, Sinnott Memorial Overlook, Kiser

Studio, and the historic rim promenade. This is the point where modern development meets historic development.

All of these secondary sites will offer quality interpretive experiences. Secondary trails will not be as wide and will encourage a leisurely pace. These trails should tempt visitors to disperse and encourage self-guided visitor explorations.

Attributes of the primary overlooks(s) are:
--prime panoramic view of lake and caldera
--can be seen from the shuttle stop
--connects to trails
--reasonably near the visitor center
--will hold substantial numbers of people
--includes outdoor exhibit panels
--provides destination, focal point, gathering place, staging area.

As a result, the landscape design will be a blend of rehabilitated cultural landscape and innovations that respond to present-day visitor loads and interpretive needs. Support for this concept is provided by the 1990 cultural landscape study's recommendations.

After the lake viewing overlook in order of importance will be the visitor center. Here people can obtain guidance on the features of the park, in addition to in-depth interpretation. Some visitors, especially those who have entered from the north, may want to go to the visitor center first.

This description applies to the summer operation; in winter, in contrast, the visitor center would be first on everyone's list. Lake viewing will occur inside where the elevation permits visitors to see over high snow banks.

Activity Center/Hotel (Visitor Center)

The visitor center will be combined in the same building with a new hotel and food service/retail facility intended to be used year-round. The functions of the visitor center are:
--providing information, orientation, and sales
--display of temporary and permanent exhibits
--screening of audiovisual programs in a dedicated theater space

--offering of evening programs in a multipurpose space
--safe viewing of the lake in winter time.

There will be a pronounced difference between the numbers of off-season visitors and summer visitors. During the few months when all of the park is accessible, large numbers of people need to be served at the visitor center, with relatively rapid turnover time, and directed out to the many activities and attractions of the park. At that time they can walk to Watchman Fire Lookout; boat on the lake; drive the rim drive and spur roads; visit the Crater Lake Lodge, Kiser Studio and Sinnott Memorial Overlook; hike various trails, etc.

When snow closes most of the park, which it does for a substantial part of the year, lesser numbers of people will come. They will be rewarded by a quieter and very scenic experience. Less is available at that time so they will linger in the visitor center and presumably will be eager for a more in-depth experience. Differences in seasonal visitor patterns should be matched by differences in visitor center media offerings, when possible. Each interpretive medium should be evaluated for its potential to be varied by season.

Since current plans have located the visitor center on the second floor of the multi-level building, it is important that visitors be assisted in their journey; entering on the ground level it will be all too easy to get lost in the hustle and bustle of a lobby which serves both concession and visitor center. Shopping and eating may divert even those who intended to find the park information desk. Methods of emphasizing the visitor center access path should be evaluated. Examples might include an open stairway design, a wide and inviting stair, artwork/panels/banners that flank the stair entrance or are located on the landing, and a carpet color and design that leads visitors to the stairs directly from the front entrance.

In the past, park information and interpretation have taken a backseat to other functions in the rim village. In the future, the National Park Service mission, identity, and function will carry a higher profile.

Lobby

A visitor information desk and cooperating association sales will occupy the lobby and be the first element encountered

by arriving visitors. Here they will be able to ask questions and obtain printed information on park features. The desk will contain a phone, radio, and remote AV controls. It may be staffed at busy times by more than one person. Although a separate cash register in the sales area will be used in summer, the information desk should have the capability of selling material off-season. Orientation exhibits, some changeable, should provide information on weather, programs, safety, and road conditions. Graphics of features and visitor activities will give clues to the nature of the park and what there is to do.

Instrumentation and interactive video may be used in the lobby--dealing with weather, air quality, seismic events, safety, directions, tips for trips, status of services and facilities, and what to see and do. The latter program might have a print-out capability and include short features on the lake boat trip and winter skiing.

Theater

In summer the theater will be used to screen a 5 to 7 minute large image audiovisual program. Haselblad filming and projection should be considered for the program. Keeping the program short will allow frequent showings while minimizing the size of the room. Large numbers of people will be accommodated in this way. A sloped floor or tiered seating system should be employed so that visibility is good from all seats.

The orientation program will focus on the park's scenic beauty, its grandeur, and the range of features. It will have emotional appeal. It will help visitors understand why Crater Lake is special, and by extension, why national parks are special. The program will not deal in specifics or in material that is apt to need changing frequently.

In winter this program will be alternated with a 15 to 20 minute audiovisual program dealing with winter at Crater Lake--in all its aspects. Topics to be included are: reasons for the heavy snowfall and long winter, relationship of weather to the lake's existence, animal and human adaptations to winter, and others.

Exhibit Room

Exhibits will deal with a number of topics:

1. Geology
   - Global/regional context of Mt. Mazama
   - Sequence of events in the Mt. Mazama story
2. Natural History
   - Wildlife, plants and forests, ecosystems, biodiversity
3. Limnology/lake research program
4. Cultural History - a brief introduction (more detail will be available at other locations)
5. Weather/climate

These exhibits will include panels with text and graphics, three-dimensional objects, and computer/video units.

Exhibitable objects may include mounted animal specimens, plant models, geological specimens, water quality devices (Van Doren bottle, secchi disk), piano wire and reel used in the first lake depth measurements, and others.

Video/computer units integrated with exhibits will feature short segments on laser disc, on such topics as-
--lake research - hydrothermal and limnological. Should feature the manned submersible program.
--winter. Could include 1930s footage of snowplowing activities; could include a time-lapse segment on snowfall, beginning with the first winter storm and continuing to deep drifts that obliterate all familiar landmarks.
--historic use of the park (based on historic photographs)
--spring opening of park
--animated sequence showing the growth of Mt. Mazama, followed by its volcanic eruption, collapse of the summit, and filling of the caldera to form the Crater Lake.
--geology of the lake bottom; computer graphics of post collapse features - Wizard Island, lava flows, sedimentation, earthquakes.

Video programs will be grouped on monitors, according to subject matter. All will be fairly short; some will be shown in summer; all will be shown in winter. One or more

programs will be interactive to a greater degree (choosing from menus for levels of information), while the others will only require interaction to the extent of pushing a button to start the program.

The dichotomy between winter and summer visitation patterns will be handled by providing levels of information, changing some exhibit elements, and adding subjects in winter. In winter, informal seating may be provided in front of one or more video units where the programs have been grouped for a more lengthy viewing time.

Lake Viewing Area

In winter the lake viewing area will be the only place where the lake can be seen (in clear weather). Several panels should provide the same kind of basic information that is available at the rim village viewpoint in summer (see wayside exhibit section). A large graphic of summer/winter views of a rim village scene would dramatize the great snow accumulations typical of this park. If the ceiling height permits, a gauge or scale device might indicate an average (or actual) snow depth and/or depth of lake. Alternatively, this kind of device could be done outside for summer visitors.

In summer, the lake viewing area will only be used incidentally for viewing because the lake can be seen at dozens of other sites at that time of year. A topoographic model will be situated here so that people can observe the actual features of the lake while viewing the model and listening to the geological talk. The model can also be used for orientation and trip planning.

Multipurpose Room

On summer evenings visitors will congregate for interpretive programs. The small theater cannot hold more than 50 or so; therefore evening programs will take place in a multipurpose space--an adjacent room which will serve other purposes in the day time.

To adequately accommodate evening programs the multipurpose room should comfortably seat most of the

audience, and not require that the interpreter set up many chairs every evening.

Audiovisual equipment to be used in programs should be permanently housed, not rolled out on temporary and unstable carts. If there are windows in the room, curtains or other room-darkening devices will be needed. Lighting should be controlled in this space, independently of adjacent spaces. It should also be possible to eliminate competing sound sources so that visitors are not distracted during the program.

If the new multipurpose room permits evening programs in a situation that is the complete opposite of that encountered at the old lodge for many years, it will succeed. At the old lodge the program was viewed on folding chairs in a noisy lobby, with inadequate light control, temporary AV equipment set-up, by large numbers of people. Some of the viewers departed mid-program when their names were called for dinner reservations.

With 71 rooms at Crater Lake Lodge and 60 rooms in the new activity center/hotel, and a range of dining facilities available, a large number of people will be attracted to the evening programs in the visitor center on the rim. It will be a valuable interpretive opportunity to present material of more depth.

Tunnel

If a tunnel is used for winter access to the new activity center/hotel building, large attractive graphics should be wall-hung to improve the entry experience.

Crater Lake Lodge

In addition to providing overnight accommodations and dining, the lodge will also house interpretive devices. One room in the annex will be used solely for interpretive purposes.

The exhibit area, about 11 feet by 14 feet, will contain exhibits and a video unit. The theme will focus on historic park use, including lodge use and renovation. Three walls should be provided as part of the construction project. It is

preferred that the front wall be omitted, including posts if possible, so that the room is open to the corridor. A freestanding exhibit or exhibits might occupy the interface of room and corridor to attract attention and channel visitor traffic. Interpretive graphics may spill over onto walls of the corridor.

Representative samples of decor such as the painted lampshades, Indian motif curtains, and other items should be removed from the lodge during the construction period and carefully packed, labeled, and stored for possible use in exhibits. The park staff could begin canvassing for other historic items that could be used in exhibits, without promising definitely that they would be used. In this way the exhibit planner will have a good choice of material when the time comes.

Directional signage in the lobby should indicate this exhibit area because, while guests will all pass by it on the way to their rooms, other visitors will not realize its existence and might otherwise miss it.

Other public use spaces will also contain wall-hung graphic material of an interpretive nature: great hall, lobby, and dining room. Guest rooms will also contain such graphic material.

Historic photos of visitor activities, scenics, and illustrations of historic personages such as William Gladstone Steel have potential for use as wall hangings throughout the building, in the spaces previously enumerated.

Framing materials for graphics should be coordinated with other lodge furnishings; the interior designer should be requested to provide suggestions on style of framing, with recommended finishes, etc.

Planning, production, and installation of the graphics in public spaces will be part of the Harpers Ferry scope of work. Production and installation of graphics in guest rooms will be part of the room furnishings and therefore part of that scope of work instead (with selection of images and caption text by Harpers Ferry).

In the great hall it would be appropriate to place bound scrapbooks containing a selection of historic and recent

photographs and other material for visitors to peruse at their leisure.

The concessioner should be encouraged to carry out the historic use theme in tablemats, menus, napkins, or wherever appropriate. These items could carry relevant tidbits of park history along with line drawings or other illustrations. These might be selected to remind visitors of the age of the park (one of the earliest), of the joys and challenges of earlier visitors, and so on. Some of this information has already been compiled, and sources such as the Steel scrapbooks will be useful to consult. As their schedules permit, the park staff may want to begin formally assembling and selecting such material, so that it is ready and in a form that is easy to use.

All of the foregoing deals with the final interpretive contents of the lodge; however, there are some interim needs, elements to be accomplished while the lodge is undergoing major reconstruction and rehabilitation over the next several years.

First, it is recommended that a visitor viewing point be established, at a safe distance from the construction activity, where people can watch the work as it progresses. It could also be a place for a wayside exhibit panel that could change two or three times during the construction project. The panel might include a historic photo and other illustrations, and explain the work underway. It would be updated at significant stages. Other places in the rim village could accommodate duplicates of temporary wayside exhibits.

Also, a succession of images should be compiled of the construction work. Especially dramatic will be the demolition and reconstruction work slated on the great hall portion of the building in 1991. Additional filming of construction will continue in subsequent years.

This photography, in concert with the documentary photos of existing conditions being assembled now by the A&E firm, should provide a good resource base for production of a short video program on the lodge restoration project. The video program would be viewed as part of the exhibit assemblage in the exhibit room. Details about sound, captioning, etc. will be finalized at a subsequent media planning stage.

Since this short video program would not utilize all the available photography, a longer film should also be produced for use in the activity center/hotel during the winter. At that time the historic lodge may be closed and inaccessible. So the longer film would serve a dual purpose: (1) interpreting the subject in an alternate and accessible location; (2) adding another option for winter when visitors have considerable time available for in-depth interpretation.

Sinnott Memorial Overlook

Sinnott Memorial has the distinction of being the first National Park Service museum funded by a specific Congressional authorization. Construction was completed in 1931. Exhibits interpreting the park's geology, along with sets of field glasses for enhanced viewing of features, were financed by the Carnegie Institution of Washington, through the National Academy of Sciences. Over the years interpreters have presented countless programs here, including a memorable geology talk using a topographic relief model with its removable mountain top which has fascinated and enlightened visitors. Many of them have photographed the model, before and after. In the array of NPS programs this is one that has succeeded very well indeed. Its success can be attributed to the happy combination of lake view and a three-dimensional interpretive device which intrigues visitors. Tilden would approve.

Well-designed to fit its surroundings, the overlook gives visitors an opportunity to view the lake below the rim level, gives a setting which focuses all attention on the caldera and lake, filtering out the rim village's distractions. Of the two rooms, the front viewing area has worked well, the back room being plagued with leaks and other problems. The overlook cannot be reached in winter and, because of the long stone stairway, is not accessible to all visitors.

The Sinnott is a special place at Crater Lake; it has provided a primary site for effective interpretation for many years; it is a seminal development in the National Park Service nature education movement. With much greater visitation and greater emphasis on accessibility today, what role should this small overlook play now and in the years to come?

Clearly, the function will change when the new visitor center is constructed. Because of the exhibit space that will be available elsewhere and the maintenance problems of the back room, as well as lack of heat, the Sinnott will no longer house museum exhibits. The limited capacity, seasonal operation, and lack of accessibility to all visitors dictate that interpretive programs central to the park's story should be presented elsewhere--in the visitor center.

It can continue to offer a quiet haven, insulated from the rim village. Instead of being a primary interpretive site, it will be an attractive option. It can still focus attention on the caldera and lake. Viewing binoculars can be replaced here for that purpose. The old exhibits on the viewing parapet will be upgraded.

An interpreter can make appearances as the schedule permits. The existing topographic model can be retained here, if the park staff desires, for self-guided use or for occasional programs. It will need a new base. One new wayside, to be located at the top of the stairway, should deal with the history of the Sinnott itself.

The Sinnott, reached by well-designed trails from major concentrations of visitors, will be part of the rim viewing experience. As visitors disperse in the village, their contact with the lake becomes more personal. At this overlook they can enjoy the view in a peaceful setting. In smaller numbers, they can forget the modern infrastructure and organization required by a large visitation, perhaps imagine themselves as John Wesley Hillman, who first saw the lake from near this spot, or as an pioneer visitor in the 1930s. The overlook will continue to provide a special encounter with the park's resources.

Kiser Studio

Known variously over the years as the exhibit building and the rim visitor center, this small building originally housed the photographic studio and sales outlet for Fred Kiser. Kiser, official photographer for the Great Northern Railroad and illustrator for the National Geographic magazine, originated the idea for the "See American First" campaign. The railroad adopted the slogan to convince Americans that the western scenery of their own country was well worth visiting, to divert tourism from Europe and Canada to

America. Railroads supported establishment of parks. Railroads and national parks joined in a mutually-advantageous alliance that resulted in development and increasing visitation to parks. A Southern Pacific travel poster advertised Crater Lake as Oregon's "mountain playground."

Kiser's photographs helped stimulate interest, not only in Crater Lake National Park but also in Glacier and others in the Northwest. He was first to employ the hand-colored-in-oil technique with photographic enlargements. Early in the days of motion pictures, he made film shorts on scenic attractions. He helped to publicize Crater Lake at a time when the powers-that-be seemed convinced more by parks' economic potential than by nature preservation. Kiser invited a popular author of the day, W.P. Eaton, to visit the park; the visit resulted in two books, a number of articles and short stories. He prepared a set of hand-colored lantern slides for Will Steel to use in his lectures about the park. Along with Steel and others, Kiser was an early influence in the conservation of nature.

Although his studio, constructed in 1921, has been determined to be of insufficient architectural interest for the National Register, it is of rustic construction, well-located, and is a symbol that should be interpreted. It can be used for interpretation of park history, enlightening visitors about the beginning of this park, its place in the American conservation movement, and also give an empowering message that individuals can make a difference.

Kiser's photographs (or copies of them) will be displayed along with information about his Scenic America company, "See America First", and his efforts in nature conservation. Although the park has some of his photographs, other sources, especially the Oregon Historical Society, Oregon Caves Chateau, and Glacier National Park, have larger collections. Arrangements should be made to copy these for the park's collection, to provide a source for revolving exhibitions. It may even be possible to prepare a traveling exhibit of photographs to be used outside the park. Images by Fred Kiser, Peter Britt, and others stimulated public interest in the park. Photographers and artists have assumed this role in many parks.

Occasionally, the Kiser Studio could be used for special graphic arts shows that would temporarily replace the Kiser

material. It would also be appropriate for an artist-in-the-park program to be associated with this building.

Kiser Studio, the Sinnott overlook, and the rim trails will all provide dispersal points in the village for visitors.

Parking Lot

Access to rim village will be via a shuttle from a parking lot at a lower elevation. This lot and shuttle system will serve large numbers of people. Orientation must be provided here, in a form that can handle a heavy volume of use.

A bus shelter, public restrooms, and contact station will be situated in the parking lot. Vertical wayside panels will be placed at the contact station. An office will be used seasonally to provide information in person. Hotel check-in may occur here. A phone, desk, and video monitor will be housed in the building. Changeable information, such as weather forecasts, will be generated from elsewhere and will be displayed on the monitor.

Since all forms of orientation will be missed by a percentage of visitors, there should be overlap to ensure that everyone has at least a general idea of the way access works and what experience options are available. One method that is not weather dependent and will be a good backup to other media and signage is a TIS message, heard before visitors reach the parking shuttle lot/garage. With enroute waysides, a TIS, and destination wayside orientation panels, the majority will be reached.

Please consult the list of wayside exhibits in the Appendix for details on subject matter to be covered at this location.

MUNSON VALLEY/PARK HEADQUARTERS

The historic Munson headquarters complex consists of three main buildings: the Sager Building (administration), the Steel Center (former ranger dormitory), and the Canfield Building (former mess hall). In addition there is the superintendent's residence, the naturalist's residence, six employee cottages, and various utility buildings. Most date from the 1930s and are still in use.

The public has access only to the Steel Center which was skillfully and carefully renovated several years ago. A foyer, restrooms, post office, information/book sales lobby, and a small audiovisual screening room are used by visitors, while staff occupy offices upstairs and elsewhere in the building. The public services offered here are intended to supplement the cramped and inadequate rim village facilities until the village is redeveloped.

Also, every winter snow temporarily closes the road from the valley to the rim, and at that time the Steel Center is the only park information office open. Even when the new development is completed there will still be infrequent occasions when rim closure occurs.

In the future, lobby and screening room will take on more of a multipurpose function. The Steel Center will continue to disseminate information infrequently in winter. It will also be used for various gatherings--school groups, teacher workshops, programs sponsored by a yet-to-be-created Crater Lake Institute, and perhaps staff at seasonal training or other sessions. For these purposes an audiovisual screening capability will be retained. Various pieces of furniture such as tables and chairs will be brought in when needed.

Exhibit panels will be installed to interpret rustic architecture, the CCC, and other subjects pertaining to cultural history. Historic photos would be very appropriate here. The intention is to interpret the valley's historic structures through these exhibits, perhaps preparing a site bulletin on the subject, installing one or more waysides outside, and continuing to offer scheduled history walks as part of the summer interpretive program.

WATCHMAN FIRE LOOKOUT AND TRAILSIDE MUSEUM

Perched high on the caldera rim overlooking the lake, with splendid distant views north and south along the crest of the Cascade range, the Watchman lookout has a long history as part of a forest fire detection and suppression system.

Constructed in classic park rustic style, it blended so well with its setting and was so well-crafted that it was called, at the time, the finest fire lookout in the country. Unusual in

that it incorporated a trail museum and was reached by a public footpath, the Watchman has always had a dual purpose of interpretation and operations.

It is a significant structure because of its tie to resource management, and more specifically, to the changing attitude over time toward fire's role in natural systems. Interpreting this subject will be handled in wayside exhibits outside on the patio, in exhibits in the trailside museum, and, when possible, in scheduled programs when the lookout can be opened to the public.

It is, secondarily, the site of triangulation procedures carried out by part of the Dutton survey crew when they measured and recorded lake dimensions. This topic is interpreted in a wayside exhibit.

The museum should be rehabilitated and furnished with new exhibit panels. The room's small dimensions (12 ft. x 20 ft.), interrupted by a door and three windows, limit the amount of wall space for exhibits. The new exhibit contents should be fabricated of materials that will resist weather (the building is unheated winter and summer) and designed for an unsupervised situation. Visitors will enter on a self-guided basis.

Coordinated with the existing wayside exhibits, the new museum exhibits will explain the fire detection and suppression system, historically and as it is done today. The Osborne fire finder, panoramic photos, role of the Mt. Scott lookout, and other operational aspects should be treated. Changes in fire management, fire ecology, and fire patterns in the park are also appropriately interpreted at this site. Construction of the building and air quality are relevant topics.

The Watchman experience is a park highlight, mixing healthy exercise (the steep trail), with an outstanding view, interpretive messages, a human interest encounter with one of the more intriguing outdoor occupations (fire lookout), and a display of the best features of rustic architecture.

LIST OF PRODUCTS AND GROSS COST ESTIMATES

	Plan	Produce	AV Equipment
Crater Lake Lodge			
History exhibit in exhibit room (154 sq.ft.), misc. items in adjacent hallway, framed graphics in public spaces	$30,000	$120,000	
Conservation of objects	$20,000		
Documentary filming of lodge reconstruction; prepare short video program; prepare longer AV program	$24,000	$120,000	$15,000
Activity Center/New Lodge (Visitor Center)			
Orientation devices and decor in lobby/reception area; instrumentation for weather, air quality, seismography. Exhibits in exhibit room and in lake viewing room; misc. items in hallway, tunnel, building entry/stairway	$120,000	$700,000	
Conservation of objects	$15,000		
Audiovisual programs	$124,000	$560,000	$210,000
Video programs in exhibit room (3 to 5 monitors) 5-7 minute Hasselblad slide program 15-20 minute film Equipment in multipurpose room Orientation video in lobby			

	Plan	Produce	AV Equipment
Kiser Studio			
Display of historic Kiser photographs and related exhibits	$15,000	$90,000	
Sinnott Memorial Overlook			
Wayside exhibits, viewing equipment, new base for topo model	$10,000	$65,000	
Watchman Fire Lookout			
Exhibits in trail museum	$15,000	$50,000	
Parkwide Wayside Exhibits (associated with Rim Redevelopment Project)			
Rim village, lower parking lot, orientation exhibits on park periphery and at park entrances	$30,000	$180,000	

Note: Preliminary planning funding (06) should be made available to the Divisions of Wayside Exhibits, Exhibit Planning and Design, and Audiovisual Arts, to ensure their participation at on-site meetings, consultation with A&E, regional, and DSC personnel, and timely plan reviews. This is important in achieving a coordinated development package.

Implementation:

Since the reconstruction of the Crater Lake Lodge will be funded first, before other rim village redevelopment projects, the interpretive media for that building should be funded first, along with interim wayside exhibits at the lodge.

Interpretive media for the rest of the rim development project along with the parking lot should be funded next.

Structural work needed on the Kiser Studio and interpretive media for Sinnott Memorial and Kiser Studio should be funded as part of the rim redevelopment project because one of the objectives of the new visitor center is to disperse visitors to other points of interest. These places should be ready to receive visitors.

Parkwide wayside exhibits should be funded as part of the rim redevelopment project because they add the finishing touches to the new system.

Immediate Actions:

1. Label and store objects/furnishings from Crater Lake Lodge, for potential use in exhibits. (Park staff)

2. Transfer 1930s 8mm film on snowplowing before it deteriorates further. (HFC)

3. Initiate process of installing seismic monitoring station in park. (Park staff)

4. Document demolition/reconstruction of lodge during summer of 1991 and 1992. (HFC-video, and A&E contractor-still photographs)

SPECIAL POPULATIONS

Provisions will be made to accommodate the needs of special populations who visit the site. Special populations are identified as those with sight, hearing, mental, and mobility impairments; the elderly and young children; and visitors who do not speak English.

Accommodations will be made for access to the site as well as to most of the interpretive media. Guidelines are available to assist park staff and media designers in increasing their sensitivity to the special needs of these groups. A number of such accommodations are ones that will benefit all visitors.

Some specific suggestions are listed here; others will be developed during later operational and design stages and will reflect the state of the art and standard procedures at the time of implementation.

Public Law 90-480, the Architectural Barriers Act, and the 1990 Americans with Disabilities Act establish certain standards for physical access. New buildings constructed will, as a matter of course, be designed to be accessible to the physically handicapped, both by visitors and employees.

The rim drive and its associated overlooks make it extremely easy for persons in wheelchairs to view the lake. Because of the rugged nature of the park, not all trails are wheelchair accessible. However, new trails in the rim village can and should be made accessible and other park locations should be surveyed for provision of an accessible trail. Since the Cleetwood Trail is quite steep and at a higher elevation than most visitors are accustomed to, a certain percentage will not be able to take a boat trip on the lake. A video program on the subject is recommended for the visitor center, giving those people a vicarious travel experience. This program will also benefit those who are deciding whether to take the boat trip and everyone who comes in winter when boating has stopped for the season. This and all other narrated video programs will be closed-captioned for the hearing-impaired.

Exhibit designers should consider the need for tactile material suitable for those with sight impairments. Especially useful would be a tactile model of Mt. Mazama, before and after the caldera-creating eruption.

Children come to the park in family groups, and to a lesser extent in school groups. The popular summer junior ranger program attracts children from ages six to twelve. It encourages attendance at interpretive programs and rewards participants with certificates and junior ranger badges. For children accompanying family groups, several publications designed especially for the younger set can be purchased at the cooperating association outlets, including the discovery/activity booklet (third and fourth grade target audience), written specifically about Crater Lake.

School groups come occasionally in winter, for snowshoe walks on a reservation basis. Material is provided to students who write for it. No offsite programs are currently presented at schools because of the distance and lack of staff. The park staff is exploring the idea of recruiting volunteers to visit schools with sets of props.

Even though schools are quite distant from the park, the weather is discouraging during most of the school year, and the cities in the region are not large population centers, still school-related interpretation could be increased to an extent, without over-committing park staff. This should be done in consultation with school districts and in conjunction with teacher workshops. An instructional packet, organized into teaching units and accompanied by 3-dimensional objects and an audiovisual component (video program) could be prepared.

Foreign visitors travel to the park: Canadians, Germans, Japanese, and others, in that order. Except for the growing number of Japanese, most are English-speaking. A text-only Japanese version of the park folder has been prepared. It is a mimeographed sheet, without illustrations, and could be improved. Informational folders are also available in French and German. The park staff should consider other literature needed in Japanese, as well as foreign language versions of sales videos and closed-captioned subtitling on interpretive video programs used in park buildings such as the visitor center. Sales videos will be attractive to foreign visitors if formatted for use in those countries.

No special services have been devised for the elderly and probably none are needed. Some things that all visitors would appreciate will be especially useful to older persons and those with limited mobility--such as benches for resting and admiring the view, and advance notice of trail distances and difficulty.

PUBLICATIONS

Publications play an important part in the information/interpretation program of the park. Both free and sales publications are available. In-depth information is provided on all park themes, to complement coverage in other media.

Some topics, such as American Indians, are best handled in publications because there is little exhibitable material. This topic is also covered in the audiovisual medium; the Indian myth about the Mt. Mazama volcanic eruption serves as the central thread in the existing park film, available as a sales video item.

On-site visitors receive the free park folder, converted to the full color, well illustrated unigrid series. Also free to the public is the park newspaper, issued in two editions annually --one for the summer season and one for winter. Site bulletins on a variety of subjects could be developed to add to the selection of free literature.

There is a demand off-site, at regional information centers and businesses, for printed information about the park. Since the unigrid folder supply is limited, perhaps a less-costly item could be developed for this purpose. Alternatively, chambers of commerce might be willing to underwrite printing of a supply of park folders to be used for off-site distribution. Providing such material is a good public relations gesture, if it can be done without undue budget consequences.

The Crater Lake Natural History Association handles sales of a variety of publications and allied material. Two outlets, at Munson Valley and in the rim village, grossed about $165,000 in 1990. Addition of the Munson Valley outlet and substantially increasing the number of items sold has, over the last several years, doubled the volume. It is expected that addition of a new visitor center will again increase the total, as well as allow display and sales of items (an expanded array of posters and video) that were not possible before, because of lack of space.

Some 125 items are currently carried by the association. They deal with park-related subjects primarily but also include regional travel guides. The biggest sellers are park guides in the moderate price range ($4 to $6). Recent additions to the inventory in the last several years include a children's discovery/activity book specific to Crater Lake and a revised bird list. A poster containing the three Rockwood paintings was also produced recently.

Items being considered for the future or now underway are:
--upgraded trails book
--summer poster
--booklets on wildflowers, forest ecology, wildlife, cultural history
--book on rustic architecture in parks (in association with other parks)
--additional video programs.

It would be useful for the association to prepare a five-year program with priorities and schedule to guide their plans for development of these and other new items.

RESEARCH

Science and research got an early start at Crater Lake, with the 1883 Diller expedition and 1886 Dutton survey, both sponsored by the U.S. Geological Survey. The basic geological references, therefore, date from fifty years ago or more. Then there was something of a hiatus in research activities until lately, when activity renewed. A current list of about thirty projects includes such efforts as the dramatic lake exploration by manned submersible. It is part of a congressionally-mandated ten year study of the lake.

Science and research are interwoven with the park history and should be interwoven with park interpretation. Visitors need to understand that research is not simply satisfying intellectual curiosity, with the end result of a stack of published scientific papers. Research results are used by managers; research is an investment in the future and assists in the preservation of the park.

Research also supports interpretation, providing accurate information for programs and media. Gaining new insights is on-going so that interpreting research findings is a dynamic, changeable process.

In addition to the on-going program of park research, specific projects listed here should be accomplished to aid planning of media described in this prospectus.

1. Survey regional institutions for historic material pertinent to Crater Lake. Include Southern Oregon Historical Society and Oregon Historical Society. Identify graphics, artifacts, and written reminiscences about early park use.

2. Prepare list of Kiser photographs held by park and other institutions. Include subject matter, size, and condition of photographs.

Contact Glacier NP and other parks for Kiser-related material.

Survey Kiser material in National Geographic magazine.

3. List sources of photography of lake research project, including the Oregon State University and television stations.

Determine how long these sources keep material. Arrange to make copies if necessary.

4. Locate CCC material.

5. Assemble relevant scientific research.

PARTICIPANTS IN THE PLANNING PROCESS (in alphabetical order)

Core Team:

Linda Finn, Interpretive Planner and Team Captain, Harpers Ferry Center

David Guiney, Wayside Exhibit Planner, Harpers Ferry Center

Charles Mayo, Chief, Division of Interpretation, Pacific Northwest Regional Office

Jim Mount, Exhibit Planner, Harpers Ferry Center

Sarah Olson, Chief, Division of Historic Furnishings, Harpers Ferry Center

Kent Taylor, Chief Park Interpreter, Crater Lake National Park

Mark Wagner, former Interpreter, Crater Lake National Park

Consultants:

Bob Benton, former Superintendent, Crater Lake National Park

Gregg Fauth, Interpreter, Crater Lake National Park

Craig Frazier, A&E Manager, Denver Service Center - Western Team

Jack Lovell and Debbie Campbell, Project Managers, Denver Service Center

Steve Mark, Historian, Crater Lake National Park

David Morris, Superintendent, Crater Lake National Park

BIBLIOGRAPHY

Briggs, Lyman
"When Mt. Mazama Lost Its Top."
National Geographic 122: 138-148.
1962.

Cranson, K.R.
Crater Lake, Gem of the Cascades. KRC Press.
Lansing, Michigan. 1982.

Diller, J.S. and H.B. Patton
"The Geology and Petrography of Crater
Lake National Park." USGS Professional
Paper No. 3. GPO. Washington, D.C.
1902.

Farner, D.S.
Birds of Crater Lake National Park.
Univ. of Kansas Press. Lawrence, Kansas. 1952.

Harris, S.L.
*Fire Mountains of the West: The
Cascade and Mono Lake Volcanoes.*
Mountain Press Publishing Co.
Missoula, Montana. 1988.

Fire and Ice - The Cascade Volcanoes.
The Mountaineers. Pacific Search
Press. 1976.

Kirk, Ruth
Exploring Crater Lake Country. Univ.
of Washington Press. Seattle. 1975.

Manning, Harvey
Crater Lake National Park. Superior
Publishing Co., Seattle.

National Park Service
Historic Resource Study. Denver
Service Center. 1984.

The Rustic Landscape of Rim Village, 1927-1941. Cultural Resources Division, Pacific Northwest Region. Seattle. 1990.

Rustic Architecture in Crater Lake National Park. Crater Lake National Park. 1987.

Historic Structures Report, Crater Lake Lodge. Denver Service Center. 1984.

Crater Lake National Park Environmental Assessment/Development Concept Plan/Amendment to the General Management Plan. 1984.

Crater Lake National Park: Mazama Campground/Rim Village Corridor. Supplement to the 1984 EA/DCP/ Amendment to the GMP. 1987.

General Management Plan - Crater Lake National Park. Denver Service Center. 1977.

Interpretive Prospectus. Harpers Ferry Center. 1980

Statement for Interpretation. Crater Lake National Park. 1989.

Handbook for Fire Lookouts. Division of Ranger Activities. 1958.

Visitor Services Project - Crater Lake National Park. S. Baldwin, D. Hospodarsky, G. Machlis, and D. Field. Cooperative Park Studies Units, University of Idaho and Oregon State University. 1985.

Park Structures and Facilities. Branch of Planning. 1935.

Osborne, W.B.
"The Lookout System." *Western Fire Fighters Manual.* 6th Ed. Western Forestry and Conservation Assn. Portland, Or. 1934

Place, Howard and Marian Place
The Story of Crater Lake National Park. The Caxton Printers, Ltd. Caldwell, Idaho. 1974.

Runte, Alfred
Trains of Discovery: Western Railroads and the National Parks. Northland Press. Flagstaff, Ariz. 1984.

National Parks - The American Experience. 2nd edition. Univ. of Nebraska Press. Lincoln and London. 1987.

Sharpe, Grant and W. Sharpe
101 Wildflowers of Crater Lake National Park. Univ. of Washington Press. Seattle, Wa. 1959.

Shelby, Bo and Donald Wolf
"Design, Structure, and Behavior: A Study of Visitors at Crater Lake National Park." Oregon State Univ. 1978.

U.S. Dept. of Agriculture
"Planning, Constructing, and Operating Forest Fire Lookout Systems in Calif. Circular No. 449. Washington, D.C. 1937.

Wallis, O.L.
A Study of the Mammals of Crater Lake National Park. Oregon State College. Corvallis, Or. 1947.

Warfield, Ronald, Lee Juillerat and Larry Smith
Crater Lake National Park - The Story Behind the Scenery. KC Publications. 1982.

Wenkam, Robert
The Edge of Fire. Sierra Club Books. San Francisco. 1987.

Williams, Howel
The Geology of Crater Lake National Park, Oregon. Carnegie Publication 450. Carnegie Institute of Washington. Washington, D.C. 1942.

Crater Lake: The Story of Its Origin. University of California Press. Berkeley, Ca. 1954.

APPENDIX A

NEW WAYSIDE EXHIBITS NEEDED

Ex.#	Subject	Location
1	Rim village orientation (summer/winter)	Lower parking lot (2 locations)
2	Park orientation (summer/winter)	Lower parking lot (2 locations)
3	Menu board/ bus schedule	Lower parking lot (2 locations)
4	Bulletin board	Lower parking lot (2 locations)
5	Rim village orientation (summer/winter)	Rim village shuttle stop
6	Park orientation (summer/winter)	Rim village shuttle stop
7	Menu board/ bus schedule	Rim village shuttle stop
8	Bulletin board	Rim village shuttle stop
9	Rim village orientation	Lake overlook
10	Park orientation	Lake overlook
11	View orientation I	Lake overlook
12	Crater Lake	Lake overlook
13	Mt. Mazama	Lake overlook
14	Safety	Lake overlook

15	Deep water exploration/ lake bottom	Lake overlook
16	View orientation II	Lake overlook
17	Rim village orientation	Near Kiser Studio
18	Park orientation	Near Kiser Studio
19	Rim landscape history	Near Kiser Studio
20	Kiser Studio history	Near Kiser Studio
21	Sinnott Memorial	Sinnott Memorial (top of stairs)
22	Crater Lake lodge	Lodge viewpoint
23	Lodge rehabilitation (temporary)	Lodge viewpoint
24	Rim village redevelopment (temporary during construction)	Rim village (multiple sites)
25	Cultural history	Munson Valley/Park HQ
26	Park orientation	Union Creek
27	Park orientation	Diamond Lake junction
28	Park orientation	USFS at Diamond Lake
29	Park orientation	North Junction
30	Park orientation	Near north entrance station (new pullout)
31	Park orientation	South entrance (new pullout)
32-39	Various subjects	Sinnott Memorial Overlook

Additional new waysides needed:
(not associated with Rim Redevelopment Project)*

1	Old growth forest/fire	Rt. 62 south
2	Old growth forest/fire	Rt. 62 west
3	Formation of Castle Creek Canyon	Rt. 62 west
4	Pacific Crest Trail	Rim Drive trailhead
5	Pacific Crest Trail	Rim Drive trailhead
6	Limnology/geology	Rim Drive pulloffs (2) between North Junction and Cleetwood Cove
7	Natural History	Rim Drive pulloffs (3) between Cleetwood Cove and Kerr Notch
8	Trailside signs (10)	Cleetwood Cove Trail
9	Trailside signs (4)	Watchman Trail
10	Trailside signs (4)	Mt. Scott Trail
11	Trailside signs (6)	Garfield Peak Trail
12	Trailside signs (2)	Sun Notch Trail
13	Plant markers (30)	Castle Crest Trail
14	Old growth forest	Grayback Motor Nature Trail (multiple locations)

*see approval memo at back of plan

EXISTING WAYSIDES

Ex. #	Subject	Location
1	Rim village	Near cafeteria entrance
2	Rim drive	Near cafeteria entrance
3	Mt. Mazama	Overlook area opposite cafeteria
4	Mt. Mazama	Overlook area opposite cafeteria
5	Crater Lake	Overlook area opposite cafeteria
6	Crater Lake	Overlook area opposite cafeteria
7	Caution	Overlook area opposite cafeteria
8	Caution	Overlook area opposite cafeteria
9	Discovery Point	Discovery Point Overlook
10	Cascade volcanoes	Rim Drive Overlook, near Bybee Creek
11	After the collapse	Watchman Parking Overlook
12	Before the collapse	Watchman Parking Overlook
13	Watchman Trail	Watchman Parking Area
14	Watchman Panorama	Watchman Fire Lookout
15	Watchman Panorama	Watchman Fire Lookout
16	Volcanic Landscape	Rim Drive Overlook, near Hillman Peak
17	Volcanic Landscape	Rim Drive Overlook, near Hillman Peak
18	Rim Drive	North Junction parking area

19	Mt. Mazama	North Junction Overlook
20	Crater Lake	North Junction Overlook
21	Caution	North Junction Overlook
22	Pumice Desert	Pumice Desert Parking area
23	Glacial Valleys	Rim Drive Overlook - Steel Bay
24	Cleetwood Cove Trail	Cleetwood Cove Trailhead
25	Be Prepared!	Cleetwood Cove Trailhead
26	The lake in legend	Skell Head Overlook
27	Mt. Scott Trail	Mt. Scott Trailhead
28	Caldera Climate	Cloudcap Overlook
29	Pumice Castle	Pumice Castle Overlook
30	Phantom Ship	Kerr Notch Overlook
31	The Pinnacles	Pinnacles Overlook - Wheeler Creek
32	Castle Crest Wildflower Trail	Castle Crest Trailhead
33	Annie Creek Canyon Trail	Mazama Capground Amphitheater
34	Fossil Fumaroles	Godfrey Glen Overlook
35	Vanished volcano	Viewpoint on Rt. 62 near Ft. Klamath
36	Bottomless Lake	Watchman Fire Lookout
37	Fire Watch	Watchman Fire Lookout

APPENDIX B

LEGISLATIVE HISTORY

1893 - Crater Lake included in the Cascade Range Forest Reserve

1902 - Act establishes Crater Lake National Park "for the benefit of the people of the United States and for the proetection and preservation of the game, fish, timber and all other natural objects..."

1915 - State of Oregon cedes to the U.S. exclusive jurisdiction over the park. Accepted by the U.S. in 1916. Amended in 1935.

1916 - National Park Service established. Takes over administration of Crater Lake National Park.

1932 - Land transferred from Crater National Forest to the park (the Annie Creek extension, consisting of 973 acres)

1968 - Pacific Crest Trail established, extending 2350 miles along mountain ranges of west coast states from Mexican to Canadian borders. 26 miles of the trail is within Crater Lake National Park.

1976 - Crater Lake NP closed to mining activity

1980 - Boundary revision - added 22, 890 acres

1982 - Boundary revision - deletes 480 acres and directs studies to determine lake's water quality status

The proposal for wilderness designation of 166,149 acres has not yet been acted upon.

Over the years various unsuccessful efforts were made to expand the park northward to include the Diamond Lake/Mt. Thielson/Mt. Bailey area and to the west to include Union Creek and the Upper Rogue Valley. The purpose was to have been to provide recreational opportunities and park facilities away from Crater Lake itself and thus curtail development that would mar the scenic and scientific qualities of the lake. It was also intended to give more protection to the wildlife of the region.

K1817(PNR-OI)

DEC 2 3 1991

Memorandum

To: Manager, Harpers Ferry Center

From: Regional Director, Pacific Northwest Region

Subject: Crater Lake National Park Interpretive Prospectus

The Crater Lake National Park Interpretive Prospectus is approved when the following revisions are made:

1. Include an upgrade of the eight wayside exhibits which are part of the parapet of the Sinnott Memorial Overlook balcony. This feature is part of the original design of the Sinnott Overlook which is on the National Register of Historic Places. The original themes should be maintained.

2. The three-dimensional map on the Sinnott Memorial Overlook should be continued and maintained.

3. Additional waysides included on a list prepared by Kent Taylor should be included in the interpretive prospectus. These wayside subjects should be specified as secondary to those currently listed in the interpretive prospectus.

(Sgd) Charles H. Odegaard

Charles H. Odegaard

Enclosure

cc:
Superintendent, Crater Lake National Park
Linda Finn, Harpers Ferry Center