

Chapter 1:

Introduction

Photo: John Teichert

PURPOSE AND NEED FOR THE PLAN

INTRODUCTION

General management plans are intended to be long-term documents that establish and articulate a vision for the future of the park, including the management philosophy and the framework to be used for decision making and problem solving. This general management plan will provide guidance for the next 15 to 20 years.

BRIEF DESCRIPTION OF THE PARK

Park Overview

Diversity is the hallmark of Olympic National Park. The park protects 922,651 acres of three distinctly different ecosystems — rugged glacier-capped mountains, more than 70 miles of wild Pacific coast, and magnificent stands of old-growth and temperate rain forest.

Olympic's 3,500 miles of rivers and streams give home to 29 species of native freshwater fish and support 70 unique stocks of Pacific salmon and steelhead, including the federally threatened bull trout (*Salvelinus confluentus*), which use both fresh and saltwater during its life cycles.

The park also provides habitat for more than 1,100 species of native plants, 300 species of birds, and 70 species of mammals. Included in these numbers are several federally threatened species — such as the northern spotted owl (*Strix occidentalis caurina*) and the marbled murrelet (*Brachyramphus marmoratus*). Plants and animals unique to the Olympic Peninsula are also protected by the park. The peninsula's isolation has led to the development of at least 23 endemic species — 16 kinds of animals and eight kinds of plants that are found at Olympic National Park and nowhere else on earth.

The 43,000 acres of the park's Pacific coastal strip and off-shore islands protect beaches, intertidal areas, and rocky tide pools. The national park boundary extends seaward to the lowest low tide line.

Olympic National Park encompasses and protects one of the largest wilderness areas in the contiguous United States — 95% of the park (876,669 acres) is designated wilderness, offering visitors a chance to experience the park's amazing diversity in its natural and pristine state.

Interwoven throughout this outstanding and diverse landscape is an array of cultural and historic sites that tell the human story of the park. More than 650 archeological sites document 10,000 years of human occupation of Olympic National Park lands, while historic sites reveal clues about the 200-year history of exploration, homesteading, and community development in the Pacific Northwest, as well as the continuing evolution of the federal preservation ethic. Local communities are closely and directly linked to the park in culture, heritage, and tradition, and also provide important historical information and meaning to the park's landscape.

Museum collections, including ethnographic objects and archival collections, further document the history and cultures that are directly related to the diversity of the Olympic landscapes.

Olympic National Park's outstanding attributes have led to international recognition. In 1976 the park was designated an International Biosphere Reserve in the Man and the Biosphere Program by United Nations Educational, Scientific, and Cultural Organization (UNESCO). This identifies the park as an internationally significant ecosystem within one of the world's major biogeographical provinces. The park is valued

for study of biological evolution and natural processes that are largely free of human disturbance. Olympic National Park serves as a global benchmark of ecological health against which effects of human activities in similar environments can be compared. The park was recognized for its scientific values because it contains superb examples of temperate rain forests and is a large protected ecosystem that remains untrammeled.

International recognition came again in 1981 when the park was declared a World Heritage Site by the World Heritage Convention, joining it to a system of natural and cultural properties that are considered irreplaceable treasures of outstanding universal value. Very few areas in the United States are designated as both a Biosphere Reserve and World Heritage Site. There is no jurisdiction implied by either of the UNESCO designations, and the United States of America and the National Park Service have the full authority and jurisdiction over park lands.

The exceptional quality of the park is well summarized in the following concluding words of the UNESCO evaluation of the park as a World Heritage Site:

Olympic National Park is the best natural area in the entire Pacific Northwest, with a spectacular coastline, scenic lakes, majestic mountains and glaciers, and magnificent temperate rain forest; these are outstanding examples of on-going evolution and superlative natural phenomena. It is unmatched in the world.

Regional Context

Occupying the central core of the Olympic Peninsula, along with a narrow strip along the peninsula's Pacific Coast, Olympic National Park is the peninsula's primary travel destination. The eastern edge of the park is only 40 miles due west of the Seattle-Tacoma corridor. More than five million people live

within a three- to five-hour drive of the park in the region stretching from Vancouver, British Columbia south to Portland, Oregon. The park received more than three million visits in 2004, and it has one of the highest overnight use rates of all parks in the country.

The national park is surrounded by a network of lands managed by state and federal management agencies, Native American tribes, and private interests. Each of these entities may have differing, and sometimes conflicting, land use policies. Cooperation and coordination with these other entities is essential to ensure the continued protection of national park resources and recreational opportunities.

Among these entities are eight federally recognized tribes that have traditional association with the Olympic Peninsula: Lower Elwha Klallam, Jamestown S'Klallam, Port Gamble S'Klallam, Skokomish, Quinault, Hoh, Quileute, and Makah.

Olympic National Park recognizes that the tribes' relationships to lands in the park have endured for thousands of years, and park staff will continue to work with the tribes to ensure that sites of traditional importance are preserved and protected. The park staff strives to create and maintain positive, productive, government-to-government relationships with these tribes.

PURPOSE OF THE PLAN

The approved *General Management Plan* will provide the framework for managing Olympic National Park and performs critical functions for National Park Service (NPS) managers. By describing specific desirable resource conditions and visitor experiences for the park, the plan establishes a clear direction for resource preservation and visitor use and proposed management strategies for achieving those goals. These goals are based on the park's purpose; significance; special mandates; administrative commitments; the body of laws

and policies that guide management of the national park system; and the issues and concerns expressed by NPS staff, park visitors, neighbors and the general public.

NPS management plans are developed in consultation with interested parties including federal, state, and local agencies, tribal governments, and the public, so the plans are developed with input from a wide variety of sources and interests.

The general management plan represents a commitment by the National Park Service to the public on how the national park will be managed. The purposes of this general management plan are as follows:

- Confirm the purpose and significance of the national park.
- Clearly define resource conditions and visitor use and experience to be achieved in Olympic National Park.
- Provide a framework for national park managers to use when making decisions about such issues as how to best protect national park resources and wilderness values, how to provide quality visitor use and experience, how to manage visitor use, and what kinds of facilities, if any, to develop in/near the national park.
- Ensure that this foundation for decision making has been developed in consultation with interested stakeholders and adopted by the NPS leadership after an adequate analysis of the benefits, impacts, and economic costs of alternative courses of action.
- Serve as the basis for later more detailed management documents, such as five-year strategic plans and implementation plans.

The general management plan does not describe how particular programs or projects should be prioritized or implemented. Those

decisions will be addressed during the more detailed planning associated with strategic plans, implementation plans, etc. All of those plans will be based on conditions and funding at the time, along with goals and appropriate types of activities established in the approved general management plan.

Legislation establishing the National Park Service as an agency and governing its management provides the fundamental direction for the administration of Olympic National Park (and other units and programs of the national park system). This general management plan will build on these laws and the legislation that established Olympic National Park (and its associated legislative history) to provide a vision for the park's future (see appendix A). Although this plan will provide overall direction for park management, specific actions needed to implement the plan will be provided in subsequent plans. Where appropriate, the park's existing resource or issue-specific plans are incorporated by reference into by this plan (these plans are described in the "Relationship of Other Planning Efforts to this General Management Plan" section). Additional park planning needs are identified in the "Planning Issues" and the "Future Studies Needed" sections of this document. The "Guidance for the Planning Effort" section calls the reader's attention to topics that are important to understanding the management direction at the national park.

NEED FOR THE PLAN

A new plan is needed to address issues, concerns, and problems related to management of Olympic National Park. A general management plan also is needed to meet the requirements of the National Parks and Recreation Act of 1978 and NPS policy, which mandate development of a general management plan for each unit in the national park system.

An Outdated Master Plan

The last parkwide management plan, the Olympic National Park Master Plan, was completed in 1976. Many changes in laws and regulations have been made since 1976. Also, the park and surrounding region have changed considerably since completion of the *Master Plan.* Regional population growth has increased the potential for additional visitors and impacts on the park's natural and cultural resources and wilderness values. Patterns and types of visitor use have changed. One of the concerns in the park today is the impact created by the three million annual visits and the number of private vehicles in the existing developed areas. Roads and facilities built years ago were not designed to handle this volume of use.

Wilderness Designation

In November 1988 Congress designated 876,669 acres of wilderness in the park and about 378 acres of potential wilderness — 95% of the park. Each of these changes has major implications for how visitors access and use the park, the facilities needed to support those uses, how natural and cultural resources are managed, and how the National Park Service manages its operations.

PLANNING PROCESS

Newsletters, news releases, and public meetings have been used to keep the public informed and involved in the planning process for Olympic National Park. A mailing list was compiled including members of federal, state, and local government agencies, organizations, businesses, legislators, media and interested citizens.

The process of preparing the *General Management Plan* for Olympic National Park began in June 2001 when a "Notice of Intent" to prepare an environmental impact statement

was published in the *Federal Register*. A newsletter along with news releases issued shortly thereafter described the planning effort.

Public open houses were held during September and October 2001 in Port Angeles, Forks, Clallam Bay, Quinault, Aberdeen, Silverdale, and Seattle, Washington, and were attended by 161 people.

The planning team received more than 500 individual comments in the meetings and in response to the first newsletter.

The comments fell into the following categories: resource protection, wilderness management, visitor use and experience, access to park areas, and partnerships. These comments were considered/incorporated into the issues considered for the plan.

A second newsletter distributed in January 2002 presented the issue-related decisions to be made in the general management plan and invited the public to workshops in Shelton, Clallam Bay, Silverdale, Port Angeles, Forks, Amanda Park, Brinnon, and Seattle, Washington. The workshops, held January 28-31, 2002, encouraged participants to explore and present their ideas for park zoning and management alternatives. These workshops were attended by 187 people.

The draft alternative concepts for managing the park were delivered in a third newsletter that was distributed in May 2003, and a planning process update newsletter was distributed in November 2004.

THE NEXT STEPS

After distribution of the *Draft General Management Plan / Environmental Impact Statement* there will be a 90-day public review and comment period. After this comment period the NPS planning team will evaluate comments from other federal agencies, tribes,

state and local governments, organizations, businesses, and individuals regarding the draft plan. Appropriate changes will be incorporated into a Final General Management Plan / Environmental Impact *Statement*. The final plan will include letters from governmental agencies, any substantive comments on the draft document, and NPS responses to those comments. Following distribution of the Final General Management Plan / Environmental Impact Statement and a 30-day no-action period, a "Record of Decision" approving a final plan will be signed by the NPS Pacific West Regional Director. The "Record of Decision" documents the National Park Service selection of an alternative for implementation. With the signing of the "Record of Decision," the plan can then be implemented.

IMPLEMENTATION OF THE PLAN

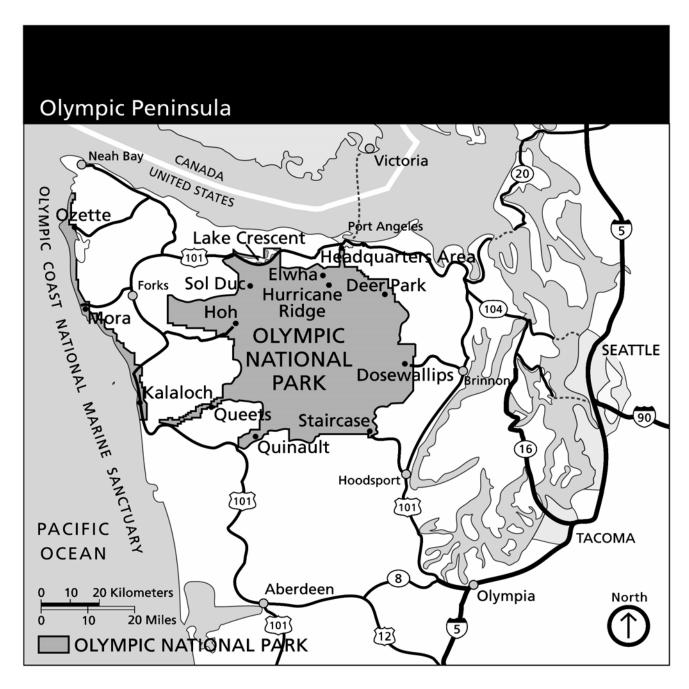
The National Park Service recognizes that this is a long-term plan, and in the framework of the plan, park managers would take incremental steps to reach park management goals and objectives. The implementation of the approved *General Management Plan* could take many years. Some components of the plan will require additional funding for implementation. Once the plan is approved, those components that require additional funding will be prioritized and implemented as funding becomes available.

In addition, once the *General Management Plan* has been approved, additional feasibility

studies and more detailed planning and environmental documentation would be completed, where necessary and appropriate, before certain proposed actions can be carried out. For example:

- Appropriate permits would be obtained before implementing actions that would impact wetlands and floodplains.
- The U.S. Fish and Wildlife Service would be consulted concerning actions that could affect threatened and endangered species.
- The state historic preservation office would be consulted for any actions that could adversely affect cultural resources.
- Tribes with traditional association with Olympic National Park would be consulted on a government-togovernment basis to identify ethnographic resources and develop appropriate strategies to mitigate impacts on these resources.

More specific site plans and compliance would be required for any proposed actions related to new construction, facility rehabilitation, and road relocations. These detailed plans would describe specific actions managers intend to take to achieve desired conditions and long-term goals. The park would actively seek alternative sources of funding, but there is no guarantee that all the components of the plan would be implemented.



Region

GUIDANCE FOR THE PLANNING EFFORT

PURPOSE AND SIGNIFICANCE

Purpose

Purpose statements are based on the national park's legislation and legislative history and NPS policies. The statements reaffirm the reasons for which the national park was set aside as a unit of the national park system and provide the foundation for, and are central to, decisions about park management and use. They provide rationale against which management alternatives can be measured. Finally, they help neighbors, visitors, and other users understand the framework in which managers make decisions.

The enabling legislation of Olympic National Park (Act of June 29, 1938, 35 Stat. 2247) states that Olympic National Park is "set apart as a public park for the benefit and enjoyment of the people." House Report 2247 lists the potential benefits and enjoyments of the park. According to the House report, the **purpose** of Olympic National Park is to

preserve for the benefit, use, and enjoyment of the people, the finest sample of primeval forests of Sitka spruce, western hemlock, Douglas fir, and western red cedar in the entire United States; to provide suitable winter range and permanent protection for the herds of native Roosevelt elk and other wildlife indigenous to the area; to conserve and render available to the people, for recreational use, this outstanding mountainous country, containing numerous glaciers and perpetual snow fields, and a portion of the surrounding verdant forests together with a narrow strip along the beautiful Washington coast.

House Report 2247, April 28, 1938

The House Report included language identifying the narrow strip along the Washington Coast even though that portion of the park was not included in the 1938 enabling legislation and was added at a later date.

Significance

Significance statements capture the essence of the national park's importance to our country's natural and cultural heritage. Significance statements do not inventory national park resources; rather, they describe the national park's distinctiveness and help to place the national park within its regional, national, and international contexts. Significance statements answer questions such as "Why are Olympic National Park's resources distinctive?" and "What do they contribute to our natural and cultural heritage?" Defining national park significance helps managers make decisions that preserve the resources and values necessary to accomplish Olympic National Park's purpose.

The **significance** of Olympic National Park is as follows.

- Olympic National Park protects several distinctly different and relatively pristine ecosystems, ranging from approximately 70 miles of wild Pacific coast and islands through densely forested lowlands to the glacier-crowned Olympic Mountains.
- The ecosystems protected within Olympic National Park contain a unique array of habitats and life forms, resulting from thousands of years of geographic isolation, along with extreme gradients of elevation, temperature, and precipitation. At least 16 kinds of animals and 8 kinds of plants on the Olympic Peninsula exist nowhere else in the world.

- Olympic National Park contains some of the last remaining undisturbed, contiguous aquatic habitat throughout the range of several west coast fish species. The park protects 12 major river basins, more than 3,500 miles of rivers and streams within 11 watersheds, more than 300 high mountain lakes, and two large lowland lakes. The park also supports more than 70 unique stocks of Pacific salmonids, 29 native freshwater fish species, and one endemic fish species.
- Olympic National Park protects the primeval character of one of the largest wilderness areas in the contiguous United States.
- Olympic National Park protects some of the finest remaining stands of old-growth temperate rain forest in the United States. These forests of ancient and immense trees provide habitat for dozens of smaller plants and animals, including important habitat for a number of threatened species.
- The Olympic rocky intertidal community is considered to be one of the most complex and diverse shoreline communities in the United States. Olympic National Park protects about 1,400 square miles of the intertidal, island, and shoreline habitat, and, combined with the neighboring Olympic Coast National Marine Sanctuary and U.S. Fish and Wildlife Service Quillayute Needles/ Flattery Rocks National Wildlife Refuge, a total of 3,600 square miles of intertidal, island, and ocean habitats is protected.
- Olympic National Park protects the largest population of Roosevelt elk in its natural environment in the world.
 Decades of protection from human harvest and habitat manipulation have sustained not only high densities of elk, but also preserved the natural composition, social structure, and dynamics of this unique coastal form of elk as found nowhere else.

 Olympic National Park protects important cultural resources, with regional and national significance, including more than 650 archeological sites, hundreds of ethnographic sites, 31 cultural landscapes, and 16 historic districts. There are 118 historic structures in the park boundaries that are on the List of Classified Structures

PRIMARY INTERPRETIVE THEMES

Based on the park's purpose, significance, and unique resources, the following interpretive themes have been developed. These themes are the ideas about the park's resources that are critical to a visitor's understanding of the park's significance. (They are not a comprehensive list of everything there is to interpret in the park.) These are the primary interpretive themes at Olympic National Park.

- A. The unique assemblage of plants, animals, fish, and habitats in Olympic National Park exists as a result of geographic isolation of the peninsula through the millennia, and is internationally recognized as valuable to all peoples.
- B. The integrity, diversity, and magnitude of Olympic National Park's unimpaired wilderness ecosystems powerfully affect the human spirit providing outstanding opportunities for discovery, research, introspection, inspiration, and recreation.
- C. The Olympic Peninsula's rich cultural history reveals a dynamic interaction of people, place, and values illustrating the ongoing need to balance diverse resource uses and their consequences.

LAWS, REGULATIONS, AND SERVICEWIDE MANDATES AND POLICIES

The key laws, regulations, and servicewide mandates and policies relevant to planning and managing Olympic National Park are described in the following section. In addition, laws, regulations, servicewide mandates, and policies are discussed within the framework used to develop more parkspecific management goals or desired conditions as described later in this chapter.

Specific NPS laws and mandates include the 1916 Organic Act that created the National Park Service; the General Authorities Act of 1970; the act of March 27, 1978, relating to the management of the national park system; and the National Parks Omnibus Management Act (1998).

The NPS Organic Act (16 USC § 1) provides the fundamental management direction for all units of the national park system:

[P]romote and regulate the use of the Federal areas known as national parks, monuments, and reservations...by such means and measures conform to the fundamental purpose of said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

The National Park System General Authorities Act (16 USC § 1a-1 et seq.) affirms that while all national park system units remain "distinct in character," they are "united through their interrelated purposes and resources into one national park system as cumulative expressions of a single national heritage." The act makes it clear that the NPS Organic Act and other protective mandates apply equally to all units of the system. Further, amendments state that NPS management of park units should not "derogat[e]...the purposes and values for which these various areas have been established."

In addition, there are laws, regulations, and policies that are not specific to the National

Park Service. For example, there are laws and policies about managing environmental quality (Clean Air Act, the Endangered Species Act, and Executive Order 11990 "Protection of Wetlands"); laws governing the management of wilderness (Wilderness Act); laws governing the preservation of cultural resources (National Historic Preservation Act and the Native American Graves Protection and Repatriation Act); and laws and policies about providing public services and visitor access (Section 504 of the Rehabilitation Act of 1973 and the Architectural Barriers Act) — to name only a few.

A general management plan is not needed to decide that it is appropriate to protect endangered species, control exotic species, protect archeological sites and historic resources, conserve artifacts, or provide for universal access. Laws and policies already dictate NPS management direction for those and many other issues. Regardless of the implementation of this plan, the park will continue to work to implement those requirements.

The National Park Service also has established policies for all units under its stewardship. These are identified and explained in a guidance manual entitled NPS *Management Policies 2001*. The alternatives considered in this document incorporate and comply with the provisions of these mandates and policies.

The laws, regulations, and policies were used to develop more park-specific desired conditions for park natural and cultural resources, wilderness, and the visitor experience.

FEDERALLY RECOGNIZED TRIBES

In addition to these over encompassing laws, regulations, and policies, there may be parkspecific mandates and administrative commitments that must be considered when developing the desired conditions and alternatives for the plan. These mandates or formal

agreements are often established prior to or concurrently with the creation of a unit of the national park system. At Olympic National Park, such mandates include treaties with American Indian tribes that were established before the park was established.

There are eight federally recognized tribes that have traditional association with the Olympic Peninsula — the Lower Elwha Klallam, Jamestown S'Klallam, Port Gamble S'Klallam, Skokomish, Quinault, Hoh, Quileute, and Makah.

Federally recognized tribes are sovereign governments. The ancestors of the tribes here today formerly lived throughout the Olympic Peninsula, but ceded their lands to the federal government through treaties and now live on reservations along the shores of the peninsula. Three treaties negotiated in 1855 with Olympic Peninsula Native American groups extinguished Indian title to lands on the Olympic Peninsula, but reserved certain rights. The three treaties are Point No Point with the Klallam, Chimacum, and Skokomish (January 25, 1855); the Treaty of Neah Bay with the Makah and Ozette (January 31, 1855); and the Treaty of Olympia with the Quileute, Hoh, Queets, and Quinault (July 1, 1855). Nothing in this plan diminishes tribal treaty rights.

The waters in Olympic National Park have been adjudicated to be usual and accustomed fishing "grounds and stations" of the eight Indian tribes having treaty secured fishing rights to specific areas, and are open to fishing by tribal members in conformance with applicable tribal or Washington State regulations conforming to the orders of the U.S. District Court (United States v. State of Washington, 384 F. Supp. 312 [1974]:323 and 36 CFR 7.28 (a)(8)(i)). The treaty with the Makah also secured the right of "whaling and sealing at usual and accustomed grounds and stations."

There is a special relationship between federally recognized Indian Tribes and the federal government. Executive Order 13084 of May 14, 1998, addresses consultation and coordination with Indian Tribal Governments as follows:

The United States has a unique legal relationship with Indian tribal governments as set forth in the Constitution of the United States, treaties, statutes, executive orders, and court decisions. Since the formation of the Union, the United States has recognized Indian tribes as domestic dependent nations under its protection. In treaties, our Nation has guaranteed the right of Indian tribes to self-government. As domestic dependent nations, Indian tribes exercise inherent sovereign powers over their members and territory. Olympic National Park will continue to work with Indian tribes on a government-to-government basis to address issues concerning Indian tribal self-government, trust resources, and Indian tribal treaty and other rights.

PARKWIDE POLICIES AND DESIRED CONDITIONS

The park staff used laws, regulations, service-wide mandates, and policies — along with park-specific legislation, public input, previous planning, ongoing consultations with partners and agencies, and research — to develop desired conditions and potential strategies for protecting park natural and cultural resources, wilderness, and visitor use and enjoyment.

The following tables summarize the servicewide mandates and policies, along with the park-specific desired conditions and potential strategies that could be used for achieving the desired conditions.

Parkwide Policies for Natural Resources

NPS policies involve managing biological resources through the use of management zones. The management zones proposed for Olympic National Park are described in Chapter 2 of this document. Within the park, development and day use zones would be managed and maintained for intensive visitor use. Within those zones, the natural aspects

might be altered. The primary objective in "natural" zones, most of the park, is the protection of natural resources and values for appropriate types of visitor enjoyment. In these zones, the goal of the National Park Service is to maintain the natural components and processes of naturally evolving ecosystems, including the natural abundance, diversity, and ecological integrity of the plants and animals.

AIR QUALITY

Olympic National Park is a Class I air quality area under the Clean Air Act. Class I areas are afforded the highest degree of protection under the Clean Air Act. This designation allows very little additional deterioration of air quality.

Desired Conditions Based on Servicewide Mandates and Policies

Air quality in the park meets national ambient air quality standards for specified pollutants. The park's air quality is maintained or improved with little or no deterioration.

Visibility is excellent, such that scenic views, including integral vistas and views of landscapes within and outside the park are largely unimpaired.

Source

- Clean Air Act
- NPS Management Policies 2001
- NPS-77, "Natural Resources Management Guidelines"

Desired Conditions Specific to Olympic National Park

Park management and visitor service activities promote preservation of excellent air quality, including healthful indoor air quality in NPS and concession facilities.

Views from park overlooks, integral vistas, and scenic stops are not obstructed or marred by air pollution for most of each year.

Air quality monitoring within or near the park is able to verify whether trends are improving or deteriorating, and whether Class I air quality standards are met within the park.

Strategies

- Cooperate with local air pollution control authorities, the Washington Department of Ecology, and the U.S. Environmental Protection Agency to monitor air quality and visibility and ensure that these authorities maintain high-quality characteristics consistent with EPA, state, and local standards.
- Inventory and monitor air-quality-related values associated with the park. Establish baseline conditions for and monitor native plants or other species that may be sensitive indicators of air pollution.
- Evaluate air pollution impacts, and identify causes.
- Participate in federal, regional, and local air pollution control plans and drafting of regulations, and review permit applications for major new air pollution sources that may affect the park.
- Through timing and appropriate equipment minimize air quality pollution emissions associated with park operations and visitor use activities. Use and demonstrate sustainable practices and pollution prevention measures in park operations. Use best available practices and technologies to provide healthful indoor air quality at NPS and concession facilities.
- Form regional partnerships to develop alternative transportation systems and promote clean fuels.
- Provide information regarding air quality and related values to park visitors.
- Conduct and assist research on air quality to learn about effects of local and long-range atmospheric deposition on park plants, soils, and wetlands. Determine changes in ecosystem function caused by atmospheric deposition and assess the resistance and resilience of native ecosystems to the effects of air pollution.

NATURAL SOUNDSCAPES

An important part of the NPS mission is to preserve or restore the natural soundscapes associated with national park system units. The sounds of nature are among the intrinsic elements that combine to form the environment of our national park system units.

Desired Conditions Based on Servicewide Mandates and	Source
Policies	
The National Park Service preserves the natural ambient soundscapes, restores degraded soundscapes to the natural ambient condition wherever possible, and protects natural soundscapes from degradation due to human-caused noise. Noise from management or recreational uses is minimized to provide a high-quality visitor experience and protect biological resources and processes that involve natural sounds (for example species that use sound to attract mates, protect territories, locate prey, navigate, or avoid predators).	 NPS Management Policies (2001) Director's Order 47,"Sound Preservation and Noise Management"

Desired Conditions Specific to Olympic National Park

Park and concession facilities use best available technology and methods to minimize or mitigate artificial noises produced by equipment and management activities.

Visitors have opportunities to experience and understand natural soundscapes.

The park maintains an inventory of natural sounds and, as feasible, monitors key locations for maintaining natural quiet.

Ecological interactions that depend upon or are affected by sound are protected.

Strategies

- Monitor and prevent or minimize unnatural sounds that adversely affect park resources or values or visitors' enjoyment of them.
- Require park staff, concessioners, contractors, and tour bus companies to comply with measures designed to reduce noise levels.
- Minimize noise generated by NPS management activities by moderating administrative functions such as the use of motorized equipment.
- Use best technologies and methods to minimize noise when procuring or using equipment.
- Encourage visitors to avoid unnecessary noise, such as minimizing the use of generators and maintaining quiet hours in the campgrounds.
- Provide interpretive programs and materials to help visitors understand the role of natural sounds and the value of natural quiet.

LIGHTSCAPE MANAGEMENT / NIGHT SKY

Light has a significant role in the life histories of many species. While some animals are active in the daytime, others are nocturnal. The annual cycle of many plant species depends on changing day length. Evidence also indicates that migratory birds, bats, and other species use stars as cues in their navigation.

Desired Conditions Based on Servicewide Mandates and	Source
Policies	
Natural darkness and other components of the natural lightscape in parks are protected.	NPS Management Policies 2001
The National Park Service will seek the cooperation of park visitors, neighbors, and local government agencies to prevent or minimize the intrusion of artificial light into the night scene of the ecosystems of parks.	

Desired Conditions Specific to Olympic National Park

The park's inventory of natural resources identifies ecological processes or components that uniquely depend upon or are affected by nighttime light.

Artificial light sources in park developed areas are designed to prevent light pollution.

Throughout a majority of the park, visitors have opportunities to experience dark night skies free of light pollution.

Strategies

- The National Park Service will cooperate with park visitors, neighbors, and local government agencies to find ways to prevent or minimize the intrusion of artificial light into the night scene in the park.
- In developed areas, artificial outdoor lighting will be limited to basic safety requirements and will be designed to minimize impacts on the night sky.
- Park staff will evaluate the impacts on the night sky caused by park operations. If light sources in the park are affecting night skies, the staff will consider alternatives such as shielding lights, changing lamp types, or eliminating unnecessary sources.
- Interpretive programs and materials will be provided to help visitors understand the role and value of natural lightscape.

ECOSYSTEM MANAGEMENT		
Desired Conditions Based on Servicewide Mandates and Policies	Source	
The park is managed holistically, as part of a greater ecological, social, economic, and cultural system.	NPS Management Policies 2001	
The park develops and maintains a current land protection plan that identifies means of protection available to achieve the purposes for which the park was created.		
Park managers seek to maintain all components and processes of naturally evolving park ecosystems. Natural disturbance and change are recognized as an integral part of the functioning of natural systems.		

- Through partnerships and cooperative agreements, the park staff works with other Olympic Peninsula land managers to accomplish mutual objectives for providing wildlife corridors, protecting biodiversity and key habitats, etc.
- In collaboration with landowners inside and outside the park, viewsheds within and adjacent to the park are protected.
- The park provides benchmarks or "control" conditions for studies of ecosystem processes in (largely) unmanipulated landscapes, helping to determine the park's own resource preservation goals and those of adjacent lands.
- Natural processes of ecosystem disturbance and change function unimpeded, and are altered only as needed to provide for visitor and staff safety and access in developed areas.
- "Purification" services provided by park ecosystems are protected and maintained, thus helping to provide clean air and water for park resources and the surrounding area. Soil and water resources are free of contaminants.
- Ecosystems and habitats damaged by human activities or nonnative species are restored. Future development avoids sensitive habitats and dynamic areas prone to natural disturbances, if possible.

Strategies

- Participate in collaborative planning efforts with adjacent land managers and tribal governments to identify common goals, pursue solutions, and build joint data sets through information sharing.
- Prepare a land protection strategy for the park.
- Maintain intact ecological functions in keystone habitats.
- Restore habitats and disturbance regimes that have been altered in the park while balancing needs to conserve threatened and endangered species, maintain existing critical facilities and road access, and provide for public safety.
- Protect and, as necessary, restore the natural cycling of nutrients in damaged ecosystems and habitats.
- Provide interpretive and educational programs about ecosystem processes, "ecological services," and methods to sustain these.

FIRE MANAGEMENT		
Desired Conditions Based on Servicewide Mandates and Policies	Source	
Park fire management programs are designed to meet resource management objectives prescribed for the various areas of the park and to ensure that the safety of firefighters and the public are not compromised.	 NPS Management Policies 2001 Director's Order 41, "Wilderness Preservation and Management" 	
All wildland fires are effectively managed, considering resource values to be protected and firefighter and public safety, using the full range of strategic and tactical operations as described in an approved fire management plan. Managers use "minimum requirement" techniques to manage fires within park wilderness areas.		

Natural fire regimes are restored and maintained, but will be modified to comply with air quality regulations, and/or to protect listed species, cultural resources, and the safety of life and property.

The best available technology and scientific information are used to manage fire within the park, to conduct routine monitoring to determine if objectives are met, and to evaluate and improve the fire management program.

Hazard fuel reduction efforts protect structures, wildland-urban interface areas, and cultural resources where appropriate and necessary.

Recognizing fire as a natural process that does not acknowledge administrative boundaries, park managers develop a comprehensive cross-boundary fire management plan with adjacent land managers.

Minimum requirement methods and tools are used to manage fires in wilderness.

Strategies

- Maintain a current fire management plan to reflect the most recent wildland fire policy, fire use applications, and the body of knowledge on fire effects within the park's vegetation types.
- Maintain cooperative agreements for fire suppression with appropriate federal, tribal, state, and local agencies and organizations.
- Monitor individual prescribed fires to provide information on whether specific objectives regarding smoke behavior, fire effects, etc. are met.
- Conduct fire history research and other studies to describe the park's natural fire regime.
- Conduct research and monitor the effects of fires in the park to ensure that long-term resource objectives are met.
- Use fire as a management tool to maintain native plant communities and control exotic species.
- Provide information to visitors about the role of fire in northwest ecosystems.

WATER RESOURCES		
Desired Conditions Based on Servicewide Mandates and Policies	Source	
Surface water and groundwater are protected, and water quality meets or exceeds all applicable water quality standards. NPS and NPS-permitted programs and facilities are maintained and operated to avoid pollution of surface water and groundwater.	 Clean Water Act Rivers and Harbors Act Executive Order 11514 "Protection and Enhancement of Environmental Quality" Executive Order 12088, "Federal Compliance with Pollution Control Standards" NPS Management Policies 2001 NPS-77, "Natural Resources Management Guidelines" 	

Water resources in the park meet or exceed all federal and state water quality standards for temperature, bacteria, dissolved oxygen, turbidity, toxic substances, pH, and nutrients.

Pollution prevention and protection of water quality to meet the needs of aquatic organisms are priorities.

Almost all park water resources meet state criteria for outstanding resources waters.

Strategies

- For waters in the park, or affecting park resources, work with appropriate agencies and partners to determine minimum flow needs and to attain the highest possible water quality standards available under the Clean Water Act.
- Promote water conservation by the National Park Service, concessioners, visitors, and park neighbors.
- Apply best management practices to all pollution-generating activities and facilities in the park.
 Take positive steps to reduce such activities.
- Minimize the use of pesticides, fertilizers, and other chemicals, and manage them in keeping with NPS policy and federal regulations.
- Monitor water flows and water quality in selected areas.
- In selected park waters, conduct water quality monitoring and research to target detection of change from atmospheric input.
- Manage stormwater runoff appropriately.
- Promote greater public understanding of water resource issues at Olympic National Park, and encourage public support for and participation in protecting park watersheds.

RIVERS AND FLOODPLAINS		
Desired Conditions Based on Servicewide Mandates and Policies	Source	
Natural floodplain values are preserved or restored.	Executive Order 11988 "Floodplain Management"	
Long-term and short-term environmental effects associated with the occupancy and modification of floodplains are avoided when practicable.	 Rivers and Harbors Act NPS Management Policies 2001 Special Directive 93-4 "Floodplain Management, Revised Guidelines 	
When it is not practicable to locate or relocate development or inappropriate human activities to a site outside the floodplain, the National Park Service • prepares and approves a statement of findings in accordance with Director's Order #77-2	for National Park Service Floodplain Compliance" (1993) • Director's Order 77-2, "Floodplain Management" • National Flood Insurance Program	
uses nonstructural measures as much as practicable to reduce hazards to human life and property while minimizing impacts on the natural resources of floodplains	(44 CFR 60)	
 ensures that structures and facilities are designed to be consistent with the intent of the standards and criteria of 		
the National Flood Insurance Program (44 CFR 60)	a National Doub	

The most current engineering methods and techniques that minimize adverse effects on natural river processes are used to protect park roads and facilities located in floodplains.

Park visitors understand the dynamic nature of the park's river systems, and the variability and cycles of river flow, flooding, etc.

Strategies

- Identify 100-year and 500-year floodplains and any park or visitor facilities located within them.
- Inventory flood-prone areas near facilities and roads, and develop a program to proactively protect these using the most current techniques that minimize adverse effects on aquatic and riparian habitats and fluvial processes.
- Prepare evacuation plans for facilities in flood hazard areas.
- Protect shoreline areas that provide spawning, feeding, and rearing habitats for fish and support rare aquatic plant species. During drought or other conditions warranting greater resource protection, this may involve occasional seasonal closures of specific areas.
- Provide information to visitors regarding river processes and natural flooding regimes.

WETLANDS		
Desired Conditions Based on Servicewide Mandates and Policies	Source	
Natural and beneficial values of wetlands are preserved and enhanced.	Clean Water ActRivers and Harbors ActExecutive Order 11514	
The National Park Service implements a "no net loss of wetlands" policy and strives to achieve a longer-term goal of net gain of wetlands across the national park system through the restoration of previously degraded wetlands.	"Protection and Enhancement of Environmental Quality" • Executive Order 11990; "Protection of Wetlands"	
To the extent possible, the National Park Service avoids long- and short-term adverse impacts associated with the destruction or modification of wetlands, and avoids direct or indirect support of new construction in wetlands wherever there is a practicable alternative.	 "Protecting America's Wetlands: A Fair, Flexible, and Effective Approach," White House Office on Environmental Policy, 1993 NPS Management Policies(2001) Director's Order 77-1, "Wetland 	
The National Park Service compensates for remaining unavoidable adverse impacts on wetlands by restoring wetlands that have been previously degraded.	Protection" NPS-77, "Natural Resources Management Guidelines"	

Wetlands within the park are inventoried and their conditions monitored. The distinct functions they perform are identified.

"Keystone" species (such as beavers) that sustain and depend upon wetland habitats occur in natural distribution and numbers.

Park visitors have the opportunity to learn about and understand the unique services and functions provided by wetlands.

Wetlands near developed areas remain unaffected by maintenance of park or concession facilities or management or recreational activities.

Wetlands adversely affected by prior human activity are restored where feasible.

Strategies

- Locate any new facilities to avoid wetlands if feasible. If avoiding wetlands is not feasible, undertake other actions to comply with Executive Order 11990 "Protection of Wetlands," the Clean Water Act, and Director's Order 77-1 "Wetland Protection," such as compensation.
- Prepare a statement of findings if proposed actions would result in adverse impacts on wetlands, including an analysis of alternatives, delineation of the wetland, a wetland restoration plan, mitigation, and a functional analysis of the impact site and restoration sites.
- Conduct systematic surveys of park watersheds to complete wetland inventories, and include this information in the planning, management, and protection of wetlands.
- Encourage the use of wetlands for educational and scientific purposes that do not disrupt natural wetland functions.

MARINE RESOURCES		
Desired Conditions Based on Servicewide Mandates and Policies	Source	
Natural resources will be managed to preserve fundamental physical and biological processes, as well as individual species, features, and plant and animal communities. Natural shoreline processes (such as erosion, deposition, shoreline migration) will be allowed to continue without interference.	 NPS Management Policies 2001 NPS-77 "Natural Resources Management Guideline" Coastal Zone Management Act 	

Natural shoreline physical and biological processes are unimpeded along most of the coastline of Olympic National Park, and where altered by human activities or structures, measures are taken to mitigate effects and restore natural conditions as much as possible.

Areas of high biodiversity within the intertidal areas are protected as "seed banks" for adjacent habitats and communities.

The park is an active participant and partner with coastal tribes, the Olympic Coast National Marine Sanctuary, the Washington Department of Ecology, National Ocean and Atmospheric Administration, the U.S. Coast Guard, the U.S. Fish and Wildlife Service, and other marine resource managers in maintaining up-to-date oil spill response plans and preparedness skills.

Strategies

- Inventory and monitor coastal and marine resources within park boundaries, determine baseline conditions, and detect abnormal changes in time to implement remedial actions.
- Maintain and restore components and processes of naturally evolving park marine ecosystems, recognizing that change caused by extreme natural events (e.g., storms, red tide, and El Niño) is an integral part of natural systems.
- Work with other agencies and tribal governments to maintain or improve water and air quality affecting marine ecosystems, and maintain natural marine viewsheds.
- Protect and restore threatened and endangered species and their critical habitat.
- Regulate and mitigate nontribal human activities to minimize adverse impacts along the park's coastal strip.
- Educate visitors about the importance and fragility of marine resources, threats to them, and protection and mitigation measures to reduce impact.

GEOLOGIC AND SOIL RESOURCES		
Desired Conditions Based on Servicewide Mandates and	Source	
Policies		
The park's geologic resources are preserved and protected as integral components of the park's natural systems.	 NPS Management Policies 2001 NPS-77, "Natural Resources 	
The National Park Service actively seeks to understand and preserve the soil resources of the park, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or the soil's contamination of other resources.	Management Guidelines"	
Natural soil resources and processes function in as natural a condition as possible, except where special considerations are allowable under policy.		

Monitoring and research programs assess conditions and trends in the park's geologic processes and resources, particularly those that are both important to the park's ecosystem and management, and subject to human influence (e.g., glaciers, sea level and shoreline position, groundwater chemistry, streamflow, stream channel morphology, sediment load, slope failures, and erosion).

Surficial geology is mapped for priority areas and critical habitats.

Strategies

- Assess the impacts of natural processes and human-related events on geologic and soil resources and restore as warranted.
- Partner with the U.S. Geological Survey and others to identify, address, and monitor geologic hazards.
- Collect baseline information on soils, and develop surficial geology maps for sensitive or priority areas.
- Develop a plan to address geologic and soil research, inventory, and monitoring.
- Update geologic history of the park, using modern theory and techniques.
- Update geologic interpretations at interpretive stops or displays.
- Identify interpretive themes or other opportunities for interpreting the notable geologic events or processes that are preserved, exposed, or occur in the park.
- Prevent or minimize adverse, potentially irreversible impacts on soils. Possibly implement soil conservation and soil amendment practices to reduce impacts, and import clean off-site soil, or use soil amendments as necessary to restore damaged sites.
- Minimize soil excavation, erosion, and off-site soil migration during and after any ground-disturbing activity.
- Survey areas of the park with soil resource problems and take actions appropriate to the management prescription to prevent or minimize further erosion, compaction, or deposition.
- Apply effective best management practices to problem soil erosion and compaction areas in a manner that stops or minimizes erosion, restores soil productivity, and reestablishes or sustains a self-perpetuating vegetative cover.

NATIVE SPECIES	
Desired Conditions Based on Servicewide Mandates and Policies	Source
The National Park Service will maintain, as parts of the natural ecosystem, all native plants and animals in the park, including all five of the commonly recognized kingdoms of living things (encompassing flowering plants, ferns, mosses, lichens, algae, fungi, bacteria, mammals, birds, reptiles, amphibians, fishes, etc.)	 NPS Management Policies 2001 NPS-77 "Natural Resources Management Guideline"
The National Park Service will strive to protect the full range of genetic types (genotypes) of native plant and animal populations by perpetuating natural evolutionary processes and minimizing human interference with evolving genetic diversity.	
The National Park Service will strive to restore extirpated native plant and animal species to parks when specific criteria are met regarding habitat availability, safety, genetic type, and reason for extirpation.	

The park provides naturally evolving examples of plant and animal communities.

The park animal and plant populations are managed to promote long-term viability, including maintaining age-structures, abundance, density and distributions within normal ranges, and a full range of natural genetic variability.

Extirpated native species are restored when feasible and appropriate.

Effects of native diseases and pests are within normal range of variation, and are not worsened by human-caused factors.

Strategies

- Complete inventory of the plants and animals in the park. Regularly monitor the distribution and condition of selected species that indicate ecosystem condition and diversity.
- Restore native biological communities and habitats. Minimize human impacts on native species, ecosystems, and the processes that sustain them.
- Review park fishing regulations annually, and revise as necessary to protect native fish populations.
- Continue to prohibit stocking of exotic fish species or enhancement of nonnative fish populations.
- Preserve genetic diversity by maintaining the abundance of unique populations at or above levels necessary for genetic variability.
- Promote harvest and management practices that protect wild salmonids. Work with area fisheries managers to implement escapement levels necessary to achieve the full role of anadromous fish in the ecosystem.
- In cooperation with other agencies and tribal governments, preserve healthy populations and provide safe migratory corridors for wide-ranging wildlife populations such as elk and bear.
- Protect the park's biotic communities from impacts due to human activities and facilities while ensuring that visitors have ample opportunity to visit and enjoy these ecosystems.

EXOTIC SPECIES		
Desired Conditions Based on Servicewide Mandates and Policies	Source	
Manage populations of exotic plant and animal species, up to and including eradication, wherever such species threaten park resources or public health and when control is prudent and feasible.	 NPS Management Policies 2001 Executive Order 13112, "Invasive Species" NPS-77, "Natural Resources Management Guidelines" 	

Park ecosystems are free of nonnative species where feasible, with the exception of noninvasive species that are documented as innocuous, and are a contributing element of a cultural landscape (as defined by the Secretary of the Interior's Standards).

Particularly sensitive park habitats, including those containing endemic or rare species, are maintained free of nonnative species.

Strategies

- Complete an inventory of plants and animals in the park and regularly monitor the distribution and condition of selected species including invasive exotics.
- Study the environmental and ecological effects of exotic species invasion to assess threats, prioritize management actions, and prevent introduction and establishment of nonnative species.
- Monitor the condition of native species that may be vulnerable to nonnative and potentially catastrophic diseases such as chronic wasting disease, West Nile virus, whitebark pine blister rust, balsam and hemlock wooley adelgid, etc. Implement management programs to prevent and develop a long-term program to reverse the destructive effects of exotic species.
- Manage exclusively for native plant species in wilderness management zones. In other management zones, limit planting of nonnative species to noninvasive, innocuous plants that are justified by the historic scene or operational needs.
- Control or eliminate exotic plants and animals, exotic diseases, and pest species where there is a reasonable expectation of success and sustainability. Base control efforts on
 - o the potential threat to legally protected or uncommon native species and habitats
 - o the potential threat to visitor health or safety
 - o the potential threat to scenic and aesthetic quality
 - o the potential threat to common native species and habitat
- Provide interpretive and educational programs on the preservation of native species.

RARE, THREATENED, AND ENDANGERED SPECIES		
Desired Conditions Based on Servicewide Mandates and Policies	Source	
Federally listed and state-listed threatened and endangered species and their habitats are protected and sustained.	 Endangered Species Act NPS Management Policies 2001 NPS-77, "Natural Resources 	
Native threatened and endangered species populations that have been severely reduced in or extirpated from the park are restored where feasible and sustainable.	Management Guidelines"	

Threatened, endangered, or otherwise imperiled species in the park show increasing trends leading to improvement in the species' status and ultimately to recovery. State and federally listed wildlife populations are stable or increasing, as measured by monitored parameters such as survival of northern spotted owls, territory occupancy of bald eagles, and at-sea surveys of marbled murrelets and sea otters.

Habitats that support or are suitable for sensitive, rare, endemic, or listed species are protected.

Park visitors learn about species in the park that are listed under the Endangered Species Act, as well as actions that may assist their recovery.

Strategies

- Support research that contributes to management knowledge of rare and protected species and their habitat. Incorporate findings in park interpretive and education programs.
- Inventory rare or protected species in the park and regularly monitor their distribution, condition, and population trends. Modify management plans to be more effective, based on the results of monitoring.
- Manage designated critical habitat, essential habitat, and recovery areas to maintain and enhance their value for listed species.
- Consult with the U.S. Fish and Wildlife Service and NOAA-Fisheries to ensure that NPS actions comply with the Endangered Species Act.
- Participate in the recovery planning process when appropriate. Cooperate with the U.S. Fish and Wildlife Service and NOAA Fisheries to implement recovery plans approved by those agencies for listed species found in the park.
- To the greatest extent possible, inventory, monitor, and manage state and locally listed species in a manner similar to federally listed species.
- Work with neighboring land and resource managers to obtain information on status and trends of little known, but potentially at-risk wildlife species, such as bats, marten, and pocket gophers.
- Provide information to park visitors regarding listed species that occur in the park and measures to promote their recovery.

Parkwide Policies for Wilderness Resources

Following the completion of this *General Management Plan*, the park staff will develop a wilderness management plan that will detail specific management actions for Olympic National Park's wilderness based on the desired conditions and strategies prescribed in this plan. The overall goal of wilderness management in Olympic National Park is to ensure that the park's wilderness resources and character are valued, enjoyed, protected, preserved, and restored for the benefit of this and succeeding generations.

In addition, the park would review all potential wilderness additions and determine if nonconforming uses still exist. For parkadministered lands, or lands that are acquired in the future, that contain nonconforming uses, rehabilitation plans and strategies will be prepared.

The principle of nondegradation must also be applied to wilderness management. The nondegradation principle seeks to maintain each wilderness in at least as a wild condition as it was at the time of classification.

WILDERNESS	
Desired Conditions Based on Servicewide Mandates and Policies	Source
The National Park Service will manage wilderness areas including those proposed for wilderness designation for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness. The park ensures that wilderness characteristics and values are retained and protected, that visitors continue to find opportunities for solitude and primitive, unconfined recreation, and that signs of people remain substantially unnoticeable. The Wilderness Act specifies that the designation of any area of the park system as wilderness "shall in no manner lower the standards evolved for the use and preservation of" such unit of the park system under the various laws applicable to that unit (16 USC Section 1133(a)(3)). Thus, the laws pertaining to historic preservation also remain applicable within wilderness.	 Wilderness Act of 1964 National Historic Preservation Act; Archeological and Historic Preservation Act; NPS Management Policies 2001, DO 41 "Wilderness Preservation and Management" DO 28 "Cultural Resource Management Guideline."
Cultural resources such as archeological sites, historic trails and routes, cultural landscapes, and structures that have been included within wilderness will be protected and maintained using methods that are consistent with preservation of wilderness character and values and cultural resource requirements.	

Desired Conditions Specific to Olympic National Park

Natural processes, native components, and the interrelationships among them are protected, maintained, and/or restored to the extent possible, while providing opportunities for their enjoyment as wilderness.

Cultural resources in the Olympic National Park wilderness are preserved and appreciated through appropriate programs of research, treatment, protection, and education.

Present and future visitors enjoy the unique qualities offered in wilderness. These include the experiences of solitude, remoteness, risk, challenge, self-sufficiency, discovery, and observation of an untrammeled ecosystem.

Wilderness management is based on the minimum requirement concept, allowing only those actions necessary and appropriate, and implementing those actions using the minimum tool, facilities, and management techniques that will ensure the preservation of wilderness character.

The values of the Olympic wilderness are understood by the public and park staff through education in wilderness ethics, use, and management skills to promote and preserve these values.

Park operations and wilderness functions are coordinated in the park to manage and protect natural and cultural resources in wilderness and preserve wilderness character. Management is coordinated with the U.S. Forest Service to provide consistency in regulations, standards, and guidelines to the extent feasible, and work will continue to be done with other local and regional groups, communities, and agencies to preserve wilderness values.

Strategies

Park staff may use the following strategies to reach the desired conditions outlined above. Strategies would be further defined through the wilderness management plan process.

- Develop and implement research programs related to the wilderness ecosystem and key natural resources and visitor experiences.
- Inventory wilderness resources, facilities, and operational activities.
- Define a range of desired conditions for wilderness resources, visitor experiences, wilderness character, and management and operational techniques.
- Manage activities to maintain and restore resource conditions, to protect visitor experiences, and to protect and restore wilderness character.
- Develop treatment plans to protect and manage cultural resources to ensure that cultural resources are managed and protected to avoid adverse effects. Treatment includes protection, stabilization, preservation, and rehabilitation.
- Develop an educational program for visitors, park staff, and local community members, and others that enhance the appreciation of wilderness resources.
- Monitor the wilderness resources and incorporate the results of monitoring to refine management programs.

Parkwide Policies for Cultural Resources

The cultural resource management policies of the National Park Service are derived from a suite of historic preservation, environmental, and other laws, proclamations, executive orders, and regulations. Taken collectively, they provide the National Park Service with the authority and responsibility for the management of cultural resources in every unit of the national park system so that those resources may be preserved unimpaired for future generations. The protection of Olympic National Park's cultural resources is essential for understanding the past, present, and future relationship of people with the park environment and the expressions of our cultural heritage.

ARCHEOLOGICAL RESOURCES		
Desired Conditions Based on Servicewide Mandates and	Source	
Policies		
Archeological sites are identified and inventoried, and their significance is determined and documented.	 National Historic Preservation Act Archeological Resources Protection Act 	
Archeological sites are protected in an undisturbed condition unless it is determined through formal processes that disturbance or natural deterioration is unavoidable.	 Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation 	
When disturbance or deterioration is unavoidable, the site is professionally documented and excavated, and the resulting artifacts, materials, and records are curated and conserved in consultation with the Washington state historic preservation office, and Native American tribes if applicable.	Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic (1005)	
Some archeological sites that can be adequately protected may be interpreted to the visitor.	 Preservation Officers (1995) NPS Management Policies 2001 DO 28 "Cultural Resource 	

Management Guideline"

Archeological site baseline data are available. Site conditions are monitored to record changes in resource conditions as a result of environmental conditions or visitor use impacts.

To the extent feasible, archeological resources degrading from environmental conditions and visitor impacts are mitigated through data recovery or other preservation strategies, including sitehardening.

To the extent feasible, archeological resources threatened by project development are mitigated first through avoidance or secondly through other preservation strategies such as data recovery.

Strategies

- Gather field data regarding rock shelters, lithic scatters, hunting camps, and other resources to develop a more accurate predictive model of prehistoric site distribution and to address related research questions.
- Inventory, evaluate, and manage archeological resources that reflect late 19th and early 20th century activities, such as forest and park development and protection, mining sites, homestead sites, resort sites, cabin remains, and associated trash dumps. National-register-eligible resources will be documented and listed.
- Monitor shell middens and petroglyph sites in the at-risk coastal areas on monthly, annual, or biannual basis.
- Educate visitors on regulations governing archeological resources and their removal and transport.
- Survey and inventory archeological sites parkwide; determine and document their significance.
- Treat all archeological resources as eligible for listing on the National Register of Historic Places pending a formal determination by the National Park Service, the state historic preservation office, and associated Indian tribes as to their significance.
- Determine which archeological sites should be added to the Archeological Sites Management Information System and the National Register of Historic Places.

HISTORIC STRUCTURES

Desired Conditions Based on Servicewide Mandates and Policies

Historic structures are inventoried and their significance and integrity are evaluated under National Register of Historic Places criteria.

The qualities that contribute to the listing or eligibility for listing of historic structures on the national register are protected in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, unless it is determined through a formal process that disturbance or natural deterioration is unavoidable.

Source

- National Historic Preservation Act
- Archeological and Historic Preservation Act
- Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation; the Secretary of the Interior's Standards for the Treatment of Historic Properties
- 1995 Programmatic Agreement (National Park Service, the Advisory Council on Historic Preservation, National Conference of State Historic Preservation Officers)
- NPS Management Policies 2001
- DO 28: "Cultural Resource Management Guideline"

Desired Conditions Specific to Olympic NP

The historic character of historic buildings and structures, including wilderness shelters and buildings related to USFS and NPS management of the park, recreational resorts and cabins, and homestead settlements, are preserved and rehabilitated to retain a high degree of integrity.

Historic structure inventories and reports are prepared and existing reports amended as needed. Actions identified in historic structure reports are implemented and a record of treatment added to the reports.

Identified and evaluated historic structures are monitored, inspected and managed to enable the long-term preservation of a resource's historic features, qualities and materials.

Strategies

- Employ the comprehensive maintenance, protection and preservation measures in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. For properties lacking specific plans, preservation actions would be based on the *Secretary's Standards* and NPS policy and guidelines. Treat all historic structures as eligible for listing on the National Register of Historic Places pending formal determination (by National Park Service and state historic preservation officer).
- Consider historic buildings not actively being used in the park for adaptive reuse by other public and private entities to assist in preservation of the structures.
- Create design guidelines and/or historic structure/cultural landscape reports for all developed areas in the park to preserve the architectural and landscape-defining features. Include design review oversight to ensure the compatibility of new planning, design, and construction.
- Aggressively pursue basic preservation maintenance activities to avoid costly rebuilding or reconstruction of historic structures or cultural landscapes.
- Comply with cultural resource protection and preservation policies and directives, and the wilderness minimal requirement techniques in wilderness areas, for the maintenance of historic structures and cultural landscapes
- Before modifying any historic structure on the National Register of Historic Places, consult with the state historic preservation office and the Advisory Council for Historic Preservation, as appropriate. Before modifying any structures associated with "Mission 66," evaluate the structure for listing on the national register in consultation with the state historic preservation office.

Cultural Landscapes.

CULTURAL LANDSCAPES		
Desired Conditions Based on Servicewide Mandates and Policies	Source	
Cultural landscape inventories are conducted to identify landscapes potentially eligible for listing in the national register and to assist in future management decisions for landscapes and associated resources, both cultural and natural.	 National Historic Preservation Act Advisory Council on Historic Preservation's implementing regulations regarding the "Protection of Historic Properties" (36 CFR 800) 	
The management of cultural landscapes focuses on preserving the landscape's physical attributes, biotic systems, and use when that use contributes to its historical significance.	Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes	
The preservation, rehabilitation, restoration, or reconstruction of cultural landscapes is undertaken in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guideline's for the Treatment of	 NPS Management Policies 2001 DO 28: Cultural Resource Management Guideline 	

Desired Conditions Specific to Olympic National Park

The cultural landscapes of the park retain a high degree of integrity. These include cultural landscapes, along with historic roads, trails, and sites that are related to USFS and NPS management, recreational resorts and cabins (Rosemary Inn, Lake Crescent Inn, and Wendell cabin) and homestead settlements (Roose, Kestner, and Humes).

Cultural landscape inventories and reports are prepared, and existing reports are amended at needed.

Identified and evaluated cultural landscapes are monitored, inspected, and managed to enable the long-term preservation of a resource's historic features, qualities, and materials.

Actions identified in cultural landscape reports are implemented, and a record of treatment is added to the reports.

Strategies

- Treat cultural landscapes that are potentially eligible for listing in the national register as eligible until a formal determination is made (by the National Park Service and state historic preservation office).
- Comply with cultural resource protection and preservation policies and directives, and the wilderness minimal requirement techniques in wilderness areas, for the maintenance of cultural landscapes.
- Create design guidelines and/or cultural landscape reports for all developed areas in the park to ensure that the landscape-defining features of these areas are preserved. These guidelines would include provisions for design review oversight to ensure the compatibility of new planning, design, and construction.

ETHNOGRAPHIC RESOURCES

Desired Conditions Based on Servicewide Mandates and Policies

Appropriate cultural anthropological research is conducted in cooperation with groups associated with the park.

To the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, the National Park Service accommodates access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoids adversely affecting the physical integrity of these sacred sites.

All executive agencies are required to consult, to the greatest extent practicable and to the extent permitted by law, with tribal governments before taking actions that affect federally recognized tribal governments. Native Americans and other individuals and groups linked by ties of kinship or culture to ethnically identifiable human remains, sacred objects, objects of cultural patrimony, and associated funerary objects are consulted when such items may be disturbed or are encountered on park lands.

All ethnographic resources determined eligible for listing or listed in the national register are protected. If disturbance of such resources is unavoidable, formal consultation with the state historic preservation officer and the Advisory Council on Historic Preservation, and with Native American tribes as appropriate, is conducted.

The identities of community consultants and information about sacred and other culturally sensitive places and practices are kept confidential when research agreements or other circumstances warrant.

Source

- National Historic Preservation Act
- Advisory Council for Historic Preservation implementing regulations
- NPS Management Policies 2001
- DO 28: Cultural Resource Management Guideline
- EO 13007 on American Indian Sacred Sites; American Indian Religious Freedom Act
- Native American Graves
 Protection and Repatriation
 Act
- Presidential memorandum of April 29, 1994, on government-to-government relations with tribal governments

Desired Conditions Specific to Olympic National Park

Potentially sensitive natural and cultural resources and traditional cultural properties (ethnographic resources eligible for the National Register of Historic Places) are identified, recorded, and evaluated through consultation with area tribes. The integrity of traditional cultural properties is preserved and protected.

Positive and productive government-to-government relationships exist with each of the eight tribes that have traditional association with the Olympic Peninsula.

Strategies

- Prepare an ethnographic overview and assessment.
- Survey and inventory ethnographic resources and document their significance.
- Treat all ethnographic resources as eligible for listing in the National Register of Historic Places pending a formal determination by the National Park Service and the state historic preservation officer.
- Continue to encourage the employment of Native Americans on the park staff to improve communications and working relationships and encourage cultural diversity in the workplace.
- Conduct consultation with affiliated Indian tribes throughout the course of the planning process for this and other documents.

CHAPTER 1: INTRODUCTION

- Olympic National Park recognizes that the tribes' relationships to lands in the park have endured for thousands of years, and park staff will continue to work with the tribes to ensure that sites of traditional importance are preserved and protected.
- Park staff will strive to create and maintain positive and productive government-to-government relationships with each of the eight tribes that have traditional association with the Olympic Peninsula.

Desired Conditions Based on Servicewide Mandates and Source	
Desired Conditions Based on Servicewide Mandates and Source Policies	e
 collections) are identified and inventoried, catalogued, documented, preserved, and protected. Provision is made for access to and use of the park's museum collections for exhibits, research, and interpretation. The qualities that contribute to the significance of collections are protected in accordance with established standards. Am Arc Preserved. Nat Prof. NPS DO Mai 	ional Historic Preservation Act; erican Religious Freedom Act; heological and Historic servation Act heological Resources tection Act ive American Graves tection and Repatriation Act is Management Policies 2001 28: Cultural Resource nagement Guideline

Desired Conditions Specific to Olympic National Park

Research and development projects include plans for the curation of collected objects and specimens.

The park's museum collections are housed in appropriate facilities that provide protection for current collections and allow for future collection expansion.

Park museum collections provide documentation of park natural and cultural resources.

Strategies

- Inventory and catalog all park museum collections in accordance with standards in the NPS *Museum Handbook*.
- Develop and implement a collection management program according to NPS standards to guide the protection, conservation, and use of museum objects.
- Continue outreach efforts to park visitors, provide access to and give tours of the collections to the community, and provide field assistance with park research projects as needed.
- Collections facilities would be upgraded, improved, and expanded according to the recommendations of the Olympic National Park "Museum Management Plan" (2002).
- Provide efficient access to reference materials and information.

Parkwide Policies for Visitor Use and Experience

Current laws, regulations, and policies leave considerable room for judgment about the best mix of types and levels of visitor use activities, programs, and facilities. For this reason, most decisions related to visitor experience and use are addressed in the alternatives. However, all visitor use of national park system units must be consistent with the following laws, regulations, and guidelines.

VISITOR USE AND EXPERIENCE, EDUCATION, AND OUTREACH Desired Conditions Based on Servicewide Mandates and Source **Policies** Park resources are conserved unimpaired for the enjoyment • NPS Organic Act of future generations. Visitors have opportunities for forms of • National Park System General enjoyment that are uniquely suited and appropriate to the **Authorities Act** superlative natural and cultural resources found in the park. • Section 504 of the Rehabilitation Act No activities occur that would cause derogation of the values • The Architectural Barriers Act and purposes for which the park has been established. • NPS Management Policies 2001 • DO 28: "Cultural Resource Park visitors will have opportunities to understand and Management Guideline" appreciate the significance of the park and its resources, and • DO-42: "Accessibility for Visitors with to develop a personal stewardship ethic. Disabilities in NPS Programs, Facilities, and Services" To the extent feasible, programs, services, and facilities in the • The Secretary of the Interior's park are accessible to and usable by all people, including regulation 43 CFR 17 those with disabilities.

Desired Conditions Specific to Olympic National Park

For all zones or districts in the park, the types and levels of visitor use are consistent with the desired resource and visitor experience conditions prescribed for those areas.

The park visitor is able to obtain visitor orientation and trip-planning information through a variety of media. Educational programs are available.

Frontcountry day use visitation is provided. Roads, trails, and related facilities are provided, but locations and numbers may be modified for resource protection, restoration, visitor experience, or increased visitation.

The level and type of commercial guided activities would be managed to protect park resources and the visitor experience.

Strategies

- For all zones, districts, or other logical management divisions in a park, identify visitor carrying capacities for managing public use and ways to monitor for and address unacceptable impacts on park resources and visitor experiences.
- Monitor visitor comments on issues such as crowding, encounters with other visitors in the backcountry, availability of campsites at busy times of the year, and availability of parking.
- Conduct periodic visitor surveys to stay informed of changing visitor demographics and desires to better tailor programs to visitor needs and desires.
- Develop outreach programs for and with schools, tribes, and community organizations.
- Provide a variety of educational opportunities in the park with continued facility-based contacts and guided activities. Web-based education would be provided. Some activities could be for a fee.
- Coordinate education programs with partners and focus on improving the general understanding of park natural and cultural resources, biodiversity, the protection of resources and natural processes, research, stewardship, wilderness, park values, and recreational and visitor opportunities.

Boundary Adjustments

Boundary adjustments are considered in several of the alternatives. The legislative provisions related to boundary changes are implemented through laws (Public Law 95-625, the National Parks and Recreation Act) and NPS *Management Policies*, which state that the National Park Service will identify and evaluate potential boundary adjustments, and may seek boundary revisions through the planning process to

- protect significant resources and values or to enhance opportunities for public enjoyment related to park purposes,
- address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineation such as topographic or other natural features or roads, or
- otherwise protect park resources that are critical to fulfilling park purposes.

Additional criteria must be met if the acquisition would be made using appropriated funds, and not merely a technical boundary revision; the criteria set forth by Congress at 16 USC 4601-9(c) (2) must be met. NPS *Management Policies* (2001), section 3.5 further defines the criteria as follows:

- The added lands will be feasible to administer, considering their size, configuration, and ownership, and hazardous substances, costs, the views of and impacts of local communities and surrounding jurisdictions, and other factors such as the presence of exotic species.
- Other alternatives for management and resource protection are not adequate.

The Park Service analyzed these criteria, and a complete boundary analysis is found in appendix B.

The Land and Water Conservation Fund Act of 1965, as amended, provides an additional, but limited authority to adjust boundaries.

In all alternatives, if any boundary adjustments occur, those lands included within park boundaries would be assessed for wilderness suitability. Those lands acquired for the purposes of exchange only would not be part of the wilderness suitability assessment.

Lake Crescent — Lake Crescent is close to the northwest park boundary. The proposed boundary adjustments are shown on the Lake Crescent Alternative B and D maps.

Policy: Protect significant resources and values or enhance opportunities for public enjoyment related to park purposes.

As described in alternatives B and D, the park boundary would be adjusted to incorporate areas near the lake outlet at the head of the Lyre River.

The addition to the park would protect the Lyre River and Lake Crescent outlet area, which are critical to Beardslee and Crescentii trout spawning areas and rearing habitat. This is the only place in the world where the Beardslee trout spawn.

The park addition would protect the Lyre River and the lake outlet, which provide critical spawning habitats for cutthroat trout and provide a migratory corridor for cutthroat moving to and from the lake.

Protecting these habitats from future development and timber harvest would also assist in preventing increased sedimentation and protecting the water quality of the Lyre River and Lake Crescent.

The 80 acres of Washington Department of Natural Resources land within the proposed boundary addition would be included as part of a comprehensive parkwide land exchange proposal that is highlighted in the Ozette Lake watershed protection strategy.

There are 700 acres of land currently within the Olympic National Forest that are within the proposed boundary adjustment at Lake Crescent. These lands would wither be transferred to the National Park Service via an acre-for-acre land exchange for lands currently within the boundaries of Olympic National Park, or would be recommended to be placed in a management status by the U.S. Forest Service that would be compatible with park purposes and help to ensure the long-term protection of Lyre River and Lake Crescent species and habitat.

There are some 860 acres of privately owned timberland in the proposed boundary adjustment that would be acquired by the National Park Service on an opportunity purchase basis and only when a willing seller situation is present.

Ozette — Ozette Lake is close to the Pacific Ocean, toward the north end of the Olympic Peninsula. The proposed boundary adjustments are shown on Ozette Alternative B, C, and D maps.

Policy: Protect significant resources and values or enhance opportunities for public enjoyment related to park purposes.

The addition of land surrounding Ozette Lake to Olympic National Park would provide both natural and scenic protection of the lake setting and would enhance public benefit and enjoyment of the area. The National Park Service would directly manage this area as part of the Ozette Lake unit of the park.

The remainder of the Ozette Lake watershed would be protected by other cooperative private/public land conservancy strategies that would be used to protect the threatened Ozette Lake sockeye and its critical habitat, the water quality of the lake, and the viewshed.

The addition of lands to Olympic National Park immediately surrounding Ozette Lake involves both state-owned and private lands. State-owned owned lands, managed by the Washington Department of Natural Resources, would be part of the overall land exchange agreement. Other lands added to the park boundary primarily involve four privately owned commercial timber companies. Acquisition of these lands would be predicated on an opportunity purchase basis requiring both a willing seller and the availability of appropriated funds to acquire the lands.

The Washington Department of Natural Resources (DNR) would gain a large forest area in a single block of land capable of being designated as a Legacy Forest. State management of the area would involve an ecologically sustainable, best practices approach to forest management and could potentially be eligible for Forest Stewardship Council certification.

The proposed land exchange between the National Park Service and the state of Washington of acquired private forest lands within the Ozette Lake watershed, but outside the proposed revision to the park boundary, would be in return for the state conveying its interests to the subsurface lands within Olympic National Park of approximately 4,100 acres of scattered parcels in the Ozette Lake, Lake Crescent, and Queets units of the park.

Authorizing legislation from Congress would be required to allow for the expansion of the boundary of the Ozette Lake unit of Olympic National Park, and for the appropriation of funds to provide for the purchase and exchange of lands within the revised boundary from willing sellers, in accordance with NPS policy.

Authorizing legislation would also be required to allow the National Park Service to acquire private timber lands from willing sellers outside the boundaries of Olympic National Park for purposes of exchange only so that the value and acreages required to exchange for the state of Washington ownership of the subsurface mineral estate within Olympic National Park could be accomplished.

This change would address several issues. First, approximately two-thirds of the park's shoreline area along the south, east, and northern boundaries of the Ozette Lake unit are less than 250 feet from the lakeshore. Recurring timber harvesting adjacent to these areas could result in highly visible clear-cuts, wind throw of trees within the narrow park boundary, the loss of important wildlife habitat in proximity to the lake, and increase sedimentation and erosion of rivers and streams that drain into Ozette Lake. Sedimentation has, and is expected to continue to have, severe adverse impacts on salmon spawning and survival in area tributary streams and river gravels, impacts to other fish species and impacts on the general hydrologic health of Ozette Lake. The potential also exists for incompatible residential and commercial developments on private lands just outside the boundary which would adversely affect the current tranquil lake setting of the park.

The addition of lands immediately surrounding Ozette Lake would be an important benefit to park resources and the visitor experiences through the protection of these lands.

Hoh — The Hoh rain forest is in the west central area of the park. The proposed boundary adjustment is shown on the Hoh Alternative B map.

Policy: Protect significant resources and values or enhance opportunities for public enjoyment related to park purposes.

The boundary would be adjusted to expand the amount of protected elk habitat to include a larger portion of the floodplain and upland habitat within Olympic National Park. Also, by protecting the floodplain and tributary areas, the fisheries resources in the Hoh floodplain would be protected.

Queets — The Queets area is in the south western area of the park. The proposed boundary adjustments are shown on the Queets Alternative B and D maps.

Policy: Protect significant resources and values or enhance opportunities for public enjoyment related to park purposes.

Protecting portions of McKinnon and Hibbard Creeks would benefit spawning Coho salmon. Each creek supports rearing habitat.

Increased protection of riparian zones and upland process would benefit physical habitat conditions and water quality.

The proposal would afford greater potential to enhance elk habitat. Elk in the Queets corridor use the floodplain in this area during the winter for thermal regulation and foraging.

The proposed boundary change provides a more logical assemblage of land and gives the public a better recognition of where protected areas are within the park.

Quinault — Lake Quinault is along the south-central park boundary. The proposed boundary change is shown on the Quinault Alternative B map.

Policy: Address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineation such as topographic or other natural features or roads.

The south park boundary upstream of Lake Quinault would be adjusted to include the full meander width of the Quinault River for protection of elk habitat.

RELATIONSHIP OF OTHER PLANNING EFFORTS TO THIS GENERAL MANAGEMENT PLAN

The following plans have influenced the preparation of this *General Management Plan*, or may be modified based on the information in this *General Management Plan*. The following list is not all inclusive.

MANAGEMENT PLANS

The Natural and Cultural Resources
Management Plan (1999) identifies the park's objectives regarding the management of cultural and natural resources, describes strategies to address resource problems, and serves as a budgeting tool for allocating staff and funding to solve the resource problems. Its management recommendations are incorporated into the General Management Plan through broad park mission goals and resource desired conditions.

The park's *Strategic Plan* (2005) identifies goals related to the National Park Service and park-specific outcomes, including those goals and actions outlined in the *Resource Management Plan*. The *Strategic Plan* identifies those actions that are to be implemented over the next five years that relate back to park-specific legislation and mandates. The goals identified in this *General Management Plan* provide the information necessary to update the *Strategic Plan*.

The park's Museum Management Plan (2002) identifies the collection management issues facing the park and presents recommendations to address these issues. These key recommendations are included as desired conditions in this management plan.

The *Business Plan* (NPS 2003d) provided the park with a synopsis of its funding history, presented a clear, detailed picture of the state of park operations and funding for 2001, and outlined park priorities and funding strategies.

It provided the financial and operational baseline knowledge to assist in the preparation of this management plan.

The Backcountry Management Plan (1980, supplement finalized in 1992) is the guiding document for managing the backcountry and wilderness for Olympic National Park. It is expected upon completion of this General Management Plan that a comprehensive wilderness management plan will be completed. The overall objectives for wilderness management are formulated in this General Management Plan. Some important issues that are addressed in this Draft General Management Plan/Environmental Impact Statement, including wilderness zones, stock use, intertidal reserve zones, limits on numbers of campers, and structures and facilities, will directly affect the content of the park's wilderness management plan.

The Lake Crescent Management Plan (1998) is a long-range management plan that guides the future management decisions concerning resource protection and visitor use of the Lake Crescent area of Olympic National Park. This plan was considered in the development of this General Management Plan. This plan did not contain detailed site designs; therefore, individual site plans addressing various aspects of site development continue to be prepared based upon the recommendations in the plan. Examples of the individual site plans and compliance documents include the Anders Administration Building Environmental Assessment and the Rosemary Inn Historic District and Olympic Park Institute Campus Improvements Environmental Assessment.

The Olympic National Park *Fire Management Plan* (2005) was prepared to address the Department of the Interior and NPS policies related to fire management; it plays a major role in accomplishing the goal of allowing

natural processes to prevail within the park. It outlines the programs needed for protecting visitors, employees, and property from risks associated with wildland fire. Additionally, the plan includes mitigation to help protect rare, sensitive, threatened, and endangered species; critical habitat; air quality; scenic viewpoints; water quality; wilderness values; and cultural resources. The implementation of the fire plan and the five-year updates will play an integral role in reaching park desired conditions related to ecosystem management and cultural resource preservation.

The Environmental Management Systems Plan (2005) establishes the goals, objectives, and specific tasks related to a proactive environmental stewardship and leadership program at Olympic National Park. This plan promotes sustainable and "green" practices while reaffirming the park's commitment to abide by all federal and state environmental laws, regulations and policies.

TRANSPORTATION AND ACCESS PLANS

The Lake Crescent Alternatives Analysis (1997) was prepared by the Department of Transportation to assess the safe alternatives for nonmotorized travel along the length of Lake Crescent. The analysis area included approximately 11 miles of U.S. Highway 101 to the south of Lake Crescent, and up to 15 miles of trails and roads on the north side of the lake. The findings of this plan were considered in the formulation of alternatives in this General Management Plan.

The Olympic National Park Access and Traffic Management Strategies (Parametrix 2003) was prepared to provide management strategies to allow the park to move toward a more sustainable traffic system in the park, to improve the visitor experience, and to serve increased visitor demands without degrading the park resources. This analysis was considered in the formulation of this General Management Plan.

OTHER REPORTS AND PLANNING EFFORTS

The Elwha Wild and Scenic River Eligibility Report, Final Draft (2004) evaluates the eligibility and classification of the Elwha River watershed as a component of the national wild and scenic rivers system. The report concluded that following the restoration of the Elwha River watershed by the removal of Elwha and Glines Canyon dams, that river and watershed segments would be eligible for wild and scenic river designation, either under a "recreational" or "wild" classification. The General Management Plan addresses whether suitability studies would be accomplished for the other 12 rivers or streams considered eligible for wild and scenic river designation.

The Elwha River Ecosystem Restoration Final Environmental Impact Statement (1995) determined that the removal of Elwha and Glines Canyon dams has the potential to fully restore the ecosystem and Elwha native anadromous fish and fulfill the purpose of the congressional mandate for full restoration. The Supplemental Environmental Impact Statement (2005) identified and analyzed the potential impacts of a new set of water quality and supply-related mitigation measures. Both these plans were considered in the development of this General Management Plan.

The National Park Service will cooperate with the U.S. Fish and Wildlife Service and NOAA Fisheries Service to implement recovery plans approved by those agencies for listed species found in the park.

REGIONAL PLANS

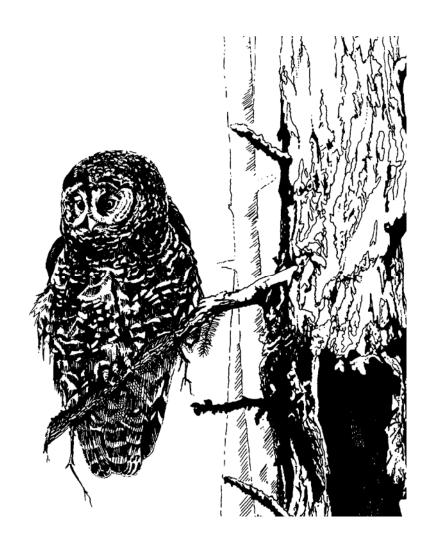
The Northwest Forest Plan (NWFP) established the overall vision for the management of federal lands in the Pacific Northwest. The NWFP mission is to adopt coordinated management direction for the lands administered by the U.S. Department of Agriculture, Forest Service, and the U.S. Department of the

Interior, Bureau of Land Management, and to adopt complimentary approaches by other federal agencies within the range of the northern spotted owl. The management of these public lands must meet dual needs: the need for forest habitat and the need for forest products.

Through a memorandum of understanding between federal agencies, including the National Park Service, a regional interagency executive committee was formed and is responsible for developing, evaluating, and resolving consistency and implementation issues with respect to specific topics including, but not limited to: geographical information systems (GIS), watershed analysis, restoration guidelines, Endangered Species Act

requirements, adaptive management guidelines, monitoring, and research.

The U.S. Fish and Wildlife Service has prepared a draft *Comprehensive Conservation Plan* for the Washington Maritime National Wildlife Refuge Complex. The purpose of this plan is to establish a framework to better manage refuge resources and to comply with federal law. The plan addresses resource management at these refuges, including the portions within the boundaries of Olympic National Park, for the next 15 years. The draft plan and environmental assessment was released for public review in summer 2005 and will likely be finalized by early 2006. (See also appendix C.)



PLANNING ISSUES

INTRODUCTION

The general public; NPS staff; representatives from other county, state, and federal agencies; tribal governments; and representatives from various organizations identified various issues and concerns during scoping (early information gathering) for this general management plan. An issue is defined as an opportunity, conflict, or problem regarding the use or management of NPS-administered lands. Comments were solicited at public meetings and through planning newsletters (see the "Consultation and Coordination" chapter).

Comments received during scoping demonstrated that there is much that the public likes about the national park and its management, use, and facilities, and that there are areas where improvements can be made. The issues and concerns generally involved determining the appropriate visitor use, types and levels of facilities, services, and activities that can be provided while remaining compatible with desired resource conditions. The general management plan alternatives provide strategies for addressing the issues within the context of the national park's purpose, significance, and special mandates.

Hundreds of ideas and comments were received during scoping meetings held with the public and park staff. Other comments came by letter, comment form, and e-mail. Every comment was read. Some of them were not appropriate for a general management plan level of detail. Other comments with general management plan-level issues, concerns, and management needs were carried forward and consolidated to create the list shown below.

DECISIONS TO BE MADE IN THE OLYMPIC GENERAL MANAGEMENT PLAN

Natural Resources

1. Using science to monitor and manage natural resources, to what extent should Olympic National Park restore natural ecological process to systems altered by humans, or let human-altered ecological processes dominate? (Issues relating to this decision topic include floodplains and erosion, stream dynamics, threatened and endangered species habitat, and extirpated species.)

Cultural Resources

- 1. Once cultural resources are identified and evaluated for significance, effective cultural resource management must address the following questions. What should be done to properly care for a cultural resource and how do cultural resources fit into the overall scheme of park management?
- 2. How should cultural resources in wilderness be managed? Prehistoric and historic human use in areas now designated as wilderness is manifested in archeological sites, historic structures, cultural landscapes, and associated features, objects, and traditional cultural properties that are contributing elements to wilderness. Laws, such as the National Historic Preservation Act, Archeological Resources Protection Act, American Indian Religious Freedom Act, and the Native American Graves Protection and Repatriation Act, as well as others, intended to preserve our cultural heritage, are applicable in wilderness.

Cultural resources in wilderness must be managed in accordance with the above laws and NPS policies, but sites must additionally be managed in a manner that preserves other wilderness resources and character. Measures to protect and inventory cultural resources in wilderness must comply with the Wilderness Act.

Tribal Relations

- 1. How can the park better work with the tribes to improve coordination and cooperation?
- 2. What are the ways and to what extent can the park work with the tribes to provide visitor opportunities and to protect park resources?

Partnerships

1. What are the ways and extent to which the park could develop and work effectively with public and private partnerships to protect park resources and provide for visitor enjoyment?

Wilderness

- 1. Consistent with wilderness values, what experiences and resource conditions should occur in the Olympic National Park wilderness? (Examples of experiences and conditions include solitude, functioning ecosystems, natural sounds and smells, and visitor self-sufficiency and responsibility.)
- 2. Consistent with wilderness values, what facilities should there be in the wilderness? (Facilities may include, but are not limited to trails, designated camping spots, toilets, historic shelters, ranger stations, radio repeaters, bridges, research facilities, and signs.)
- 3. What adjustments, if any, could be made to current wilderness boundaries to fulfill the park's mission, purpose, and significance?

Visitor Experiences

- 1. How can the park accommodate anticipated visitation increases as well as diverse visitor needs and expectations, while maintaining high-quality visitor experiences and preserving park resources?
- 2. What types and levels of educational and recreational activities could the park accommodate while still protecting park resources and promoting stewardship? (Examples of activities include hiking, camping, wildlife watching, photography, downhill and cross-country skiing, camping, boating, surfing, and wind surfing.)
- 3. What are the ways and degree to which the park could provide education and interpretation to park visitors versus providing outreach or off-site programs?
- 4. Without impairing park resources, what types, sizes, and locations of facilities could be provided to support park activities and visitor experiences? Should they be located in or outside the park? To what extent could uses be separated to avoid visitor or operational conflicts?

Access to and around the Park

- 1. What are the ways and to what extent can safe, efficient, park-oriented visitor experiences be provided in the park through the use of public or private transit, bicycles, or other nontraditional transportation options?
- 2. To what extent can there be public road and trail access to visitor destinations while minimizing or mitigating impacts on natural processes or park resources? (For example, could problems caused by short-cut trails to the beach, multiple access points into the park, and roads and trails in river valleys be avoided?)

Boundary Adjustments

1. What adjustments, if any, could be made to current park boundaries to fulfill the park's mission, purpose, and significance?

ISSUES NOT ADDRESSED IN THE GENERAL MANAGEMENT PLAN

Not all of the issues raised by the public are included in this general management plan. Other issues raised by the public were not considered because they

- are already prescribed by law, regulation, or policy (see the "Service wide Mandates and Policies" section)
- would be in violation of laws, regulations, or policies
- were at a level that was too detailed for a general management plan and are more appropriately addressed in subsequent planning documents

One suggestion was to place any fish on the federal endangered species list off limits to fishing in the park. Harvest management will be consistent with the requirements of the Endangered Species Act and the mandate for the park; therefore, this issue is not addressed in the *General Management Plan*.

Another suggestion was to have cross-park, road access. This would require building a road across the Olympic Wilderness, which

would not be permitted under the Wilderness Act.

There were many specific comments that raised issues more appropriately addressed by various future implementation plans. Suggestions included

- having a central campsite clearinghouse
- installing bear wires and outhouses in all high use wilderness campsites
- placing greater emphasis on interpreting exotic plants
- providing more interpretation programs at Sol Duc and more nature programs at campgrounds, generally
- providing more interpretation of traditionally associated people (such as fishermen, loggers, and farmers) and the history and development of the unique aspects of life on the Olympic peninsula
- grooming Obstruction Point road for cross-country skiing
- maintaining introduced fish in high lakes
- allowing pack goats in the park
- providing recycling programs throughout the park

Although comments like these are not addressed in this management plan, they will be saved and considered for future implementation plans and/or day-to-day park management.

IMPACT TOPICS — RESOURCES AND VALUES AT STAKE IN THE PLANNING PROCESS

INTRODUCTION

Impact topics allow comparison of the environmental consequences of implementing each alternative. These impact topics were identified based on federal laws and other legal requirements, the Council on Environmental Quality's guidelines for implementing the National Environmental Policy Act, NPS management policies, subject-matter expertise and knowledge of limited or easily impacted resources, and issues/concerns expressed by other agencies or members of the public during scoping. Impact topics were developed to focus the environmental analysis and to ensure that alternatives were evaluated against relevant topics. A brief rationale for the selection of each impact topic is given below, as well as the justification for dismissing any topics from further consideration.

IMPACT TOPICS TO BE CONSIDERED

Air Quality

Olympic National Park is designated as a Class I area under the Clean Air Act. Class I areas are afforded the highest degree of protection under the act. The Clean Air Act states that managers have an affirmative responsibility to protect park air-quality-related values from adverse air pollution impacts. Because of the importance of clean air to visibility, odor, flora, fauna, geological resources, archeological resources, soil resources, and water resources in the park, this topic will be retained for analysis.

Soundscapes

NPS *Management Policies* (§4.9) require national park managers to strive to preserve the natural quiet and natural sounds associ-

ated with the physical and biological resources (for example, the sounds of birds and flowing water). The natural soundscape (i.e., natural quiet) in the Olympic wilderness is a special resource to park visitors. Implementing any of the action alternatives could alter the sound-scape in one or more areas of the national park, so this topic will be retained for analysis.

Geologic Processes

The NPS Geological Resources Division brought together park staff, scientists, and other resource specialists to address the issue of human influences on geologic processes and characteristics in Olympic National Park. The processes having the most importance, the most subject to human influence, and the highest level of management significance to the park were identified, as were those processes that could be affected by the implementation of this plan. Because of this, the topic of geologic resources (including shoreline and coastal zone management) is retained.

Hydrologic Systems

Rivers and lakes are highly important ecological components of the Olympic Peninsula. They provide nutrient transport, water purification, and habitat for a wide diversity of life. Some stream channels in the park have been modified in the past. Alternatives in this document could affect stream channel morphology either beneficially or adversely, therefore, this topic is retained for analysis.

Executive Order 11990, "Protection of Wetlands," requires federal agencies conducting certain activities to avoid, to the extent possible, the adverse impacts associated with the destruction or loss of

wetlands and to avoid new construction in wetlands if a practicable alternative exists. The National Park Service must determine if proposed actions will be in or will affect wetlands. If so, the responsible official shall prepare a wetlands assessment (statement of findings), which will be part of the environmental assessment or environmental impact statement. There are two types of wetlands in the park that could be affected by implementation of any of the action alternatives — palustrine and estuarine (see glossary) — so this topic is retained for analysis.

Executive Order 11988, "Floodplain Management," requires federal agencies to evaluate the potential effects of actions they may take in a floodplain to avoid, to the extent possible, adverse effects associated with direct and indirect development of a floodplain. The National Park Service must determine whether an activity or project will be located in or will affect a floodplain. If so, staff will prepare a floodplain assessment (statement of findings). The assessment will become part of the environmental assessment or environmental impact statement. The alternatives presented in this plan propose leaving facilities in floodplains or removing them, so this topic is retained for analysis.

Intertidal Areas

The park intertidal areas (the coastal area between the high and low tide marks) have been identified by park and other scientists as ecologically critical areas because of their high biodiversity and rich array of habitats. This ecosystem is particularly susceptible to human impacts and deserves special attention to preserve its fragile nature. Therefore, this topic will be considered further in the planning process.

Soils

The soils of the Olympic Peninsula reflect a varied environment and complex history. They can be affected by construction, restoration, and visitor use. Alternatives presented in this plan could have adverse or beneficial impacts on soils, so this topic is retained.

Vegetation

Olympic National Park is home to a great variety of vegetation — from alpine tundra to coastal rain forest. Some plant species are found only on the Olympic Peninsula. There is also a concern over the spread of nonnative plants in the park. Alternatives presented in this plan could affect native and invasive exotic or nonnative vegetation, so this topic is retained.

Fish and Wildlife

Olympic National Park is home to a great variety of fish, birds, and other wildlife; some of these species are found only on the Olympic Peninsula. Alternatives presented in this plan could affect wildlife and fish species or important habitat, so this topic is retained.

Special Status Species

Analysis of the potential impacts on special status species (federal or state endangered, threatened, candidate, or species of concern) is required by the Endangered Species Act, NPS management policies, the National Environmental Policy Act, and other regulations. The alternatives presented in this document have the potential to affect special status species or habitat, so this topic will be retained for analysis.

Wilderness Values

The congressionally designated Olympic Wilderness comprises about 95% of the park. Although wilderness-specific issues and management actions will be addressed in a future wilderness management plan, this general management plan prescribes overarching management goals for wilderness management. Thus, this topic will be retained for analysis.

Cultural Resources

The National Historic Preservation Act and the National Environmental Policy Act require that the effects of any federal undertaking on cultural resource be taken into account. Also, NPS Management Policies 2001 and Cultural Resource Management Guideline (Director's Order 28) call for the consideration of cultural resources in planning proposals. Actions proposed in this plan could affect archeological resources, historic structures, cultural landscapes, ethnographic resources, and museum collections. Therefore this topic will be retained for analysis

Visitation

The planning team identified visitation as an important issue that could be affected under the alternatives. Thus, this topic will be retained for analysis.

Visitor Opportunities

The Organic Act and National Park Service *Management Policies* 2001 direct the National Park Service to provide enjoyment opportunities for visitors that are uniquely suited and appropriate to the superlative resources found in the park. Four different aspects of visitation and enjoyment are evaluated: *the spectrum of park environments* — the differences in the ability of visitors to

experience all types of park environments; recreational opportunities — five types of opportunities are discussed; recreational services — the differences in commercial recreational services available to visitors; and visitor facilities — the differences in opportunities to use facilities such as overnight lodging, camping, stores, and other facilities.

Actions in the alternatives could affect visitor use in other nearby recreational areas and local communities. In particular, implementing alternatives could redirect some visitation to locations outside the park. Depending on the number of people who were displaced from the park, the visitor opportunities offered in these areas and management of the areas could be affected. Thus, this topic will be retained for analysis.

Information, Orientation, and Interpretation

The ability of park visitors to obtain adequate information, orientation, and interpretation regarding their visit and understanding and appreciation of park resources could be affected in the alternatives. The Organic Act and NPS *Management Policies 2001* direct the National Park Service to provide enjoyment opportunities for visitors. Visitors are more apt to enjoy the park when they have received accurate information and orientation to park and area resources and facilities, and when they have opportunities through interpretive media and programs to make intellectual and emotional connections with the resources.

Actions proposed in the alternatives in this document could affect the degree of visitor understanding and appreciation of park resources, and their ability to get proper information and orientation to the park and region. Therefore this topic will be analyzed.

Visitor Access and Transportation

To develop alternatives, the collection, analysis, and application of visitor use data is required. Providing visitor access to Olympic National Park is a public and park concern. Alternatives proposed in this plan could affect visitor access; therefore, this impact topic will be retained for analysis.

Socioeconomic Environment

The National Environmental Policy Act requires an examination of social and economic impacts caused by federal actions as part of a complete analysis of the potential impacts on the "Human Environment." Clallam, Grays Harbor, Jefferson, and Mason Counties (and the city of Port Angeles in particular) make up the affected area for socioeconomic analysis. Smaller local communities within these counties and private sector businesses, including visitor service facilities and operators (e.g., restaurants and motels) could be affected by actions proposed in this management plan. The proposed boundary changes have the potential to affect socioeconomic resources on the Olympic Peninsula. Therefore, this topic will be analyzed.

Park Operations

Staffing and park priorities may change under some of the alternatives. Therefore, the effects on park operations under each alternative will be examined.

IMPACT TOPICS DISMISSED FROM FURTHER CONSIDERATION

The following impact topics were considered and determined not relevant to the development of this general management plan for Olympic National Park for the following reasons: (a) implementing the alternatives would have no effect or a negligible effect on the topic or resource or (b) the resource does not occur in the national park. The topics dismissed from further evaluation are as follows.

Coastal Zone Management

The Coastal Zone Management Act (16 U.S.C. 1451 et seq.), requires that all federal activities in coastal areas be consistent with approved state coastal zone management programs, to the maximum extent possible. Washington's Coastal Zone Management program excludes lands the federal government owns, holds in trust, or otherwise has the sole discretion to determine their use (letter dated September 23, 2005).

Although NPS-administered lands do not require a coastal zone consistency determination, if an action may affect a coastal zone area, the National Park Service would evaluate the potential impacts on this zone and, where appropriate, consult informally with the state of Washington Department of Ecology.

Under this *General Management Plan*, the National Park Service proposes no development in any area of the national park that would conflict with the coastal management program. A copy of the *Draft General Management Plan / Environmental Impact Statement* has been submitted to the state Department of Ecology for a consistency review.

Energy Requirements and Conservation Potential

Alternatives C and D, the preferred, could result in new facilities with inherent energy needs. In both alternatives, new facilities would be designed with long-term sustainability in mind. The National Park Service has adopted the concept of sustainable design as a guiding principle of facility planning and development (*Management Policies* 9.1.1.7).

The objectives of sustainability are to design facilities to minimize adverse effects on natural and cultural values, to reflect their environmental setting, and to require the least amount of nonrenewable fuels/energy.

Alternatives C or D could result in an increased energy need, but this need is expected to be negligible when seen in a regional context. Thus, this topic is dismissed from further analysis.

Environmental Justice

On February 11, 1994, President William J. Clinton signed Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-*Income Populations*. This order requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs/policies on minorities and low-income populations and communities. The Secretary of the Interior established Department of the Interior policy under this order in an August 17, 1994, memorandum. This memorandum directs all bureau and office heads to consider the impacts of their actions and inactions on minority and low-income populations and communities; to consider the equity of the distribution of benefits and risks of those decisions; and to ensure meaningful participation by minority and low-income populations in the department's wide range of activities where health and safety are involved.

The Environmental Protection Agency's Office of Environmental Justice defines environmental justice as:

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of

environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs ands policies.

The goal of this "fair treatment" is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts.

(Environmental Protection Agency, "Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis," April 1998, pages 7-8)

In responding to this executive order two questions are asked and answered as the major part of the analysis:

- 1. Does the potentially affected community include minority and/or low-income populations?
- 2. Are the environmental impacts likely to fall disproportionately on minority and/or low-income members of the community and/or tribal resources?

Minority Populations. Minority populations exist in the affected region (the four-county area; see table 13 in the "Affected Environment" chapter). Native Americans make up the largest minority group in this four-county area. According to the U.S. Census Bureau, the 8,874 Native Americans represent about 4.3% of the region's total population of 207,077 persons; about 60% of these individuals live on the eight reservations in the affected area. The next largest minority group (8,357 Hispanics or Latinos) constitutes about 4.0% of the total population. African Americans (1,468 persons) make up only 0.7%

of the total population in the region. Compare these figures to the state demographic for race where Hispanic/Latino Americans are 7.5% of the state's population. Asian Americans are the next largest minority at 5.5% of the state's population, and Native Americans make up less than 2% of Washington's population.

Low Income/Poverty Populations. All four counties have had higher rates of poverty than the state in 1999, and Grays Harbor County was much higher than the national average. Very low per capita personal incomes, high unemployment rates, and high poverty rates are indicative of low-income populations and communities.

- The developments and actions of the alternatives would not result in any identifiable adverse human health effects. Therefore, there would be no direct or indirect negative or adverse effects on human health on any minority or lowincome population or community.
- The impacts on the natural and physical environment that occur due to implementing any of the alternatives would not disproportionately adversely affect any minority or low-income population or community, or be specific to such populations or communities.
- The alternatives would not result in any identified effects that would be specific to any minority or low-income community.
- The Olympic planning team actively solicited public participation as part of the planning process and gave equal consideration to all input from persons regardless of age, race, income status, or other socioeconomic or demographic factors.
- Park staff and planning team members have consulted and worked with the affected Native American tribes and will continue to do so in cooperative efforts to improve communications and resolve any problems that occur. In addition, the planning team did not identify any negative or adverse effects that would

disproportionately and adversely affect the tribes.

Based on the above information and the requirements of Executive Order 12898, environmental justice was ruled out as an impact topic to be further evaluated in this document.

Indian Trust Lands

The National Park Service does not manage or administer Indian trust assets. The overriding mandate for the National Park Service is to manage the park units in the national park system consistent with park laws and regulations. Where Olympic National Park shares boundaries with the Quinault, Hoh, Quileute, Ozette, and Makah reservations, some park activities may affect trust assets on the reservation. "When park managers have reason to believe that park activities may affect Indian trust assets, they are responsible for initiating and maintaining government-togovernment consultation with the affected tribal government(s)" (Memo to Assistant DOI Secretary, Policy, Management and Budget from Acting NPS Director, dated March 1, 2001).

No lands comprising Olympic National Park are held in trust by the secretary of the interior solely for the benefit of American Indians due to their status as American Indians. Therefore, this topic was dismissed from further analysis.

Natural or Depletable Resources Requirements and Conservation Potential

Consideration of these topics is required by 40 *Code of Federal Regulations* (CFR) 1502.16. The National Park Service has adopted the concept of sustainable design as a guiding principle of facility planning and development (NPS *Management Policies* 9.1.1.7). The objectives of sustainability are to design facilities to minimize adverse effects on

natural and cultural values, to reflect their environmental setting and to maintain and encourage biodiversity, to operate and maintain facilities to promote their sustainability, and to illustrate and promote conservation principles and practices through sustainable design and ecologically sensitive use. Essentially, sustainability is the concept of living within the environment with the least impact on the environment.

None of the alternatives would substantially affect the park's energy requirements because any rehabilitated or new facilities would take advantage of energy conservation methods and materials.

Through sustainable design concepts and other resource management principles, the alternatives analyzed in this document would attempt to conserve natural or depletable resources. However, some of the techniques that may be used to maintain road access in the floodplains under some of the alternatives may not be sustainable and could result in impacts on hydrologic and riparian processes. Therefore, those topics are evaluated in this document under "Hydrologic Systems," and a separate Statement of Findings is attached as appendix D.

Night Sky

The National Park Service recognizes that the night sky over Olympic National Park is a feature that substantially contributes to the visitor experience. NPS policy requires the preservation, to the extent possible, of the natural lightscapes of parks and minimization of the intrusion of artificial light (light pollution) into the night scene (NPS *Management Policies 2001*, 4.10). The clarity of night skies is important to visitor experience as well as being ecologically important. Artificial light sources both in and outside the park can diminish night sky viewing opportunities.

Any new outdoor lighting installed as a result of implementing any of the alternatives in this document would be the minimum necessary for safety or security, and new lighting would be designed to prevent stray light from spreading into the sky. Because implementation of any of the alternatives in this document would not affect night sky viewing opportunities more than negligibly, this topic will not be analyzed further.

Prime or Unique Farmlands

In August 1980 the Council on Environmental Quality directed that federal agencies must assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture's Natural Resource Conservation Service as prime or unique. Prime farmland is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland soils produce specialty crops such as specific fruits, vegetables, and nuts.

According to the National Resource Conservation Service there are no unique farmlands in the park. Prime farmland in the Olympic area tends to be in the flatter river bottoms, usually in the floodplain. The local NRCS office has completed a limited soil survey in the Queets River valley and identified some prime farmland in the lower part of the valley. Soil surveys have not been completed in other parts of the park; however, it can be assumed that there could be prime farmlands in lower river valleys (such as along the Quinault River) and in some coastal river valleys (such as the Quillayute River) with less than 8% slope. Private agriculture is not allowed in the park, so this type of land use would not be affected by this plan. The prime farmlands are in the floodplains, and none of the alternatives propose development in prime farmland. Therefore, there would be no impacts on prime or unique farmlands and the topic is being dismissed from further analysis in this document (pers. comm. 5/5/2003 Chuck Natsuhara, NRCS soil scientist).

Urban Quality and Design of the Built Environment

Consideration of this topic is required by the *Code of Federal Regulations* (CFR) 1502.16. The quality of urban areas is not a concern in this planning project except possibly in the headquarters area. Throughout the park, vernacular architecture and park-compatible design would be taken into consideration for new structures built under all of the action alternatives. Emphasis would be placed on designs and materials and colors that blend in and do not detract from the natural and built environment. Therefore, adverse impacts are anticipated to be negligible. No further consideration of this topic is necessary.

Water Quality

Effects on water quality are regulated by NPS policies and the Clean Water Act (33 USC 1344). NPS *Management Policies 2001*, 4.6.3, requires that the National Park Service will

take all necessary actions to maintain or restore the quality of surface waters and ground waters within the parks consistent with the Clean Water Act and all other applicable federal, state, and local laws and regulations;

Surface water resources in the Olympic National Park area of interest include the Pacific Ocean and Strait of Juan de Fuca; the Elwha, Hoh, Skokomish, Dosewallips, Quinault, Queets, Sol Duc, and other rivers; Matheny, Morse, Bear, and numerous other creeks; Crescent, Quinault, Ozette, Mills, Cushman, and numerous smaller lakes; many springs; and several marshland areas near the west coast. The data inventories and analyses contained in the baseline water quality report completed by the NPS Water Quality Division in 1999 indicate that surface waters in the study area generally appear good with some impact from human activities. Potential anthropogenic sources of contaminants

include municipal and industrial wastewater discharges, residential development, logging activities, gravel pit operations, stormwater runoff, recreational use, and atmospheric deposition (NPS 1999a). Most of these sources occur downstream of the park. There are several sources of natural turbidity in the waters, including normal suspended fine material caused by shifts in river channels and the resultant erosion of banks. Where steep, unstable slopes and heavy winter precipitation predominate, high water events cause natural turbidity in streams.

Some degradation to the park's surface waters may come from runoff from parking lots and roads, and fuel discharge from the use of motors in lakes and rivers. Oil, gasoline, and other automotive fluids can be flushed from these surfaces into waterways during rain or snow melt. The extent and effects of this have not been studied.

A concern in the park is the effect of discharge from the Sol Duc Hot Springs resort on the Sol Duc River. The resort uses small amounts of chlorine to control bacteria in its spring-fed swimming pool, which drains into the river. The NPS Water Resources Division funded a study in 1994 to evaluate if a relationship exists between the resort operation and lack of coho spawning in the area. Biological, hydraulic, and water chemistry (chlorine, dissolved oxygen, conductivity, pH, turbidity, and redox) characteristics of the river were analyzed. The preliminary conclusion is that the chlorine probably evaporates off before being flushed into the river (NPS 1999b).

Data from study of the Elwha River indicates that the river and its tributaries are currently oligotrophic (low in nutrients). Removing the dams and restoring the historical anadromous salmon runs would be a positive step towards the restoration of nutrients to the Elwha River watershed (NPS 1999b).

Water quality protection measures (mitigation) and best management practices

would be used to protect water quality and prevent its degradation from construction or other park operations. Such measures include in-stream sedimentation check dams, surface silt fencing, prompt revegetation, and replacement of topsoil. Facilities at Sol Duc Hot Springs would be monitored to ensure that the waters meet health standards for bathing facilities. In addition, the discharge from these facilities would be monitored for water quality.

These procedures are being applied now and would be applied under any alternative presented in this document. Additional actions such as replacing deteriorated culverts have been completed, in part, to protect water quality in the park. Future construction or other surface-disturbing actions occurring as a result of implementing any of the action alternatives would require further site-specific environmental analysis and include water quality protection measures (mitigation) such as those mentioned above. Thus, implementing any of the alternatives would have no more than a negligible affect on water quality and would not interfere with protection mandates, so this topic is dismissed from further analysis.

Wild and Scenic Rivers

A preliminary park analysis has determined that the following 13 rivers or river segments within park boundaries are eligible for designation as part of the Wild and Scenic Rivers system under the Wild and Scenic Rivers Act:

Bogachiel River
Ozette River
Calawah River
Queets River
Dosewallips River
Quinault River
Duckabush River
Royal Creek
Elwha River
Skokomish River
Gray Wolf River
Sol Duc River
Hoh River

An eligibility report has been completed for the Elwha River. For the purposes of this study, the river was divided into two segments and its tributaries. Segment one, from the mouth to Glines Canyon Dam, was found to be eligible for designation as a wild and scenic river upon the removal of the dams. Segment two, from the backwaters of Glines Canyon Dam to the river's headwaters, and all tributaries within the park, were found to be eligible under current conditions. No actions are being proposed that would affect the eligibility of the river.

No formal eligibility studies have been conducted for the remaining eligible rivers. Most of the eligible portions of these rivers are in designated wilderness, and wild and scenic river designation would compliment this and afford additional protection. Further studies of eligibility will be conducted after the completion of this general management plan, so this topic is dropped from further environmental analysis.