

II.1 Introduction

(See Section 1 of the current Nomination Form and Section 1, 2 and 3 of the original Nomination Forms)

1a) State Party:
USA

1b) Name of World Heritage property:
Olympic National Park

1c) Please provide geographical coordinates for the site to the nearest second. (In the case of large sites, please give three sets of geographical coordinates.)

Geographical coordinate: - 124 42 37W 47 27 38N

Geographical coordinate: - 124 44 14W 48 16 27N

Geographical coordinate: - 123 07 18W 48 17 14N

Geographical coordinate: - 123 07 11W 47 28 24N

1d) Give date of inscription on the World Heritage List.

date (dd/mm/yyyy): 30/10/1981

1e) Give date of subsequent extension(s), if any.

date (dd/mm/yyyy): 12/12/1990

1f) List organization(s) responsible for the preparation of this site report.

Organization #1

Organization Name: Olympic National Park
Last Name: Laitner
First Name: Bill
Title: Superintendent
Address: 600 East Park Ave.
City: Port Angeles
State/Prov: WA
Postal Code: 98362
Telephone: 360-565-3001
Fax: 360-565-3015
Email: bill_laitner@nps.gov

II.2 Statement of Significance (see Section 2 of the current Nomination Form and Section 5 of the original Form)

2a) When a State Party nominates a property for inscription on the World Heritage List, it describes the heritage values of the property which it believes justifies the inscription of the property on the World Heritage List. Please summarize the justification for inscription as it appears in the original nomination of the property.

The original nomination stated that Olympic National Park is considered to be of outstanding universal value and was nominated to the World Heritage list because it contains the largest and best example in the western hemisphere of virgin temperate rainforest. The park is a complete ecosystem with hundreds of species, many endemic to the area, that are continuing to evolve in a relatively natural state. The ecosystem is intact and of sufficient size to include the components necessary to assure its continuing natural existence, and protection of its integrity is afforded by its management as a national park by the United States National Park Service under Federal statutes.

The park is of exceptional natural beauty and is the largest protected area in the temperate region of the world that includes in one assemblage a combination of ecosystems from ocean edge, through wet mixed coniferous forests to glacial peaks. The area contains 60 glaciers, 62 miles (100 km) of roadless ocean coastline, and one of North America's largest areas of subalpine meadows. The park contains the largest intact stand of mixed coniferous forest in the conterminous United States, including most of the world record size specimens of major coniferous species. There are 500 taxa of vascular plants, 180 species of birds, and 50 species of mammals, of which at least thirteen taxa of plants and seven taxa of animals are endemic to Olympic National Park. With ten major watersheds and over 200 streams and rivers, anadromous as well as resident population of seven salmonid species, the park may contain the largest intact assemblage of habitat and native gene stocks of salmonid species in the conterminous United States.

2b) At the time of initial inscription of a property on the World Heritage List, the World Heritage Committee indicates the property's outstanding universal value(s) (or World Heritage value(s)) by agreeing on the criteria for which the property deserves to be included on the World Heritage List. Please consult the report of the World Heritage Committee meeting when the property was listed and indicate the criteria for which the Committee inscribed the property on the World Heritage List. (Choose one or more boxes.)

Cultural Criteria

- i
- ii
- iii
- iv
- v
- vi

Natural Criteria

- i
- ii
- iii
- iv

2c) *At the time of initial inscription, did the World Heritage Committee agree upon a Statement of Significance for the WHS? (Consult the report or minutes of the World Heritage Committee meeting when the property was listed.*

No

2c1) *If YES, please cite it here.*

2c2) *If NO please propose a Statement of Significance for the World Heritage Site based on the consideration given the property by the Committee when it inscribed the property on the World Heritage List. (Note: Following the completion of the Periodic Report exercise, the State Party, in consultation with appropriate authorities, will determine whether to proceed with seeking a Committee decision to approve any proposed Statement of Significance. The Committee must approve any proposed Statement of Significance through a separate, formal process. See 7g.)*

Olympic National Park is the largest and best example in the western hemisphere of virgin temperate rainforest. The park ecosystem contains hundreds of species, many endemic to the area, that are continuing to evolve in a relatively natural state. The park's boundaries contain 373,397 hectares (922,651 acres) of which 354,788 hectares (876,669 acres) are designated wilderness, including 100 km (62 miles) of roadless coastline, 60 glaciers, one of North America's largest areas of subalpine meadows, and the largest intact stand of mixed coniferous forest in the conterminous United States, with most of the world record size specimens of major coniferous species.

The park contains 981 species of native, terrestrial, vascular plants and 342 species of native aquatic plants, 301 species of birds, 59 species of terrestrial mammals, and 11 species of marine mammals. 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 found nowhere else. The park's ten major watersheds and over 200 streams support 22 breeding native fish species, including anadromous as well as resident populations of seven salmonid species. The park may contain the largest intact assemblage of habitat and native gene stocks of salmonid species in the conterminous United States. Endemic species and subspecies in the park include two sensitive plants and six others, several mammals, including the Olympic marmot (full species), three subspecies of endemic fish, and seven endemic insects. The park contains 11 threatened animal species and 21 species of federal concern. There are 17 species of plants listed as threatened or sensitive by the State of Washington, but none are federally designated.

The park's proximity to eight federally recognized tribal reservations--of which it shares boundaries with four--provides opportunities to cooperate to protect park resources. The Olympic Coast Marine Sanctuary provides a buffer for marine protection and federal and state forest lands offer additional opportunities for boundary protection.

The park functions as a scientific 'control site' for long-term ecological monitoring because of its intact ecosystem and distinct geography located away from major pollution sources. The park's ancient forests serve as a benchmark for the study of threatened and endangered species, such as the Spotted Owl. The park's long-term ecological monitoring program will specifically target potential or predicted stressors so that impacts from invasive plants, effects of visitor use, impacts of airborne pollutants, and land-use practices outside the park will be closely monitored.

2d) Since the original inscription of the property on the World Heritage List, has the World Heritage Committee agreed with a proposal by the State Party that the property be recognized for additional World Heritage values and added additional criteria to the inscription as a result of a re-nomination and/or extension of the property?

No

*2d1) If YES, please indicate which new criteria were added and the date.
(dd/mm/yyyy)*

II.3 Statement of Authenticity / Integrity
(See Section 2 of the current Nomination Form and Section 4 of the original Form)

3a) In addition to meeting one or more of the criteria, which justify inscription on the World Heritage List, a natural or cultural property must meet the appropriate conditions of authenticity and/or integrity, as defined in clauses 24b and 44b of the Operational Guidelines for Implementing the World Heritage Convention. If at the time of inscribing the property on the World Heritage list, the State Party and the International Council on Monuments and Sites, ICOMOS and/or the International Union for Conservation of Nature and Natural Resources, IUCN, evaluated the authenticity and integrity of the property, please cite those evaluations here. (Please quote directly from the nomination, Committee minutes and the Advisory Body's evaluation.)

"The site is large enough to contain on-going geological processes (Glaciation and changing coastline) and evolution of the many and varied forest types. Ideally, the site should include the forest which separates the 100 kilometer-long coastal strip from the montane areas, but this is not considered feasible or vital to the integrity of the site as both the coastal strip and the 3350 square kilometers of the Olympic Mountains can stand alone.

The main danger to the integrity of the site is, oddly, one of its attractions: the mountain goat. Due to the location of the site, mountain goats never dispersed naturally to the Olympics, so their introduction in 1925-29 may be causing significant changes in the natural ecosystem. Research has suggested that the mountain goats have reduced plant cover, increased erosion, and shifted plant-community dominants toward more resistant or less palatable species; they have been recorded feeding on at least three of the endemic plants, and some concern has been expressed that these species may be endangered by the mountain goat." [From ICUN Technical Review, #6 Integrity]

3b) Have there been significant changes in the authenticity or integrity of the property since inscription?

NO

3b1) If YES, please describe the changes to the authenticity or integrity and name the main causes.

II.4 Management

(See Section 4 of the current Nomination Form and Section 2 and 4 of the original Form)

Management Regime

4a) How can the ownership/management of the property best be described? (Select all that apply.)

- management under protective legislation
- management under contractual agreement(s) between State Party and a third party
- management under traditional protective measures
- other

Please describe.

52 Stat. 1241 (Statute to create Olympic National Park)

In 1897, the beauty and significance of the Olympic Peninsula was formally recognized through President Cleveland's designation of 2,188,000 acres (885,456 hectares) as the Olympic Forest Reserve (which was later reduced in size by over 500,000 acres/202,344 hectares). Within that area, Mount Olympus National Monument was established in 1909 (it, too, was subsequently reduced in size). In 1916, the National Park Service was created, and, in 1933, administration of Mount Olympus National Monument was transferred from the U.S. Forest Service to the National Park Service. Olympic National Park was established in 1938 with the abolishment of Mount Olympus National Monument (52 Stat. 1241). Legislation subsequent to the enabling act of Olympic National Park has, among other provisions, authorized exclusive jurisdiction within the park, added rain forest acreage, the Morse Creek watershed, and the Queets corridor, enlarged the coastal strip, adjusted park boundaries to hydrographic divides, and designated a portion of the park as wilderness (Frank and Rhines, 1986). The park currently encompasses over 922,000 acres (373,121 hectares).

4b) Please indicate under which level of authority the property is managed

National

Please describe

4c) Please describe the legal status of the property. For example, is it a national, provincial or territorial park? A national or provincial historic site?

U.S. Department of Interior, National Park Service

4d) Please provide the full name, address and phone/fax/e-mail of the agency(ies) directly responsible for the management of the property.

Contact #1

Agency Name: Olympic National Park
First Name: Bill
Last Name: Laitner
Address: 600 E. Park Ave.
City: Port Angeles
State/Prov: WA
Postal Code: 98362
Telephone: (360) 565-3002
Fax: (360) 565-3015
Email: bill_laitner@nps.gov

Contact #2

Agency Name: National Park Service
First Name: Fran
Last Name: Mainella
Address: 1849 C Street, N.W.
City: Washington
State/Prov: District of Columbia
Postal Code: 20240
Telephone: 202-208-4621
Fax:
Email: fran_mainella@nps.gov

4e) Please provide a list of key laws and regulations, which govern the protection and management of the cultural and natural resources of the property.

The following are United States federal statutes:

Antiquities Act, 1906 (16 USC 431 et seq.)

Act to Establish the National Park Service (Organic Act), 1916 (16 USC 1)

Act to Abolish Mount Olympus National Monument and Establish Olympic National Park, 1938 (P.L. 75-778, 52 Stat. 1241)

Wilderness Act, 1964 (16 USC 1131 et seq.)

National Historic Preservation Act, 1966 (16 USC 470 et seq.)

Clean Air Act, 1967, as amended (42 USC 7401–671)

National Environmental Policy Act, 1969, as amended (42 USC 4321 et seq.)

Act to Improve the Administration of the National Park System (General Authorities Act, 1970, as amended (16 USC 1a-5 et seq.)

Federal Water Pollution Control Act, 1972 (Clean Water Act), as amended (33 USC 1251 et seq.)

Coastal Zone Management Act of 1972 (16 USC 1455, as amended through P.L. 104-150, Coastal Zone Protection Act of 1996)

Endangered Species Act, 1973 (16 USC 1531 et seq.)

Resource Conservation and Recovery Act, 1976, as amended (42 USC 6901 et seq.)

American Indian Religious Freedom Act, 1978 (42 USC 1996 et seq.)

Archaeological Resources Protection Act, 1979 (16 USC 470 et seq.)

National Parks Overflights Act, 1987 (Public Law 100-91)

Washington Park Wilderness Act of 1988 (P.L. 100-668, 102 Stat. 3961)

Native American Graves Protection and Repatriation Act, 1990 (25 USC 3001 et seq.)

Elwha Ecosystem and Fisheries Restoration Act of 1992, (P.L. 102-495, 106 Stat. 3173)

Magnuson-Stevens Fishery Conservation and Management Act, 1996 (16 USC 1801)

National Park Air Tour Management Act, 2000 (Public Law 106-181)

4f) Please describe the administrative and management arrangements that are in place for the property concerned, making special mention of the institutions and organizations that have management authority over the property and the arrangements that are in place for any necessary coordination of their actions. Make special reference, if appropriate, to the role of First Nations in managing the property.

None of the following have management authority over the property.

The National Oceanic and Atmospheric Administration manages the adjacent Olympic Coast National Marine Sanctuary, which has overlapping jurisdiction with the park in the intertidal area. The park cooperates with the Marine Sanctuary in decisions that affect the intertidal area, however, neither agency has authority over the other.

Olympic Peninsula tribes share co-management with the state of Washington for salmon fisheries. USFWS guides management of threatened or endangered species within the park, although ultimate decision authority rests with the park.

The park has exclusive jurisdiction. Under exclusive jurisdiction, law enforcement activities and investigations must be conducted by the United States. The State has no legal obligation or authority to enforce criminal law in the park.

4g) Please also note whether there have been any significant changes in the ownership, legal status, contractual or traditional protective measures, or management regime for the World Heritage Site since the time of inscription.

In 1988, 876,669 acres (354,776 hectares), or almost 95% of the park was designated as Wilderness. (Washington Park Wilderness Act of 1988, P.L. 100-668, 102 Stat. 3961).

Several sites within the park individually have special recognition. There are four established Research Natural Areas in the park. Additionally, in 1983, Point of Arches was listed on the National Registry of National Landmarks.

In October 1988, Congress reauthorized the National Marine Sanctuary program. Under this program, portions of Olympic's coastal strip and offshore islands were included in the Olympic Coast National Marine Sanctuary designated in 1994. Additionally, in 1993, 13 park rivers were listed as eligible for "Wild and Scenic" status. The intent of the Wild and Scenic Rivers Act, passed in 1968 (P.L. 90-542), is to protect the existing natural state of free-flowing rivers which are principally bordered by large amounts of federal land. There is currently no active consideration of this proposal within the Congress.

4h) Is there a management plan for the property?

YES

4h1) If YES, please summarize the plan, indicating if the plan is being implemented and since when, and the URL where the plan can be located, if available. (A copy of the plan should be submitted in December 2004. See Section 8)

The last park management plan was the 1976 Master Plan. While the plan discussed uses and concepts, it did not include alternatives or prescriptions. The 1976 plan focused on finding a balance between visitor use and natural resource constraints, and highlighted as a high priority research such as a vegetation mapping, soil mapping, human behavior patterns, monitoring forest conditions, status of rare and endangered plants, and effects of human activities. None of these studies have been completed; however, various research studies have included elements of vegetation mapping, rare and endangered species status, and effects of human activities.

The General Management Plan that is in progress (2005) contains specific decision points and desired conditions based on public and agency issues. The decision points address the following: resource protection and sound science; the role of cultural resource protection and interpretation; wilderness values and visitor experience, facilities in the wilderness, protection standards to preserve wilderness values and accomadation while preserving resources; park access without causing greater impacts to the resources (trails, parking and roads); and partnerships to protect our resources, and to enhance cooperative opporitiunities with Olympic Peninsula tribes to protect tribal heritage values.

The outcome of this plan will be preferred alternatives to guide decision-making over the next 20 years.

4h2) If NO, is a management plan under preparation or is preparation of such a plan foreseen for the future?

Park General Management Plan scheduled for completion in 2005

Financial Resources

4i) What is the annual operating budget for the property in the current fiscal year? (For sites consisting of more than one property provide the budgets of constituent parts.)

The 2004 budget is not final yet. Based on preliminary information base funds (congressionally appropriated) should be \$10,446,000 USD for routine park operations.

Last year (2003) the park received non-base funds (project-specific funding) for cultural and natural resource management studies and resource rehabilitation (\$640,000 USD) targeted maintenance projects, such as roads, trails and buildings (\$812,000 USD) and resource education (\$41,000 USD). Some of these project funds are multi-year, such as a four year major revegetation project to rehabilitate impacted campsites.

Sources of Expertise and Training in Conservation and Management Techniques

4k) Please describe any sources of specialized expertise, training, and services that come from sources off-site (e.g., training centers, museum conservation facilities).

Olympic National Park has installed a National Park Service Technology Enhanced Learning (NPS-TEL) center to provide its workforce remote employee development opportunities. Through interactive courses delivered by satellite, employees can refresh their knowledge, gain new skills, receive mandatory training, and get timely supervisory training. Employees self-register for the NPS-TEL courses on-line at <http://www.telmps.net/index.cfm>. This website also features upcoming training events and a list of NPS units that are offering each course. The workforce can also participate in the National Park Service's Training and Development Program, which offers hundreds of classroom-based, computer-based, and television-based training courses, as well as workshops and symposia.

New permanent employees are required to complete a two-year, five-part program in the fundamental, universal competencies expected of all National Park Service employees. More specialized learning opportunities are available in the following areas: supervision; management and leadership; administration and office management support; information management; cultural resources stewardship; historic preservation skills and crafts; planning, design and construction; natural resources stewardship; interpretation, education, and cooperating associations; recreation and conservation programs; visitor use management; law enforcement and resource protection; fire and aviation management; facility maintenance; and several specialty fields. A catalog of current course offerings and training events is available online at <http://www.nps.gov/training/pdf/2003-catalog.pdf>.

National Park Service training facilities include the Horace M. Albright Training Center (located within Grand Canyon National Park), Stephen T. Mather Training Center, the Historic Preservation Training Center, Capital Training Center, and the NPS/Federal Law Enforcement Training Center. Through partnerships with other agencies and institutions, National Park Service employees are encouraged to take advantage of programs offered at such facilities as the Arthur Carhart National Wilderness Training Center, the Olmsted Center for Landscape Preservation, and the National Interagency Fire Center. Sources of off-site expertise and specialized services include the National Park Service's Harpers Ferry Center, which provides a variety of services, including interpretive planning, conservation of objects, audiovisual equipment repair, graphics research, replacement of wayside exhibits, and the revision and reprinting of publications. Regional archeological centers, including the Western Archeological Center in Tucson, Arizona, offer curatorial facilities for artifacts and expertise in artifact preservation. Additional technical assistance for the care and management of museum collections is provided online by the National Park Service's Archeology and Ethnography Program, which also sponsors courses on how to incorporate ethnography into park planning, management, and interpretation. Online aids provided to employees by the National Park Service include technical publications, searchable databases, notification about learning opportunities both within and outside the agency, and Internet links to related Web sites.

4j) Please provide information about the number of staff working at the World Heritage Site (enter figures).

Full Time: 101 Fulltime Permanent, 21 subject-to-furlough (Value must be a number)
Part Time: 5 part time and one intermittent (Value must be a number)
Seasonal: 152 and 4 term positions (Value must be a number)
Other: 939 Volunteers
265 Concession employees
8 Northwest Interpretive Association (Value must be a number)

These are 2003 figures.

Please list the job categories of these staff (e.g., Park Superintendent, Historian, Ecologist, Interpreter, General Works/Maintenance Manager) and describe the specialized skills and expertise of the World Heritage Site's staff members.

Superintendent, Deputy Superintendent, Public Information Officer, GIS, Administration, maintenance, resource education, park rangers, wilderness information, fee collection, natural resource management, cultural resource management, seasonal ranger staff.

Visitation

4l) Are there any visitor statistics for the site?

YES

4l1) If YES, please provide the annual visitation for the most recent year it is available, indicating what year that is, a brief summary of the methodology for counting visitors, and briefly describe the trends in visitation. (In describing these trends, please use the year of inscription as a baseline.)

Visitation in 2003 was 4,354,844

Although Olympic is a wilderness park, it is accessible by road at nine distinct points of entry. The park has inductive loop traffic road counters at these nine points of entry. Of these nine points, Lake Crescent, Kalaloch, and Hurricane Ridge account for 70% of visitation. Highway 101, the primary highway on the Olympic Peninsula, traverses Lake Crescent and Kalaloch, and Hurricane Ridge has a well-maintained year-round road where visitors can view the heart of the Olympic Mountains. The traffic count is multiplied by a persons-per-vehicle (PPV) multiplier. The PPV varies by location and month. As a general trend, visitation has increased steadily from 1980 to the present, with a period of rapid growth between 1993 and 1997. In 1980, the park received 2.5 million visitors. By 1999, that figure had increased 70 percent to 4.2 million. Part of the increase can be contributed to the long-term trend of extended visitor use, particularly during the spring and fall.

4m) Please briefly describe the visitor facilities at the property.

Olympic National Park's infrastructure for visitors includes 168 miles (270 km) of roads, 611 miles (983km) of trails and 2600 campsites. All roads into and around Olympic National Park eventually lead to the major arterial highway of the Olympic Peninsula, U.S. Highway 101. 20 miles (32 km) of this main highway are included within the park boundary--8 miles (13 km) at Kalaloch and 12 miles (19 km) at Lake Crescent. There are 69 miles (111 km) of paved roads in the park and 99 miles (159 km) of graded roads. The parkwide road system has three tunnels and 27 bridges, ranging in length from 32 feet to 235 feet (9.75km-71.6km). Most bridges are concrete with only a handful of the log and timber stringer type still in service. Each road into the park eventually terminates at a trailhead parking area from which one can begin a hike along the 611 miles (983 km) of trail within the park. The trail system includes 32 bridges ranging in length from 40 to 120 feet (12-37 m) with hundreds of smaller spans and footlogs. There are approximately 12 miles (19 km) of wood-decked puncheon or boardwalk in the park. Half of that traverses wetlands providing coast access at Ozette.

There are six concession facilities in the park. Four provide overnight lodging and food services: Kalaloch Lodge, Sol Duc Hot Springs Resort, Log Cabin Resort and Lake Crescent Lodge. There is a gift shop and snack bar at Hurricane Ridge, and a store with a coffee shop and boat rentals at Fairholme General Store on Lake Crescent. Therapeutic and swimming pools are located at Sol Duc Hot Springs, and there is a down-hill ski area and winter play area at Hurricane Ridge.

Park Service Visitor Centers are located at Port Angeles, Hoh, and Hurricane Ridge; park Ranger stations are located at Elwha, Lake Crescent, Mora, Kalaloch, Quinault, Staircase, and Hoodspout. There is also a multi-agency visitor contact facility in Forks.

4n) Is there tourism/visitor management plan for the property?

NO

4n1) If YES, please briefly summarize the plan, and provide a URL where the plan can be located.

Scientific Studies

4o) Please list key scientific studies and research programs that have been conducted concerning the site. (Please use the year of inscription as a baseline.)

Olympic National Park has a robust research program comprised of three parts. First, the park conducts original research as part of its own natural resource management function. Such projects include areas of immediate management concern or where the park has legal obligation (human/predator interactions; Northern Spotted Owl demography; status and distribution of rare or endangered plant species, identification of archeological sites, historic structures, cultural landscapes, and ethnographic resources, etc.). Second, many academic scientists or scientists from other government agencies perform original research in the park each year on topics of their own interest, and under conditions described in scientific research permits issued by the park. These projects are integrated when possible into the park's overall research needs and may comprise as many as 80 permits issued in a given year. For example, topics of independent research include: nutrient dynamics of small watersheds; geological investigation of landslides affecting lake impoundments; genetic affinity of target bird species; and the fate of large woody debris in the Queets River. (See <http://science.nature.nps.gov/permits/servlet/IarFormSearch>).

Third, the park is developing formal protocols for "Vital Signs Monitoring," an ecological trend analysis designed to monitor the condition of the park's ecosystems. The Vital Signs protocols will be peer-reviewed, published, and the significant resources monitored indefinitely. In order to direct this work, the park has a full time Research Coordinator and a full time Data Manager on staff, as well as scientists supervising the following programs: Marine and Coastal Ecology, Fisheries Biology, Vegetation Ecology, Geographic Information Systems/Remote Sensing, Wildlife, Dam Removal, Archeology and Anthropology.

4o1) Please describe how the results of these studies and research programs have been used in managing the World Heritage Site.

Most park research programs are specifically intended to address management needs. The park resource management program, and the long-term ecological monitoring initiative, all have, as their goals, delivery of timely early warnings of ecological change.

Mountain goat research has included publication of a major monograph detailing impacts of this non-native animal to the park's ecosystem. This document was used in preparation of an Environmental Impact Statement on goats and will continue to be the baseline as the park strives to reduce goat numbers. Research continues to discover feasible ways to reduce goat numbers.

Research on many species of anadromous fish, and recent work using radio-tags implanted in threatened bull trout, have been widely used by the park, by the US Fish and Wildlife Service, by Washington State agencies, and by local Indian tribes in setting harvest rates and establishing fishing regulations.

Olympic National Park research on Northern Spotted Owls has provided important baseline data to the Northwest Forest Plan, a multi-agency US government plan designed to conserve old growth forest resources.

Visitor-use impacts monitored by the Natural Resource Management Division's wilderness branch has guided revegetation projects at backcountry campsites and has informed the establishment of quotas for backcountry use.

Significant research has been directed at river restoration as a result of the pending removal of two dams on the Elwha River. This river drains about one fifth of the park, and is located in pristine National Park habitat upstream of the upper dam. Sediment loads, impacts to fisheries, and vegetation ecology have been studied, and models derived, to guide park management as the dams are removed. Researchers will study all aspects of the Elwha River ecosystem as natural systems are restored following nearly a century that the dams have been in place.

The park archeologist conducts archeological surveys in the park high country, and site monitoring at the coastal archeological sites.

The park anthropologist works with the tribes on ethnographic studies, including intertidal traditional use, traditional burning practices of park prairies, and plant gathering and use studies.

4o2) What role, if any, has the property's designation as a World Heritage Site played in the design of these scientific studies and research programs? For example, has there been a specific effort in these programs to focus on the recognized World Heritage values of the property?

Although World Heritage Site designation, in and of itself, has not been a factor in the design of studies and research programs, the park's function as a scientific 'control site' for numerous research projects is prominently featured in our research catalog and in our appeals to scientists encouraging research. Moreover, Olympic National Park's distinct geography, located west of (and thus up-wind from) land-based pollution sources makes the park particularly valuable as a baseline or benchmark for studies in atmospheric dry deposition, airborne pollutants, whole-column atmospheric ozone monitoring, and the search for persistent organic pesticides in snow. Our collaborators are actively involved in extending these studies to other natural areas in Asia. As the best remaining habitat in the range of the Northern Spotted Owl, Olympic's forests serve as the benchmark for other agencies mandated to study and protect these animals by the Northwest Forest Plan, an inter-agency initiative. And the Olympic coast, containing 62 miles (100 km) of rocky coast, serves as the most nearly pristine control area for management activities of the park, tribes, state agencies and the Olympic Coast National Marine Sanctuary. Olympic National Park is also a key resource for control type studies for anadromous fisheries with the pristine headwaters of 12 rivers in the park.

Education, Information and Awareness Building

4p) Is there a plaque at the property indicating that it is a designated World Heritage Site?

YES

4q) Is the World Heritage Convention logo used on all of the publications for the property?

NO

4r) Are there educational programs concerning the property's World Heritage values aimed at schools?

YES

4r1) If YES, please briefly describe these programs.

We provide an environmental education program to all of the fourth grade classes on the north Olympic Peninsula annually. These are in the towns along Highway 101 stretching from Hoodspout in the southeast corner of the park, to Forks on the west side. Our programs are basic orientation programs to Olympic National Park and are given to over 100 classes each year. Although the World Heritage status is not specifically mentioned, the ecosystems of the Olympic Peninsula and the national park are introduced, along with the core values of why the park was established. Olympic National Park's core values are introduced through the park's general education program, which consists of exhibits in five facilities, the park website, two films, a CD-Rom, the main park brochure, handouts, trailguides, park newspapers and publications for sale at park visitor centers, over 200 wayside exhibits, and museum exhibits in five different areas. We also provide ranger-led talks, walks, evening programs, and school-based programs.

In 2002, we contacted 454,000 visitors at our Visitor Centers, Information Stations, and Ranger Stations. Our education rangers directly contacted 65,000 visitors in educational programs and informal contacts. We gave school programs to 7,500 children.

4s) Are there special events and exhibitions concerning the property's World Heritage values?

YES

4s1) If YES, please briefly describe them.

The World Heritage designation plaque is located on the outside wall of the Hoh Visitor Center, and a new World Heritage plaque will be installed at the Olympic National Park Visitor Center this year (2004). We do not have any special events or exhibits that focus specifically on the World Heritage designation. But we do focus all of our education programs on Olympic National Park's core values--the purpose and significance of why the park was established. These are highlighted in many different ways in our education program, described below, and at community events that occur around the Olympic Peninsula throughout the year.

4t) Please briefly describe the facilities, visitor center, site museum, trails, guides and information material that are available to visitors to the World Heritage Site.

The park has three major visitor centers that all receive over 100,000 visitors each year. They are the Olympic National Park Visitor Center, which is the primary park visitor center and is located in Port Angeles. In addition to being the main orientation center, it also processes most of the information calls, visitor email and mail requests. The Hurricane Ridge Visitor Center is located above 5,000 ft, has exhibits and a film that focus on mountain ecology and the human history of the mountains. The Hoh Visitor Center is located in the Hoh Rain Forest and focuses on the temperate rain forest. Additionally there are four other visitor information stations, located at Lake Crescent, the town of Forks, Quinault, and Staircase. Last year we printed and distributed 339,100 publications and had over 2,250,000 individual visits to our website last year.

4u) What role, if any, has the property's designation as a World Heritage Site played with respect to the education, information and awareness building activities described above? For example, has the World Heritage designation been used as a marketing, promotional, or educational tool?

World Heritage and Biosphere Reserve status is highlighted in many different ways as an educational tool to convey the importance and significance of the park and its future preservation. Most visitors recognize the value and honor of being selected as a World Heritage Site and we bring up the designation in many of our programs. We have a handout that is specifically devoted to the park's status as a World Heritage and Biosphere Reserve site, and the World Heritage status is mentioned in many of our personal-services education programs. There are also references to World Heritage status in park films, on the park website, and in the main park brochure.

II.5 Factors Affecting the Property (See Section 5 of the current Nomination Form)

5) Please briefly identify factors affecting the property under the following headings: Development Pressures, Environmental Pressures, Natural Disasters and Preparedness, Visitor and Tourism Pressures, Number of Inhabitants Within Property and Buffer Zone and Other - major factors likely to affect the World Heritage values of the property. First discuss those that were identified in the original nomination, in the same order in which they were presented there, then those that have been discussed in reports to the World Heritage Committee since inscription, and then other identified factors.

This section should provide information on all the factors which are likely to affect a property. It should also relate those threats to measures taken to deal with them, whether by application of the protection described in Section 4e or otherwise.

Not all of the factors suggested in this section are appropriate for all properties. The list provided is indicative and is intended to assist the State Party in identifying the factors that are relevant to each specific property.

(In describing these trends, please use the year of inscription as a baseline.)

For EACH Factor, please specify the following:

key actions taken to address factor

any plans that have been prepared to deal with factor in the future

whether the impacts of factor appears to be increasing or decreasing, and the timeframe for which the comparison is being made.

Development Pressures

5a) Provide information about Development Pressures on the following: demolitions or rebuilding; the adaptation of existing buildings for new uses which would harm their authenticity or integrity; habitat modification or destruction following encroaching agriculture, forestry or grazing, or through poorly managed tourism or other uses; inappropriate or unsustainable natural resource exploitation; damage caused by mining; and the introduction of invasive nonnative species likely to disrupt natural ecological processes, creating new centers of population on or near properties so as to harm them or their settings.

As urban populations expand in Puget Sound, it is clear that increased population pressure from primary residences and increased travel around Olympic National Park will result. People and motorized activities are most likely responsible for known invasions of exotic weeds into the park. The park is monitoring these invasions, tracking nearly 200 species of exotic plants, and employing an Exotic Plant Management Team to eradicate weeds following a strategic plan.

Olympic National Park is an easy drive for the millions of people living in Seattle, Tacoma, Bellingham, and many smaller cities. A major impact to the park is from day-use visitors crowding popular recreation sites. At current visitation levels, social trails, eroded areas, and changes to animal behavior are apparent.

Logging continues around the park, right up to its borders. Today, the park appears as an 'island of green' sharply outlined by logged areas in satellite images. We are certain that such logging practices have impacts on the park, but we are only beginning to document impacts. For example, the park is the most important remaining habitat for threatened Northern Spotted Owl (*Strix occidentalis*). Our recent research has shown that spotted owls are being displaced from known nesting sites by non-native, invasive barred owls (*Strix varia*). Barred Owls were unknown in Washington until the 1970s. Their spread into Olympic Peninsula is likely due to opening of forests caused by human activities. Thus the logged areas surrounding the park provide a foothold for the invaders. Barred Owls have, in every observed case, displaced the Spotted Owls, invariably resulting in their abandonment of established nest sites. Our data continue to document this worsening problem.

Island biogeographic theory suggests that any 'island' is likely to suffer invasions, extinctions, and alteration of successional patterns when separated from nearby sources of colonizing flora and fauna. Because of surrounding land-use practices, the park is increasingly an 'island,' in the biological sense. The park's long-term ecological monitoring program mentioned below will specifically target potential or predicted stressors so that impacts of invasive plants, effects of human visitor use, impacts of airborne pollutants, and land-use practices outside the park will be closely monitored.

Environmental Pressures

5b) Environmental pressures can affect all types of property. Air pollution can have a serious effect on stone buildings and monuments as well as on fauna and flora. Desertification can lead to erosion by sand and wind. What is needed in this section is an indication of those pressures which are presenting a current threat to the property, or may do so in the future, rather than a historical account of such pressures in the past.

Olympic National Park is subjected to environmental pressures from local and remote sources. Although the park is arguably the best remaining example of mixed coniferous northwestern temperate rainforest, it is not pristine, and it is continually exposed to growing threats from outside.

Impacts to flora and fauna through human activities continue to ramify through the park's ecosystems. Mountain goats have already been mentioned as having negative impacts on high alpine flora. These animals were introduced to the park for sport hunting in the early 20th century but it was not until their numbers were enormously expanded that studies begin to show the widespread damage caused by these non-native animals. Similarly, extirpation of native wolves from the Olympic Mountains in the early 20th century caused important changes to deer and elk populations, and subsequent changes to forest understory vegetation. These trophic effects are the subject of current research to guide future management. Key actions within Olympic National Park include research into the potential prey base for wolves, and an environmental impact analysis and management plan for non-native mountain goats (this will be underway within the next 3 or so years, following completion of the park's General Management Plan). These issues are not expected to be resolved in the near future, but will require perhaps a decade or more to make progress.

Five species of salmon are native to Olympic National Park, but all now occur in greatly reduced numbers. Although the complete reason for salmon depletion is not known, marine harvest and persistent toxins in the ocean are known to have a role. Drainages that originate within Olympic National Park pass through tribal reservations and other usual and accustomed fishing locations where the fish are harvested, a tribal right protected through treaty. Because the park is largely pristine and recreational angler pressure closely controlled, Olympic is an ideal location for testing management policies based on increasing escapement levels to increase salmon production. The park is also the ideal site for studies on the importance of marine-derived nutrients transported in the bodies of salmon to upstream ecosystems. The park has instituted catch-and-release regulations within the park, is working with the state and local tribes to bring greater protection to salmonids, and, in 2007, will remove the Glines Canyon and Elwha Dams from the Elwha River in order to restore fish passage to 75-miles of habitat. Nonetheless, due to habitat decline outside the park, as well as harvest and hatchery management practices, overall negative impacts to salmonids are expected to continue for the foreseeable future.

Natural Disasters and Preparedness

5c) This section should indicate those disasters which present a foreseeable threat to the property and what steps have been taken to draw up contingency plans for dealing with them, whether by physical protection measures or staff training. (In considering physical measures for the protection of monuments and buildings it is important to respect the integrity of the construction.)

According to geologists, the Olympic Peninsula region is overdue for a large scale earthquake, which could be attended by a tsunami, as occurred here in 1700 when coastal forests were submerged by more than a meter (3.5 feet) of tidewater. Such a quake would likely have major effects to coastal park lands. The park emergency operations chief works with the county on the Clallam County Tsunami Plan and participates in emergency response preparedness exercises. The plan is designed to save lives and provides escape routes for visitors and residents. Potential impacts to park resources include water inundation along coastal areas, damage to roads, trails, and administrative sites, landslides causing water quality and fishery concerns, and damage or loss of habitat and nesting sites of endangered species.

The park works with the Washington State Department of Ecology, the US Coast Guard, and the Marine Sanctuary on the Washington State Department of Ecology Oil Spill Response Plan. Major oil spills in 1988 and 1991 have affected park species and habitats. Recently, an emergency-response tugboat has been stationed at Neah Bay to aid ships in distress. Such preventative measures may reduce the chance of a spill caused by a ship run aground, but ship wrecks are still a major concern. Park staff work on contingency planning with the other agencies and attend strategic planning meetings, and annual scenerio exercises. The park has been documenting carcasses on the beach since 2001, for the University of Washington Coastal Observation and Seabird Survey, to establish a baseline for oil spill loss. Intertidal community studies are being conducted that will aid in our understanding should an oil spill occur.

The revised fire plan, scheduled for 2004 finalization, will allow for the return role of natural fire to the ecosystem, as long as the fire meets certain prescriptive values. These natural fires had previously provided a mosaic pattern over the landscape, allowing for vegetation and animal diversity within the forested areas. The fire management plan will be in place for five years, at which time the plan will be analyzed and adjusted as needed. This initial attempt at returning fire to the ecosystem will be conservative in nature so that impacts can more easily be addressed and plans adjusted. Due to the long return fire intervals, at present, it is thought that little long term negative impact to the environment has occurred under the past 50 years of full suppression. Fires that do not meet prescriptions or that are human caused will continue to be suppressed. The park is funded for a small, initial attack firefighter force to address the normal fire year needs in suppression. Large fires in the Olympics are rare, due to the normally moist conditions. Should a large fire occur that does not meet prescriptive values, an interagency effort will be utilized to suppress the fire.

Olympic National Park has an on-going program to limit the amount of hazardous waste and materials that it produces. One way this is accomplished is by purchasing as many products that are environmentally friendly as possible. The park also has a Hazardous Materials Spill Prevention Control and Countermeasures Plan (SPCC) to address hazardous materials spills and prevention. The major outside threat to the park is vehicles transporting hazardous materials through the park on State Highway 101. As there are no alternate roadways to utilize, this is the only roadway to transport these materials to cities and businesses surrounding the park. Some park employees are trained as initial hazardous spill responders. Minor hazardous materials spills that do not require special response equipment may also be responded to by cooperating agencies, such as local volunteer fire departments. Hazardous materials spills that require specialized equipment will take longer response times, as there are no hazardous materials teams on the Olympic Peninsula. The closest response team is located in Bremerton and other cities located in the Puget Sound Region. For these incidents, isolation and keeping the public in the safe zone is the primary response, until a trained hazardous materials team arrives on site. The next major hazardous materials threat is from oil spills caused by ships along the coastal strip on the western side of the Olympic Peninsula. As oils spills are classified as a hazardous material response, this is also addressed in the park's SPCC plan.

As part of the Federal Energy Regulatory Commission's licensing of dams, an emergency response plan is required for the two dams on the Elwha River, which has been completed. In addition, a "tabletop" exercise must be completed yearly to address response and notification procedures, to simulate the response should a dam failure occur.

The park safety officer conducts a yearly safety inspection of the park and visitor use areas for OSHA compliance. Safety violations are communicated to the responsible party for corrective action or mitigation. In addition, OSHA has conducted inspections of park facilities and submits findings to the Superintendent's office for corrective actions.

The park conducts yearly structural fire inspections. The park's safety officer and fire management officer serve as the lead for these inspections. Violations and findings are communicated to the responsible party for corrective action. At the headquarters unit, the city of Port Angeles Fire Department conducts voluntary inspections of visitor use, maintenance, and office buildings, and relays findings to the park for corrective action.

Visitor and Tourism Pressures

5d) In completing this section what is required is an indication of whether the property can absorb the current or likely number of visitors without adverse effects (i.e., its carrying capacity). An indication should also be given of the steps taken to manage visitors and tourists. Possible impacts from visitation that could be considered include the following:

- i. damage by wear on stone, timber, grass or other ground surfaces;*
- ii. damage by increases in heat or humidity levels;*
- iii. damage by disturbance to the habitat of living or growing things; and*
- iv. damage by the disruption of traditional cultures or ways of life.*

Olympic National Park receives more than 4.3 million visitors per year, most of whom visit front-country locations not far from paved roads. Although the largest part of the park is backcountry wilderness accessible only by backpacking, by far the largest visitor impact is through day-use in these easily accessible locations. The park is now preparing a General Management Plan, due for completion in 2005, to address these and other public use issues. Many options will need to be considered as park visitation increases. Public use areas can be hardened through paving parking areas and pullouts. Numbers can be controlled by limiting size of key parking areas or by establishing quota systems for particular areas. Automobile congestion can be reduced through mass transit systems in heavily used corridors such as Hurricane Ridge Road, which is being considered in development of the park's General Management Plan.

Over 95% of Olympic National Park is designated wilderness. Popular wilderness areas used by day hikers or backpackers have been impacted by trampling and social trailing. In these areas, the park has established a quota system for overnight stays, regulations on camping locations, stringent requirements on food storage, and has completed extensive revegetation projects. Many kilometers of boardwalk have been built in sensitive wetland and beach areas to allow hikers safe passage without destructive social trails or broadened areas from hikers finding dry footing in wet, muddy areas. As the population around and near the park continues to grow, use levels within the park are expected to increase over the next 10 years. In conjunction with the General Management Plan, the park is also preparing a Wilderness Management Plan to establish protective standards for acceptable resource conditions and visitor experience, and to prescribe management tools that will be used to maintain these conditions.

Number of Inhabitants Within Property and Buffer Zone

5e) Include the best available statistics or estimate of the number of inhabitants, if any, within the property and any buffer zone and describe any activities they undertake which affect the property.

Lake Crescent inholders, approximately 100 (86 structures)
Lake Quinault inholders, approximately 100 (80 Structures)
Lake Ozette inholders, approximately 15 (10 structures)
Total acreage 384

Approximately 50% of inholders have seasonal or secondary homes that are only occupied 3-4 months of the year. However, over the past ten years more of these vacation homes have become primary residences. This is especially true for Lake Crescent, which is most likely associated with the growth of the Port Angeles area. As these inholdings become year round residences, there is a great expectation by the inholders for added law enforcement and fire protection.

In general, there is gradual development occurring in the area immediately surrounding Olympic National Park, with the concentration taking place on parcels of private land near Port Angeles. Rapid growth is also occurring in large communities 60 miles or more east of the park. There are approximately 8,000 people residing within 0.5 mile (1 km) of the park boundary.

5f) List Other Factors

II.6 Monitoring **(See Section 6 of the current Nomination Form)**

Administrative Arrangements for Monitoring Property

6a) Is there a formal monitoring program established for the site? In this case, "monitoring" means the repeated and systematic observation and collection of data on one or more defined factors or variables over a period of time.

YES

6a1) If YES, please describe the monitoring program, indicating what factors or variables are being monitored and which partners, if any, are or will be involved in the program.

Olympic National Park is a "Prototype park" designated by the National Park Service to do advanced research and protocol development on coniferous forest ecosystems. The park is also a member of the North Coast and Cascades Inventory and Monitoring Network, a grouping of parks in the Northwest, established in 2000 to perform Vital Signs Monitoring of park ecosystems. Olympic National Park is obligated to monitor status and trend of the park's ecosystems with special emphasis on those indicators that would constitute early warning of ecosystem change (i.e., the 'Vital Signs'). The park is involved in defining the most important indicators worthy of monitoring. When these indicators are finally selected (2004), protocol development and peer review will follow. When protocols are accepted by the National Park Service Inventory and Monitoring Program, monitoring for the long term will begin and is expected to continue indefinitely. Funding for at least a core group of the monitoring projects is already in park base funding.

As a first stage, the park completed a number of inventories designed to document species presence for 90% of the vertebrate and flowering plant species. The park hired a data manager to design databases and develop long-term protocols for data management. The park is engaged in a formal prioritization process to determine the most important ecosystem indicators or "Vital Signs." The list, still under review and refinement, includes vegetation patterns and change, water quality and quantity, aquatic ecosystem health, and various environmental processes. It also includes several focal species (e.g., Northern Spotted Owls, ungulates, and amphibians) chosen for strategic reasons. And it includes 'system drivers' such as weather/climate, precipitation, and glacier monitoring. These monitoring targets were chosen through a series of workshops, comprised of experts, using a numerical ranking method.

Working together with scientists from the US Geological Survey/Biological Resource Division, Olympic National Park has been the leader in establishing these protocols, in testing prioritization methods, and in implementing some of the first protocols (Spotted Owls and intertidal monitoring). Eventually, as all monitoring programs are formalized and approved, the park will be monitoring aquatic invertebrates, air quality, vegetation change through plots and remote sensing, landbird communities, amphibian populations in lakes, elk demographics, and other topics. All will be closely integrated into a program intended to provide maximum sensitivity to future change at minimum cost.

Key Indicators for Measuring State of Conservation

6b) At the time of inscription of the property on the World Heritage list, or while in the process of reviewing the status of the property at subsequent meetings, have the World Heritage Committee and the State Party identified and agreed upon key indicators for monitoring the state of conservation of the property's World Heritage values?

NO

6b1) If YES, please list and describe these key indicators, provide up-to-date data with respect to each of them, and also indicate actions taken by the State Party in response to each indicator.

6b2) If NO key indicators were identified by the World Heritage Committee and used so far, please indicate whether the World Heritage Site management authority is developing or plans to develop key indicators for monitoring the state of conservation of the property's World Heritage Values.

The World Heritage Site management authority is not developing key indicators for monitoring the state of conservation of World Heritage Values within Olympic National Park. However, the Natural Resource Challenge, funded by the US Congress in 2000, provides funds for an on-going research program to inventory and monitor the status and trends of park ecosystems. The park is engaged in a formal prioritization of important ecological indicators and will be conducting long term monitoring on those topics.

Results of Previous Reporting Exercises

6c) Please describe briefly the current status of actions the State Party has taken in response to recommendations from the World Heritage Committee at the time of inscription or afterwards, through the process known as "reactive reporting." (Note: The answer to this question will be "not applicable" for many sites.)

On December 23, 1988, the barge *Nestucca* spilled 230,000 gallons of Bunker C fuel oil that fouled beaches from Grays Harbor north to Vancouver Island. Affected beaches in Washington included the 60-mile-long intertidal strip within Olympic National Park. To study the fate and potential effects of the spilled Bunker C fuel oil on Washington coastal beaches including those within the Olympic National Park, three separate field studies were conducted by Pacific Northwest Laboratory and the University of Washington (UW) to determine the effects of the spilled Bunker C fuel oil. The first study, conducted by the MSL, focused on the residual oil in intertidal and shallow subtidal sediments and invertebrate tissues. The second study, conducted by UW, examined sediments and invertebrate tissues in the deeper subtidal zone (0 to 20m below mean low water). The third study, conducted by the UW, focused on the potential effects of oiling on intertidal communities.

Only trace amounts of oil were detected in the intertidal, shallow subtidal, and deeper subtidal sediments suggesting that little residual oil remains on Washington coastal beaches from the December 1988 *Nestucca* spill. Due to a fortunate set of circumstances, the *Nestucca* spill also appeared to cause relatively little damage to intertidal communities (rock, cobble, or sand) along the coast of Washington. The combination of high tide, wind, and waves caused the oil to contact the shore in the zone where it could do minimal damage to intertidal communities.

On July 22, 1991, the Chinese freighter TUO HAI collided with the Japanese fishing vessel TENYO MARU approximately 25 miles northwest of Cape Flattery, off the northern Washington coast, and a short distance north of the United States-Canada border (in the Canadian EEZ). The TENYO MARU quickly sank in about 90 fathoms of water. At the time of the collision, the vessel had approximately 354,800 gallons of intermediate fuel oil and 97,800 gallons of diesel aboard, which began to be released as the vessel sank. The resulting slick was carried south and east by currents and wind and ultimately affected much of the Washington and a portion of the Oregon coasts.

The most immediately apparent injury from this spill was its impact on seabirds. Less damage was noted in the intertidal area of Olympic National Park than that from the 1998 *Nestucca* oil spill. A total of 4,300 dead birds were collected during the spill, including 643 which died at rehabilitation centers. Of this number, approximately 73% were common murrelets, a bird whose population was already substantially depressed from historic levels. The dead birds also included 45 Marbled Murrelets, a federally listed threatened species. A limited mark-recapture study conducted shortly after the spill indicated that the total mortalities may have been as much as 10-20 times the number of recovered birds. The other primary immediately observable effect of the spill was a 108-day closure by the Indian Health Service of the Indian subsistence shellfish fishery in the affected area.

On December 23, 1994, the United States (on behalf of NOAA, the Interior Department, the Department of Transportation and the National Pollution Fund), the Washington Department of Ecology, and the Makah Indian Tribe entered into a settlement with the Maruha Corporation and the Japan Ship Owners' Mutual Protection and Indemnity Association (the owners and the insurers of the TENYO MARU), Tianjin Ocean Shipping Co., the China Ocean Shipping Co., and the United Kingdom Mutual Steam Ship Assurance Assn. (Bermuda) Ltd. (the owners, the operators and the insurers of the TUO HAI). The agreement covered claims by the United States, the State of Washington and the Makah Tribe for oil removal costs, natural resource damages, and civil penalties arising from the oil spill.

Under the settlement, the companies agreed to pay a total of \$9,000,000 USD (over and above approximately \$2.4 million in removal costs previously paid). Of the total paid, \$500,000 USD went to pay a civil penalty assessed by the U.S. Coast Guard, \$3,000,000 USD went to reimburse oil removal costs, \$340,028 USD was paid to reimburse damage assessment costs, and the balance (\$5,159,972 USD, plus interest) was allocated to natural resource damages. Projects funded from the settlement included Marbled Murrelet habitat protection, public education signs and brochures, restoration of Common Murre colonies, wildlife rehabilitation center, etc.

II.7 Conclusions

World Heritage Values

7a) Please summarize the main conclusions regarding the state of the World Heritage values of the property (see items II.2. and II.3. above).

Olympic National Park still qualifies as a Natural World Heritage Site under criteria ii, and iii. There have been no significant changes or degradation of values or integrity of the property articulated in those criteria. The State Party proposes that the property be recognized for additional World Heritage values under cultural criteria iii: "Bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared."

Olympic National Park's western coastal boundary surrounds three tribal reservations and borders two others [Hoh, Quileute, Ozette (in trust for Makah Tribe), Makah, and Quinault]; therefore, management issues are of joint concern. The Park also shares some resource management concerns with four tribes to the north and east of the boundary [Elwha Klallam, Jamestown S'Klallam, Port Gamble S'Klallam, and Skokomish]. The cultural systems of these tribes have been associated with the lands now within Olympic National Park for at least 5,000 years. Each tribe is a separate federally recognized tribe and the eight tribes comprise three distinct language families. These tribes were signatory to three separate treaties in 1855 that ceded lands now within Olympic National Park. The park contains 161 documented prehistoric archeological sites and hundreds of ethnographic places and/or resources of specific cultural importance to the tribes. The park recognizes this connection and has established research studies, management coordination, and cultural resource protection and interpretation in cooperation with the tribes. The tribes are self-governing, and the park maintains a government-to-government relationship with the tribal governments. Cultural Criteria iii is proposed as an addition by the State party because the eight contemporary tribes retain knowledge of their ancestors that is reflected in their use of the park. The tribes can provide the park with a better understanding of the varied history of the resources we manage, and the park can work with the tribes to protect heritage values.

Management and Factors Affecting Site

7b) Please summarize the main conclusions regarding the management of and factors affecting the property (see items II.4. and II.5. above).

Olympic National Park continues to be owned by the United States Government and managed by the National Park Service. As a national park, the property receives the highest level of conservation protection afforded by federal law in the United States. Management of the property is guided by a Master Plan (1976). A General management Plan will be finalized in 2005, as will a Wilderness Management Plan. The Fire Management Plan will be finalized this year (2004). Several other plans also guide park management, including the Resource Management Plan (1999). All plans are periodically updated.

Olympic National Park receives more than 4.3 million visitors per year, most of whom visit front-country locations not far from paved roads. Although the largest part of the park is backcountry wilderness accessible only by backpacking, by far the largest visitor impact is through day-use in these easily accessible locations. The new General Management Plan will address these and other public use issues. Many options will need to be considered as park visitation increases.

Over 95% of Olympic National Park is designated wilderness. Popular wilderness areas used by day hikers or backpackers have been impacted by trampling and social trailing and the park has established a quota system for overnight stays. As the population around and near the park continues to grow, use levels within the park are expected to increase over the next 10 years. In conjunction with the General Management Plan, the park is also preparing a Wilderness Management Plan to establish protective standards for acceptable resource conditions and visitor experience, and to prescribe management tools that will be used to maintain these conditions.

Since 1980 visitation to the park has increased by 70%; however most growth occurred between 1993 and 1997. Part of this increase is attributed to a trend toward longer visitor stays. Visitation has been relatively stable since 1999 at about 4.2 million. Visitor needs are accommodated by a wide range of facilities and services; the most popular being Lake Crescent, Kalaloch and Hurricane Ridge. At Hurricane Ridge, parking is often exceeded during the peak summer months and during winter weekends; the General Management Plan will address this issue.

The potential for a destructive oil spill continues to exist; however, an emergency response tug boat has recently been stationed at Neah Bay to assist ships that may have lost power, therefore preventing them from running aground. Oil Spill response is discussed in section 5c and the effects of two previous major spills is discussed in 6c.

As urban populations expand in Puget Sound it is clear that increased population pressure from primary residences and increased travel around Olympic National Park will result. People and motorized activities are most likely responsible for known invasions of exotic weeds into the park. The park is monitoring these invasions, tracking nearly 200 species of exotic plants, and employing an Exotic Plant Management Team to eradicate weeds following strategic plan guidelines.

Olympic National Park is an easy drive for the millions of people living in Seattle, Tacoma, Bellingham, and many smaller cities. A major impact to the park is from day-use visitors crowding popular recreation sites. Already, social trails, eroded areas, and changes to animal behavior are apparent.

Logging continues right up to the park borders. Today, the park appears as an 'island of green' sharply outlined by logged areas in satellite images. We are certain that such logging practices have impacts on the park, but we are only beginning to document impacts. The logged areas surrounding the park provide a foothold for invasive flora and fauna. Our data continue to document this worsening problem.

Island biogeographic theory suggests that any 'island' is likely to suffer invasions, extinctions, and alteration of successional patterns when separated from nearby sources of colonizing flora and fauna. Because of surrounding land-use practices, the park is increasingly an 'island,' in the biological sense. The park's long-term ecological monitoring program mentioned earlier will specifically target potential or predicted stressors so that impacts of invasive plants, effects of human visitor use, impacts of airborne pollutants, and land-use practices outside the park will be closely monitored.

Olympic National Park is subjected to environmental pressures from local and remote sources. Although the park is arguably the best remaining example of mixed coniferous northwestern temperate rainforest, it is not pristine, and it is continually exposed to growing threats from outside. There is an increasing urban outgrowth from the Seattle region, and impacts to the park include housing development near the park boundary. There are currently 8,000 residents within 0.5 miles (1 km) of the park's boundary.

Impacts to wildlife through human activities continue to ramify through the park's ecosystems. Mountain goats have already been mentioned as having widespread impacts on the alpine flora. Similarly, extirpation of native wolves from the Olympic Mountains in the early 20th century caused important changes to deer and elk populations, and subsequent changes to forest understory vegetation. These trophic effects are the subject of current research to guide future management. An environmental impact analysis and management plan for non-native mountain goats will be underway within the next 3 years, following completion of the park's General Management Plan. These issues are not expected to be resolved in the near future, but will require perhaps a decade or more to make progress.

Five species of salmon are native to Olympic National Park, but all are now found in greatly reduced numbers. Although the complete reason for salmon depletion is not known, marine harvest and persistent toxins in the ocean are known to have a role. Olympic is an ideal location for testing management policies based on increasing escapement levels to increase salmon production. The park is also the ideal study site for studies on the importance of marine-derived-nutrients brought in the bodies of salmon to upstream ecosystems. In 2007, Olympic National Park will remove the Glines Canyon and Elwha Dams from the Elwha River in order to restore fish passage to 75-miles (120 km) of habitat. Nonetheless, due to habitat decline outside the park, as well as harvest and hatchery management practices, overall impacts to salmonids are expected to continue for the foreseeable future.

Since 1980 the park's base funds have remained flat when adjusted for inflation. Combining this with the increased costs of salaries, retirement, and other personnel costs, the park has seen a loss of one million dollars of spending power since 1999. This year (2004) we have 14 permanent positions that will not be filled due to lack of funding. In addition, this year for the first time, we have lost all base funded (ONPS) seasonal positions.

Proposed Future Action(s)

7c) Please describe briefly future actions that the State Party has approved to ensure the conservation of the World Heritage values of the property.

These sample headings can be used as a checklist.

*Modification of legal or administrative structure
Changes to financial arrangements
Increases to staffing level
Provision of training
Modification of visitor facilities
Preparation of a visitor management plan
Studies of public knowledge of the World Heritage Site
Emergency preparedness
Establishment or improvement of a monitoring program.*

Conservation of the World Heritage values at Olympic National Park is enhanced by the federal laws and regulations that protect and regulate National Parks in the United States. The various processes underway to address pressures on the park's World Heritage values are described in Section 5. They include finalization of Olympic National Park's General Management Plan (2005), Fire Management Plan (2004), and Wilderness Management Plan (2005).

The General Management Plan will confirm management direction for the next 20 years. Decision points based on public and agency issues will address resource protection using sound science, and the role of cultural resource protection and interpretation; wilderness values and visitor experience, facilities in the wilderness, protection standards to preserve wilderness values and accommodation while preserving resources; park access without causing greater impacts to the resources (trails, parking and roads); and partnerships to protect our resources, and to enhance cooperative opportunities with Olympic Peninsula tribes to protect tribal heritage values.

Monitoring the condition of resources is a critical component of conservation efforts. Current monitoring efforts, including the long Term Ecological Monitoring program will continue into the future as long as the need and funding permit.

The park's revised Fire Management Plan will be finalized in 2004. The revised fire plan will allow for the return role of natural fire to the ecosystem, as long as the fire meets certain prescriptive values.

The park's present legal and administrative structure, financial arrangements, and provision of training will remain in place. Staffing levels have been in decline for the past five years, and continue to do so because of budget cuts.

Responsible Implementing Agency(ies)

7d) Please identify the agency(ies) responsible for implementation of these actions described in 7c, if different from those listed in Section II.4.

Timeframe for Implementation

7e) If known, or predictable, please provide a timeline for the implementation of the actions described in 7c.

The General Management Plan should be completed in 2005

Needs for International Assistance

7f) Is it anticipated that International Assistance, through the World Heritage Fund, will be requested for any of the planned actions described above?

NO

7f1) If YES, please state the nature of the request and when it will be requested, if known.

Potential Decisions for the World Heritage Committee

7g) Please indicate if the World Heritage Site management authority has preliminarily identified, as a result of this reporting exercise, an apparent need to seek a World Heritage Committee decision to change any of the following:

(Note: Following completion of the Periodic Report exercise, the State Party, in consultation with appropriate authorities, will determine whether to proceed with seeking a Committee decision on these changes. To request such changes, the State Party will need to follow a separate, formal process, subsequent to submitting the report.)

- change to criteria for inscription
- change to Statement of Significance
- proposed new Statement of Significance, where previously missing
- change boundaries or buffer zone

II.8 Documentation

(See Section 7 of the current Nomination Form and Section 3 of the original Nomination Form)

8a) Please review the original nomination for the property to determine whether it is necessary or advisable to supply, update or amend any of the following documentation for the World Heritage Site. Indicate what documentation will be supplied to supplement the information found in this report. (This documentation should be supplied at the time the Periodic Report is submitted to the World Heritage Centre, in December 2004.)

- x a) Photographs, slides and, where available, film. This material should be accompanied by a duly signed authorization granting, free of charge to UNESCO, the non-exclusive right for the legal term of copyright to reproduce and use it in accordance with the terms of the authorization attached.
- b) Topographic or other map or site plan which locates the WHS and its boundaries, showing scale, orientation, projection, datum, site name, date and graticule.
- c) A copy of the property management plan.
Not available until 2005
- d) A Bibliography consisting of references to all the main published sources on the World Heritage Site, compiled to international standards.

8b) Do you have a digital map of the WHS, showing its location and boundaries?

YES

8bi) If yes, in what format(s) is the map?

jpg

8bii) Is it published on a publicly-accessible website?

YES

8biii) If yes, please provide the URL of the site where the map can be found. Must be a valid URL.

www.nps.gov/olym