U.S. Fish & Wildlife Service

Washington Islands

National Wildlife Refuges

Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges

Comprehensive Conservation Plan and Environmental Assessment



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Comprehensive Conservation Plans provide long term guidance for management decisions and set forth goals, objectives, and strategies needed to accomplish refuge purposes and identify the Service's best estimate of future needs. These plans detail program planning levels that are sometimes substantially above current budget allocations and, as such, are primarily for Service strategic planning and program prioritization purposes. The plans do not constitute a commitment for staffing increases, operational and maintenance increases, or funding for future land acquisition.

Washington Islands National Wildlife Refuges

Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges

Comprehensive Conservation Plan and Environmental Assessment

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Approved: _____ 6/14/07
Regional Director, Region 1 **Date**

Vision Statement for the Washington Islands National Wildlife Refuges:

Since 1907, critical resting and breeding grounds for marine wildlife off the outer Olympic coast have been protected and preserved by the National Wildlife Refuge System. The more than 600 rocks, reefs, and islands known as Flattery Rocks, Copalis, and Quillayute Needles National Wildlife Refuges are designated wilderness (except Destruction Island), and all will continue to be preserved in a natural condition with minimal human intrusion. Management activities will focus on monitoring Refuge wildlife and on protection and maintenance of a natural functioning ecosystem. The U.S. Fish and Wildlife Service will coordinate with other agencies and tribes to ensure the long-term health and viability of native seabird and marine wildlife populations. We will also work with others to provide wildlife viewing and interpretation at selected locations on the adjacent coastline. Fostering an appreciation for Pacific coast wildlife will enrich people in a variety of ways and ensure that this outstanding legacy of wildlife is passed on to future generations.

FINDING OF NO SIGNIFICANT IMPACT

Washington Islands National Wildlife Refuges
(Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges)
Comprehensive Conservation Plan
Clallam, Jefferson, and Grays Harbor Counties, Washington

The U.S. Fish and Wildlife Service (Service) has completed the Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA) for Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges (Washington Islands Refuges). The CCP will guide management of the Refuges for approximately the next 15 years. The CCP and EA describe the Service's proposals for managing the Refuges and their effects on the human environment under two alternatives, including the no action alternative.

Decision

Following comprehensive review and analysis, the Service selected Alternative B for implementation because it is the alternative that best meets the following criteria:

- Achieves the mission of the National Wildlife Refuge System.
- Achieves the purposes of the Refuges.
- Will be able to achieve the vision and goals for the Refuges.
- Maintains and restores the ecological integrity of the habitats and populations on the Refuges.
- Addresses the important issues identified during the scoping process.
- Addresses the legal mandates of the Service and the Refuges.
- Is consistent with the scientific principles of sound wildlife management.
- Facilitates wildlife–dependent recreation compatible with the Refuges' purposes and the Refuge System mission.

As described in detail in the CCP and EA, implementing the selected alternative will have no significant impacts on any of the environmental resources identified in the CCP and EA.

Public Review

The planning process incorporated extensive public involvement in developing and reviewing the CCP. This included two interagency meetings, nine tribal meetings, three planning updates, and public review and comment on the planning documents. The details of the Service's public involvement are described in the CCP and EA.

Conclusions

Based on review and evaluation of the information contained in the supporting reference, I have determined that implementing Alternative B as the CCP for management of the Washington Islands Refuges is not a major Federal action that would significantly affect the quality of the human environment, within the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969. Accordingly, the Service is not required to prepare an environmental impact statement.

This Finding of No Significant Impact and supporting reference are on file at the U.S. Fish and Wildlife Service, Washington Maritime National Wildlife Refuge Complex, 33 S. Barr Road, Port Angeles, WA 98362 and U.S. Fish and Wildlife Service, Division of Planning and Visitor Services, 911 NE 11th Avenue, Portland, Oregon, 97232. These documents can also be found on the Internet at http://pacific.fws.gov/planning/. These documents are available for public inspection. Interested and affected parties are being notified of our decision.

Supporting Reference

U.S. Fish and Wildlife Service. 2006. *Washington Islands National Wildlife Refuges Comprehensive Conservation Plan and Environmental Assessment.*

Regional Director

6/14/07
Date

Table of Contents

Page

Chapter 1. Introduction, Purpose, and Need

1.1 Background 1-1
1.2 Purpose of and Need for Action 1-3
1.2.1 Proposed Action 1-3
1.2.2 Purpose and Need 1-3
1.3 Location and Historical Overview of the Washington Islands National Wildlife Refuges 1-4
1.3.1 Location of Washington Islands NWRs 1-4
1.3.2 Historical Overview 1-4
1.3.3 Washington Islands NWR and Regional Management Responsibilities 1-9
1.4 National Wildlife Refuge System Mission, Refuge Purpose, and Vision 1-10
1.5 Related Actions and Activities 1-11
1.5.1 Research Activities 1-11
1.5.2 Tribal Fish and Wildlife Programs 1-11
1.5.3 Olympic Coast National Marine Sanctuary 1-11
1.5.4 United States Coast Guard Activities 1-12
1.5.5 National Park Service 1-12
1.5.6 Environmental Education 1-12
1.5.7 Northern Pacific Coast Regional Shorebird Management Plan 1-13
1.5.8 Regional Seabird Conservation Plan, Pacific Region 1-13
1.5.9 National and Regional Waterbird Conservation Plan 1-13
1.5.10 Comprehensive Plan for Coastline Management 1-14
1.6 Applicable Legal Mandates 1-14
1.6.1 Mandates Specific to the Washington Islands NWRs 1-14
1.6.2 Service and Refuge System Policies 1-15
1.7 Public Involvement 1-15
1.7.1 Interagency Meetings 1-16
1.7.2 Washington Department of Fish and Wildlife Meeting 1-16
1.7.3 Planning Updates 1-16
1.7.4 Issues and Opportunities Identified 1-16
1.7.5 Tribal Consultation 1-17
1.7.6 Comment Response Process on the Draft CCP/EA 1-20
1.8 Summary of Key Planning Issues 1-20

Chapter 2. Alternatives, Goals, Objectives, and Strategies

2.1 Alternatives 2-1
2.1.1 Alternative A: No Action 2-1
2.1.2 Alternative B: Proposed Action 2-2
2.2 Goals, Objectives, and Strategies 2-2
2.3 Management Themes 2-3
2.3.1 Wildlife and Habitat Protection and Management (WH) 2-3
2.3.2 Sensitive Species Protection (SS) 2-8
2.3.3 Wilderness Protection (WP) 2-9

Table of Contents (continued) *Page*

2.3.4 Cooperative Programs (CP) 2-10
2.3.5 Research and Monitoring Activity Management (RA) 2-15
2.3.6 Public Education Management (PE) 2-18
2.4 Common Features Among the Goals, Objectives, and Strategies 2-20
2.5 Comparison of Alternatives 2-21

Chapter 3. Affected Environment
3.1 Introduction 3-1
3.2 Climate and Ocean Conditions 3-1
3.3 Geology and Soils 3-2
3.4 Biological Resources 3-2
3.4.1 Vegetation 3-3
3.4.2 Wildlife 3-5
3.4.3 Species with Special Status 3-22
3.5 Cultural Resources 3-27
3.5.1 Ethnographic Information 3-27
3.5.2 Archaeology 3-28
3.5.3 History 3-29
3.6 Recreation/Public Use 3-30
3.7 Environmental Justice 3-32
3.8 Visual Resources 3-32
3.9 Socioeconomics 3-33
3.10 Public Health and Safety 3-35
3.11 Wilderness Resources 3-35

Chapter 4. Environmental Consequences
4.1 Introduction 4-1
4.2 Climate and Ocean Conditions 4-1
4.3 Geology and Soils 4-2
4.4 Biological Resources 4-3
4.4.1 Effects to Vegetation 4-3
4.4.2 Effects to Wildlife 4-4
4.4.3 Effects to Species with Special Status 4-10
4.5 Cultural Resources 4-12
4.6 Recreation/Public Use 4-13
4.7 Wilderness Resources 4-14
4.8 Environmental Justice 4-14
4.9 Unavoidable Adverse Impacts 4-14
4.10 Irreversible and Irretrievable Commitments of Resource 4-14
4.11 Short-Term Uses vs. Long-Term Productivity 4-14
4.12 Cumulative Effects 4-15

Table of Contents (continued) *Page*

Appendices

A: Glossary of Terms A-1
B: References B-1
C: Legal Materials Pertinent toWashington Islands National Wildlife Refuges
Laws and Executive Orders Potentially Applicable to the CCP and EA for Washington Islands National Wildlife Refuges C-1
Executive Order 703 ..... C-4
Executive Order 704 ..... C-5
Executive Order 705 ..... C-7
Public Land Order 4095 ..... C-8
Public Law 91-504 ..... C-9
Public Law 99-635 ..... C-12
Public Law 100-226 ..... C-15
Memorandum of Understanding with National Park Service, 1993 ..... C-17
Memorandum of Understanding with United States Coast Guard, 2003 ..... C-21
D: List of Preparers D-1
E: Minimum Requirement Analysis and Compatibility Determination
Minimum Requirement Analysis E-1
Compatibility Determination E-7
F: Summary of Washington Islands NWRs Wildland Fire Management Plan F-1
G: Implementation G-1
H: Public Comments and Service Responses H-1

List of Figures

1-1 Washington Islands NWRs and Vicinity 1-2
1-2 Flattery Rocks NWR 1-5
1-3 Quillayute Needles NWR 1-6
1-4 Copalis NWR 1-7
3-1 Biological Zones of Washington Islands NWRs and Vicinity 3-4

List of Tables

2-1 Comparison of Alternatives 2-22
3-1 Breeding seabirds of the Washington Islands NWRs, outer coast of Washington State. 3-11
3-2 Special Status Species and Habitats That Have Been Documented on the Washington Islands NWRs 3-23
3-3 Population and Density Information for Selected Areas 3-34
3-4 Median Household Income for Selected Areas 3-34

Chapter 1 Introduction, Purpose, and Need

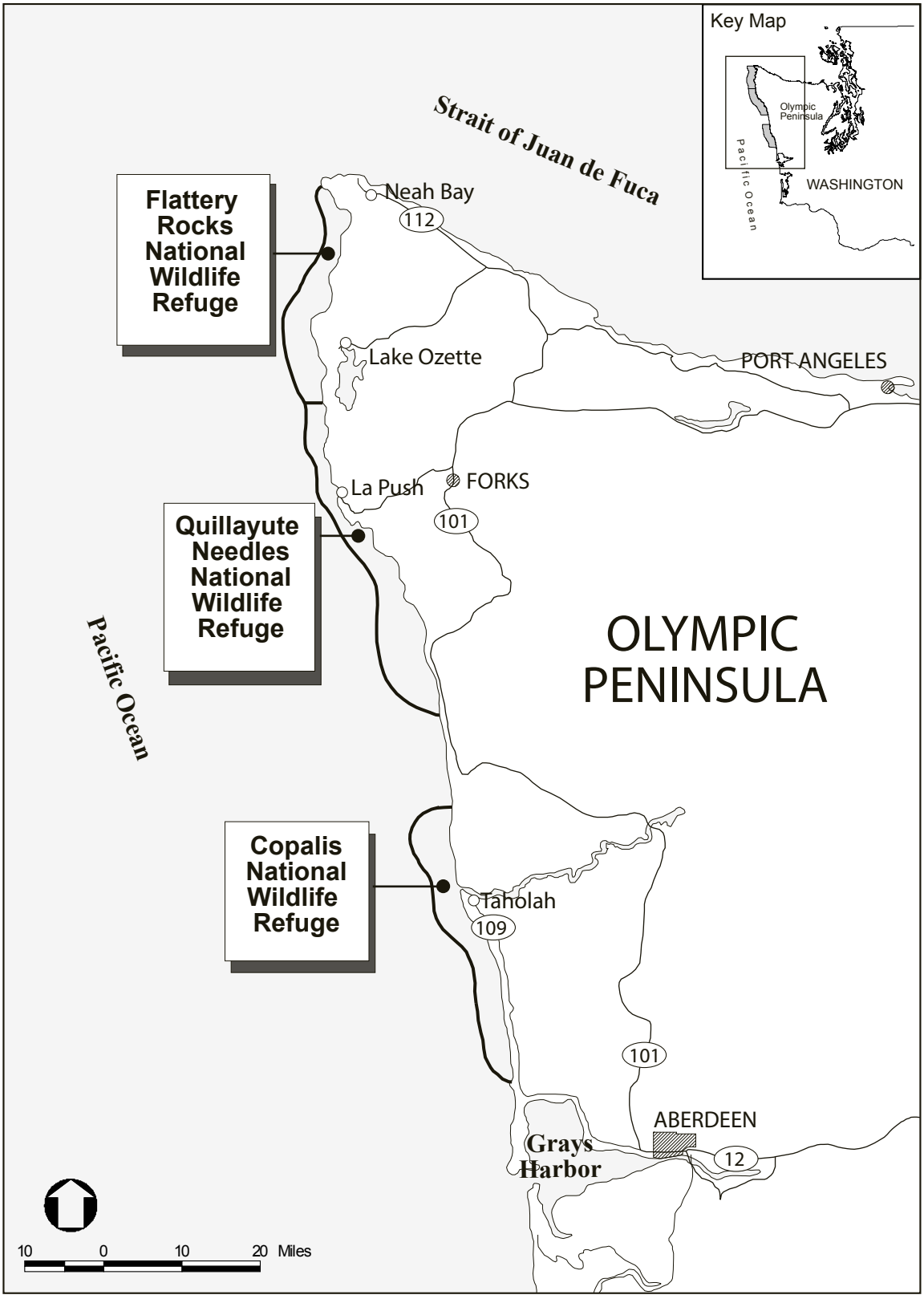
1.1 Background

The U.S. Fish and Wildlife Service (Service) has prepared this Comprehensive Conservation Plan/Environmental Assessment (CCP/EA) to guide its management of the lands and resources of the following three national wildlife refuges (NWRs): Flattery Rocks NWR, Quillayute Needles NWR, and Copalis NWR. Located along the outer coast of Washington State's Olympic Peninsula (Figure 1-1), these three national wildlife refuges are collectively called the Washington Islands NWRs or Refuges throughout this document. The Service has primary management authority over most of the offshore rocks and islands except for those included within established Native American reservation boundaries.

The Service prepared a management plan for the Washington Islands NWRs in 1986 (revised in 1989). To better manage refuge resources and comply with Federal law, the Service has prepared this CCP that addresses resource management at the Washington Islands NWRs for the next 15 years. Alternative B, the Proposed Action presented in this final EA is also the CCP. Alternative B presents the goals, objectives, and strategies for the long-term management of the Washington Islands NWRs. The strategies for achieving refuge goals will guide management decisions over the 15-year life of the CCP. The final EA describes the effects of each alternative for managing the Washington Islands NWRs. This integrated document is divided into four primary chapters:

- Chapter 1 Introduction, Purpose, and Need
- Chapter 2 Alternatives, Goals, Objectives, and Strategies
- Chapter 3 Affected Environment
- Chapter 4 Environmental Consequences

Additional material is included as appendices at the end of the document, as necessary. Remaining sections in Chapter 1 include the following: 1.2 The Purpose of and Need for Action; 1.3 An Overview of the History of the Washington Islands NWRs; 1.4 the National Wildlife Refuge System mission, refuge purposes, and vision statement; 1.5 A Discussion of the Related Actions and Activities; 1.6 A Review of the Legal Mandates Applicable to the Washington Islands NWRs CCP; and 1.7 A Summary of all Relevant Issues and Opportunities.



P/9E418.01/Graphics/wa-marine-rfg6-29.cdr

Sources: FWS 1986; NPS 2000; Pers. Comm. Jim Thomas, Realty Dept, WDNR, April 30, 2000.

Washington Islands NWRs And Vicinity

Chapter 1 Introduction, Purpose, and Need

FIGURE 1-1

1.2 Purpose of and Need for Action

1.2.1 Proposed Action

The Service proposes to adopt and implement a CCP for the three Washington Islands NWRs: Flattery Rocks NWR, Quillayute Needles NWR, and Copalis NWR. Because a CCP is a Federal action, the National Environmental Policy Act (NEPA) of 1969 requires an assessment of the potential environmental effects of the proposed action and any alternatives (including the "no action" or status quo alternative). The two alternatives evaluated in this EA are Alternative A, the no action alternative; and Alternative B, the proposed action. Alternative B would fulfill the vision and purposes of each Refuge and is consistent with the mission of the National Wildlife Refuge System and the goals of the National Wilderness Preservation System. Alternative B addresses the significant issues identified in the CCP planning process and is consistent with principles of sound fish and wildlife management.

1.2.2 Purpose and Need

Under the National Wildlife Refuge System (NWRS) Administration Act of 1966, as amended by the Improvement Act of 1997 (Public Law 105-57), the Service is required to develop CCPs for all NWRs outside Alaska. The purpose of this CCP is to update management direction so that it is consistent with the Improvement Act and with the Washington Islands Wilderness designation under Public Law 91-504. The CCP will provide the refuge manager and staff with a 15-year management plan for the conservation of seabirds, marine mammals, other wildlife, and their related habitats and for the protection of wilderness values. A CCP is needed to address significant problems that may adversely affect refuge wildlife, plant populations, and habitats. Specifically, the problems, concerns, and opportunities for the Washington Islands Refuges include: (1) a lack of public awareness of the Refuges' valuable and sensitive wildlife resources; (2) the need to improve coordination with other managing agencies and Tribes; (3) wildlife disturbances from aircraft overflights and people on or near breeding sites; (4) the need for additional scientific research, surveys, and monitoring; (5) the existing occurrence and potential threat of contaminants and debris; and (6) concerns related to exotic species. The goals, objectives, and strategies included in Alternative B were developed to address coordination and cooperation opportunities, and external threats to the biological diversity, biological integrity, and environmental health of the Washington Islands NWRs.

1.3 Location and Historical Overview of the Washington Islands National Wildlife Refuges

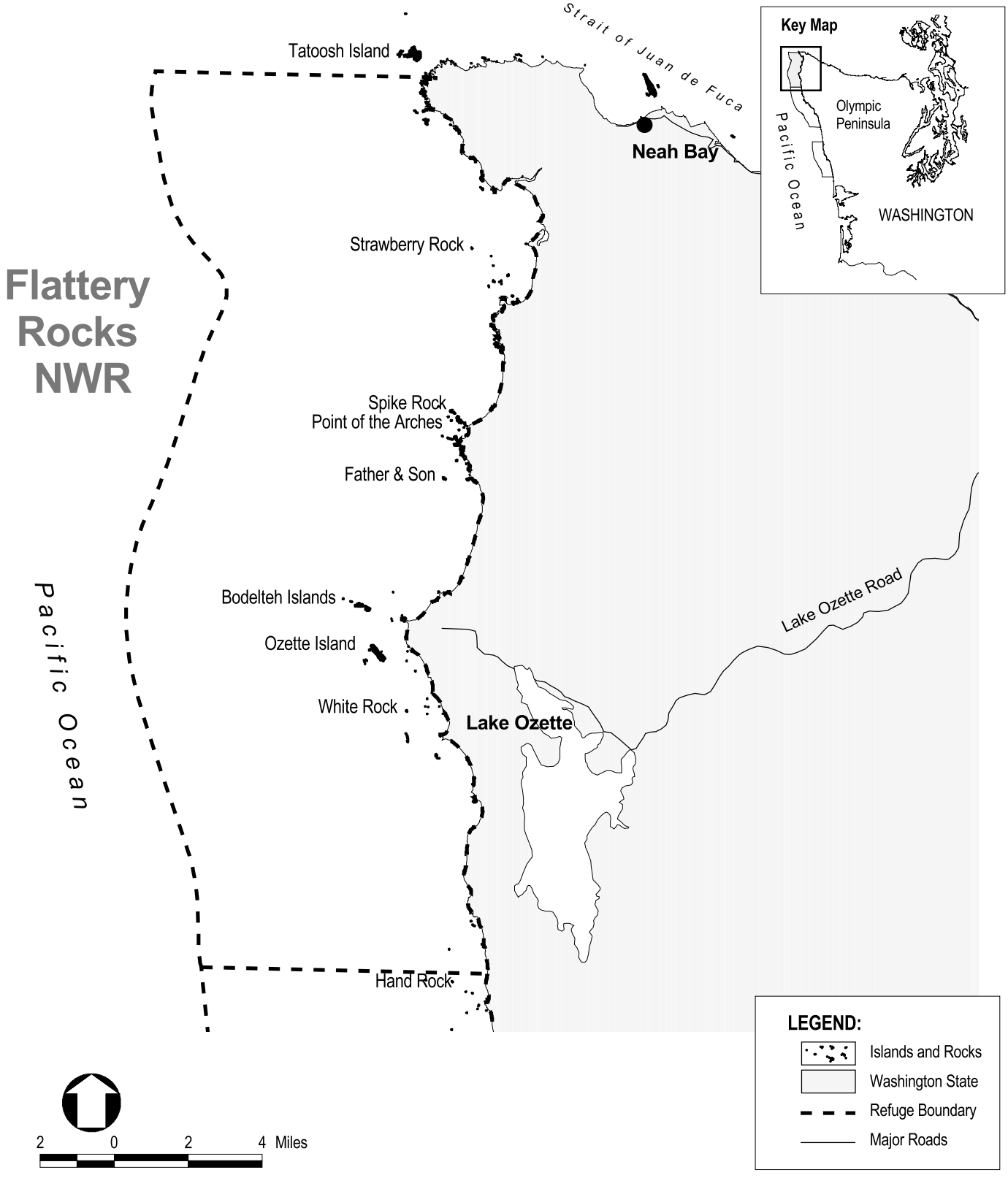
1.3.1 Location of Washington Islands NWRs

The Washington Islands NWRs, located along 100 miles (161 km) of the outer coast of the Olympic Peninsula, encompass more than 600 islands, sea stacks, rocks, and reefs (Figures 1-2, 1-3, and 1-4). The total land area above the line of mean high water of the rocks, reefs, and islands which comprise the Refuges is approximately 486 acres (0.8 sq miles) (196.7 ha [2 sq. km]). Only about 40 of the islands are named. The legal descriptions for each Refuge are as follows: Copalis NWR is between Latitude 47°08' North and 47°29' north; Quillayute Needles NWR is between Latitude 47°38' North and 48°02' North; and Flattery Rocks is between Latitude 48°02' North and 48°23' North. The Refuges do not include islands that are part of designated Native American reservations, such as James Island.

1.3.2 Historical Overview

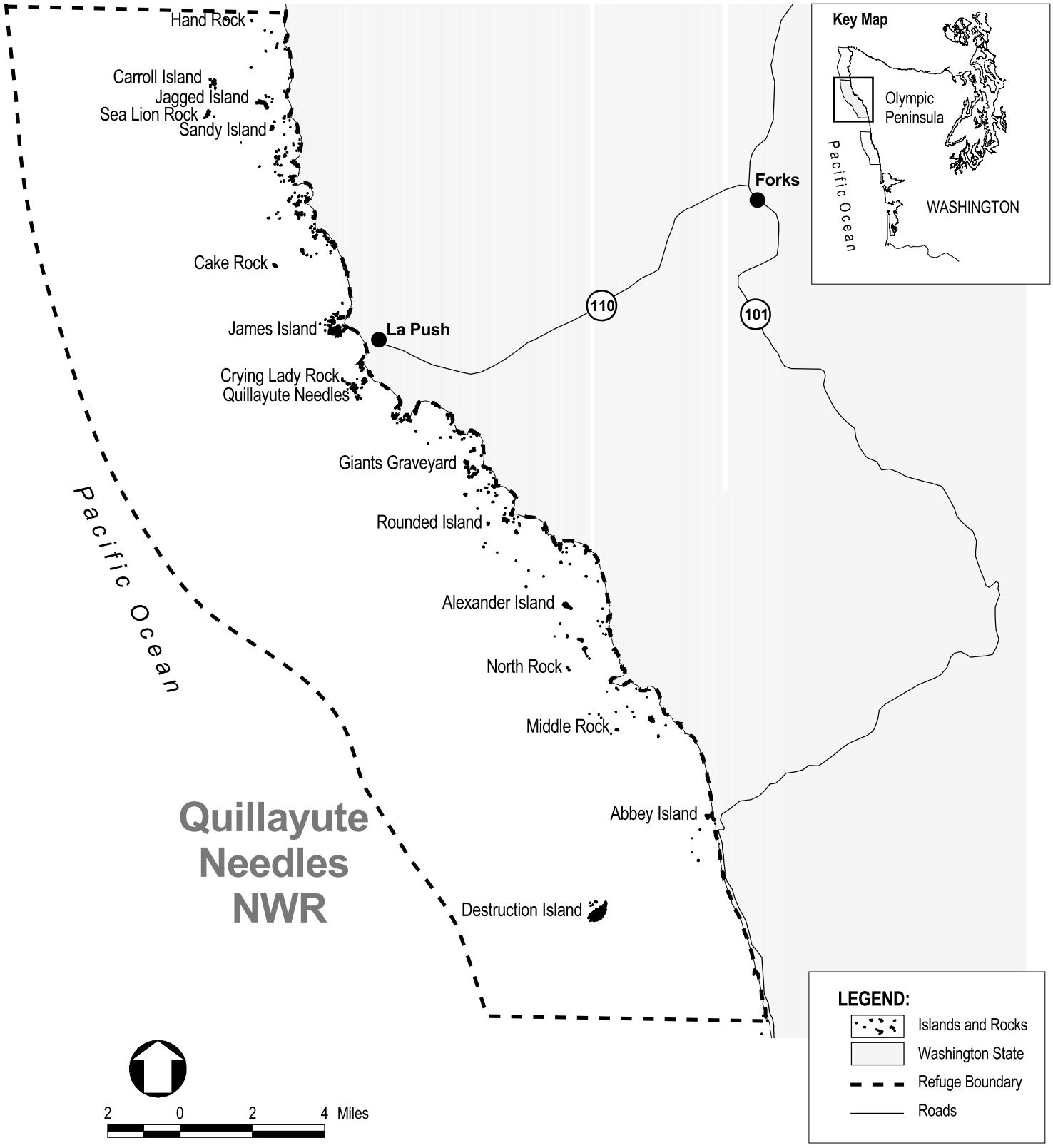
The Washington Islands NWRs have long been considered remote and isolated areas. At least seven groups of Native Americans−the Makah, Ozettes, Quileutes, Hoh, Queets, Quinaults, and Copalis−occupied the outer coast of the Olympic Peninsula adjacent to the present day Washington Islands Refuges. They depended on the natural resources of the Pacific Ocean as well as the rivers and forests for their subsistence (Ruby and Brown 1992). Washington coastal development by European-Americans began during the late 1800s, but the area remains relatively undeveloped and sparsely populated. There has been little private ownership of any of the islands. Today, the population of Forks, the largest town on the west side of the Olympic Mountains, is estimated at 3,500 people (Forks Chamber of Commerce 2000). The Native American populations living on or near the four local Indian reservations are estimated at 1,752 for the Makah Reservation, 2,951 for the Quinault Indian Reservation, 784 for the Quileute Reservation, and 86 for the Hoh Reservation (Northwest Portland Indian Health Board 2003).

The U.S. Coast Guard (USCG) was given authority to operate a lighthouse on Destruction Island in 1866 by an Executive Order. The lighthouse is currently fully automated and unstaffed; however, the USCG retains authority over the facilities and conducts maintenance activities, including servicing lighthouse batteries quarterly, under a Memorandum of Understanding (MOU) with the Service. The USCG facilities include the lighthouse, a helicopter/generator pad, several buildings, a network of tramcar tracks, a tramcar shed, a water tower, two underground cisterns, several old house foundations filled with rubbish, and remnants of docking facilities (USFWS 1986).



Source: U.S. Fish and Wildlife Service GIS, EDAW, Inc. 2001. P:/9E41801/GIS/APR/ISLANDS.APR

Flattery Rocks NWR

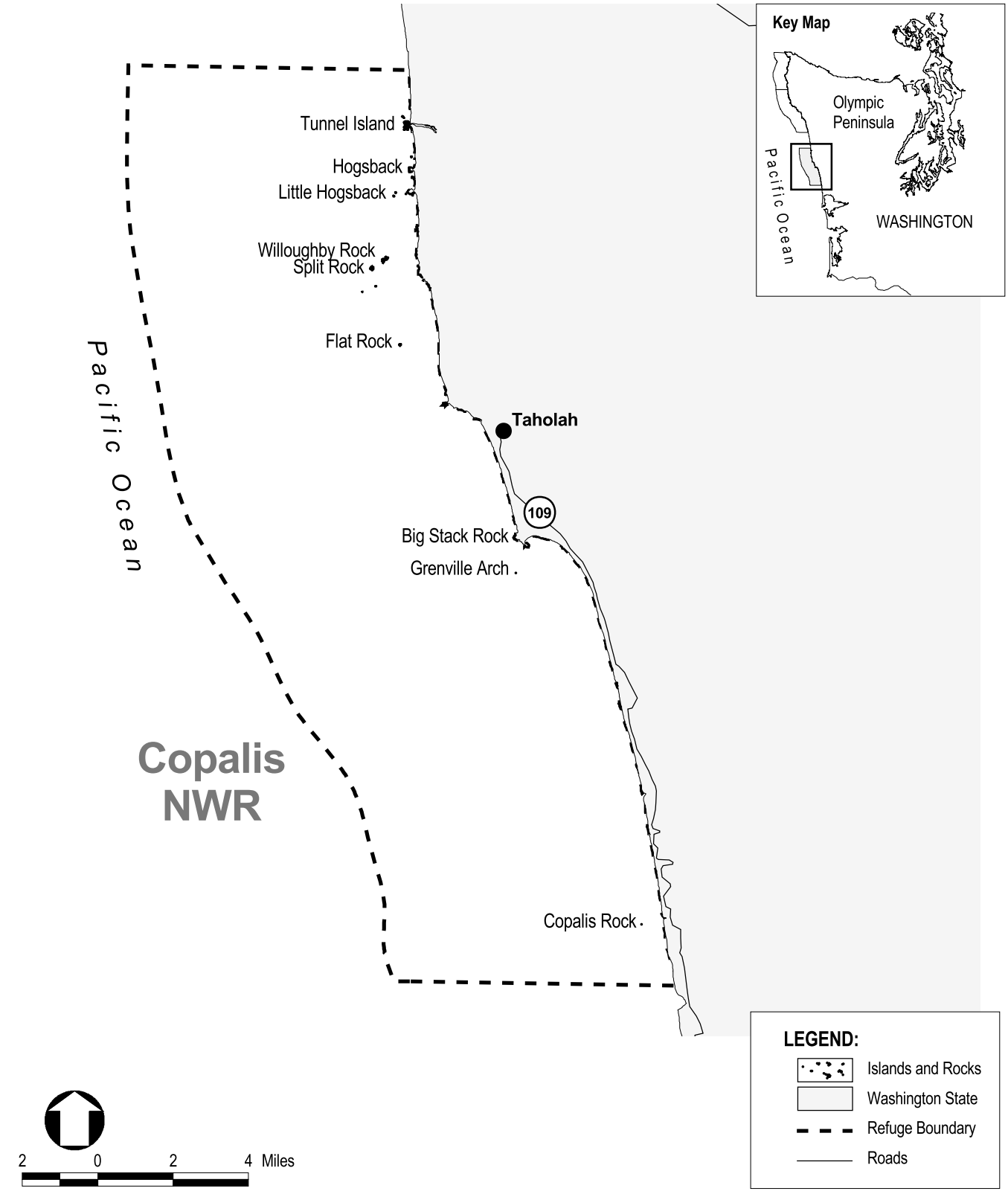


Source: U.S. Fish and Wildlife Service GIS, EDAW, Inc. 2001. P:/9E41801/GIS/APR/ISLANDS.APR

Quillayute Needles NWR

Chapter 1 Introduction and Purpose & Need

FIGURE 1-3



Source: U.S. Fish and Wildlife Service GIS, EDAW, Inc. 2001. P:/9E41801/GIS/APR/ISLANDS.APR

Copalis NWR

Chapter 1 Introduction and Purpose & Need

FIGURE 1-4

Along much of the coastline adjacent to the islands lies the Olympic National Park (ONP), which officially became a national park on June 29, 1938. This park encompasses 922,651 acres (373,396 ha), and includes some of the beaches and headlands along the coast.

The islands that make up the Washington Islands NWRs were first granted Federal conservation protection under a seabird reserve system, designated in 1907 by President Theodore Roosevelt (Executive Orders No. 703, 704, 705). The three reservations were renamed Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges in 1940 (Presidential Proclamation, July 30, 1940, President Franklin D. Roosevelt as granted under 50 Stat. 917). All three are managed together as the Washington Islands NWRs.

In 1944, the U.S. Navy was granted use of a number of rocks within the Washington Islands Refuges for bombing and strafing activities (USFWS 1986). White Rock, North Rock, North Sea Lion Rock, South Sea Lion Rock, Carroll Island, Split Rock, Rounded Island, and possibly other islands were all utilized for this purpose until 1949, when bombing was continued only on South Sea Lion Rock. In 1993, the U.S. Navy's use of this area was rescinded by the Secretary of the Interior (NOAA 1993).

In 1967, the Washington Department of Natural Resources (WDNR) signed a resolution prohibiting the "prospecting, mining, and/or oil and gas exploration activities within one-quarter of one statute mile of any island, islet, reef, or rock within the boundaries of said Refuges" (Resolution Number 76).

The Department of the Interior removed James Island, near La Push, Washington, from the Quillayute Needles NWR in 1966 (Public Land Order 4095), when it was determined that the lands were set aside for the Quileute Reservation in 1889.

In 1970, all three of the Washington Islands NWRs were designated as Wilderness Areas through Public Law 91-504, except for Destruction Island in Quillayute Needles NWR. This action was undertaken to promote and protect the pristine and remote nature of the islands. In 1986, Public Law 99-635 expanded and adjusted the boundaries of ONP. The bill effectively transferred land management authority for Flattery Rocks and Quillayute Needles NWRs to the National Park Service (NPS). As a result of pressure from Washington State's scientific and environmental community, another bill to restore the two Refuges to the Service was introduced. In December 1987, Public Law 100-226 restored Flattery Rocks and Quillayute Needles to full NWR status, although both are now located within the boundary of the ONP. The bill also called for a cooperative agreement between the Service and the NPS. The Service and NPS signed a MOU in June 1988 (Agreement No. 9500-80001) which outlines the objectives for the Washington Islands NWRs and the obligation of both agencies. Under this agreement, the Service maintains management and administration responsibilities; regulates the Washington Islands NWRs' uses; monitors wildlife; works with the NPS in developing educational information; notifies NPS of site visits; and exchanges information and training pertinent to the

Washington Islands NWRs. As a result of the agreement, the NPS is obligated to: develop informational and educational programs about the Washington Islands NWRs; provide law enforcement training for park rangers; monitor trespassing activity; support the Service's restriction of public and agency access to the NWRs; and conduct cooperative scientific research as needed.

The waters surrounding the Washington Islands NWRs were designated a National Marine Sanctuary in 1994. The Olympic Coast National Marine Sanctuary (Sanctuary), encompasses 2,111,992 acres (3,310 sq miles) (854,696 ha [8547 sq km]) of marine waters and extends along 135 miles (217 km) of coastline, thereby incorporating the entire area surrounding the islands and rocks of all three Refuges. This designation covers most of the continental shelf and varies between 25 to 40 miles (40 to 65 km) offshore (NPS 2000). The National Oceanic and Atmospheric Administration (NOAA) manages the Sanctuary through guidance contained in the May 1993 Olympic Coast National Marine Sanctuary Management Plan.

1.3.3 Washington Islands NWR and Regional Management Responsibilities

The management responsibilities as they apply on and around the Washington Islands NWRs' region are complex. The Service is responsible for most of the islands, rocks, and seastacks above the mean high water line. As with other national wildlife refuges, the Service is responsible for any wildlife, fish, and plants that occupy the Washington Islands NWRs whether they are seasonal or permanent residents. This includes seabirds, shorebirds, and marine mammals that use the Refuges' islands and shoreline. Although Service responsibilities cover terrestrial environments, the Refuges are vitally linked with the surrounding marine environment and its resources. As an agency, the Service is mandated to enforce Federal wildlife laws, manage migratory bird populations, conserve and restore wildlife habitat, and administer the Endangered Species Act (ESA).

Along the Washington Coast, Federal, State, and Tribal governments exercise management responsibility along the shoreline and in waters surrounding the Refuges. The NPS manages ONP, which includes expanses of mainland coastline (CFR 15- IX-922). As described in Section 1.3.2, the Service manages the Quillayute Needles and Flattery Rocks NWRs under an agreement with the NPS. The Washington State Parks and Recreation Commission maintains Pacific State Park, Griffith Priday State Park, and Ocean City State Park, which are all adjacent to the Copalis NWR (pers. comm., Karmen Martin). The Quileute, Makah, Hoh, and Quinault Tribes manage reservation lands that border the Washington Island NWRs. These Tribes also have off-reservation access to "usual and accustomed grounds and stations" for activities reserved by treaties (fishing, shellfishing, and in the case of the Makah, whaling and sealing) which overlap with State and Federal management responsibilities. The Sanctuary designation as described in section 1.3.2 extends to the higher high water mark on Refuge islands. The Washington Department of Fish and Wildlife is responsible for management of fish and wildlife in State waters around the Refuges.

1.4 National Wildlife Refuge System Mission, Refuge Purpose, and Vision

The Service's mission for the NWRS is to "administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of the present and future generations of Americans" (National Wildlife Refuge System Improvement Act 1997; Public Law 105-57). The CCP for the Washington Islands NWRs is being developed in accordance with this mission statement and the guidelines as delineated in the Improvement Act.

Based on the guidance provided in the Improvement Act (Section 7), the CCP for any refuge must identify and describe the following: (1) the refuge purpose; (2) the distribution, migration/ dispersal patterns, and abundance of fish, wildlife, and plant populations and their habitat on the refuge; (3) the archaeological and cultural values; (4) areas that are suitable for use as administrative sites or visitor facilities; (5) problems that may adversely affect fish, plant, and wildlife populations and habitats on the refuge and potential corrective actions; and (6) opportunities for compatible wildlife-dependent recreation.

Originally, when established in 1907, the stated purpose of the three Washington Islands Reservations was to establish "a preserve and breeding ground for native birds and animals" (Executive Order No. 703, 704, and 705). The inclusion of these Refuges into the Wilderness System in 1970 placed added emphasis on the purpose of wilderness preservation for these refuge islands (Public Law 91-504). Section 5 of Public Law 91-504 directs the administration of the Washington Islands Wilderness to be carried out in accordance with the provisions of the Wilderness Act. The purposes of the Wilderness Act are to secure an enduring resource of wilderness and to administer designated areas in a way that protects and preserves wilderness character. Wilderness is an additional purpose for all lands within the Washington Islands NWRs except Destruction Island. In the 1986 Washington Islands NWR Management Plan, the Service stated that the management direction for the Refuges is to protect the natural resources in an undisturbed and wilderness nature, with special emphasis on seabird nesting colonies.

The Refuges' vision is a broad statement of how the Service intends to manage refuge resources over the 15-year life of the CCP. The vision statement for the Washington Islands NWRs follows:

> Since 1907, critical resting and breeding grounds for marine wildlife off the outer Olympic coast have been protected and preserved by the National Wildlife Refuge System. The more than 600 rocks, reefs, and islands known as Flattery Rocks, Copalis, and Quillayute Needles National Wildlife Refuges, are designated wilderness (except Destruction Island), and all will continue to be preserved in a natural condition with

minimal human intrusion. Management activities will focus on monitoring refuge wildlife and on protection and maintenance of a natural functioning ecosystem. The U.S. Fish and Wildlife Service will coordinate with other agencies and tribes to ensure the long-term health and viability of native seabird and marine wildlife populations. We will also work with others to provide wildlife viewing and interpretation at selected locations on the adjacent coastline. Fostering an appreciation for Pacific coast wildlife will enrich people in a variety of ways and ensure that this outstanding legacy of wildlife is passed on to future generations.

1.5 Related Actions and Activities

A number of ongoing actions and activities pertinent to the development of the CCP for the Washington Islands NWRs are described below.

1.5.1 Research Activities

The Service, Washington Department of Fish and Wildlife (WDFW), and National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) currently conduct research on the Washington Islands NWRs and surrounding area, focusing on seabirds, raptors, salmon, and marine mammals. Other Federal and State agencies and universities have also performed research on the Refuges.

1.5.2 Tribal Fish and Wildlife Programs

All four of the Tribes adjacent to the Washington Islands Refuges are active in a variety of fish and wildlife management programs. These include monitoring shellfish in cooperation with State and Federal agencies; developing tribal hunting regulations; seabird monitoring and research; and management of fisheries resources with the State. Most of these Tribes have natural resource professionals on their staff.

1.5.3 Olympic Coast National Marine Sanctuary

The Olympic Coast National Marine Sanctuary was established in 1994 because this marine environment was considered to be of special national significance. The Sanctuary is managed by NOAA with guidance from the Sanctuary Advisory Council. NOAA has established an Area to be Avoided (ATBA), which serves as a guide for navigating vessels safely along the Washington Coast. NOAA also regulates a number of activities within the Sanctuary boundaries. Restricted activities within the Sanctuary include: oil and mineral exploration; disturbances to cultural and historical resources; material dumping; seabed alterations; low-flying aircraft (under 2,000 feet [610 m]) over islands or coastlines; and disturbances to marine mammals, turtles, and seabirds

(15 C.F.R. § 922.152). The intended effect of these regulations is to protect the biological, recreational, ecological, and historical qualities of the Sanctuary (NOAA 1993).

The Sanctuary Advisory Council's management mission is the protection of ecological and cultural integrity of the Sanctuary area. The Council is composed of 15 representatives from local Tribes, local county governments, Washington State Department of Ecology, WDNR, WDFW, the tourism industry, commercial fishing interests, the marine industry, research and education entities, conservation organizations, and the general public. In addition, Federal agencies (NPS, NOAA Fisheries, USCG, Navy, Northwest Straits Commission, and the Service) participate as non-voting members, providing technical input.

1.5.4 United States Coast Guard Activities

The USCG is responsible for the Destruction Island lighthouse and the associated buildings. As stated earlier, this lighthouse was established in 1891, and is still considered an active aid to navigation. Maintenance on the automated lighthouse is the duty of the USCG and includes servicing the optics and light batteries quarterly, with occasional overnight visitations. There is no full-time USCG presence on the island. If problems are reported regarding lighthouse operation, the USCG will usually visit the island for repair work within 18 hours of the report time (pers. comm. Kilburger 2000). Travel to the island is conducted by helicopter. Methods of transportation to and activities on the island are guided by an MOU with the Service. Biological surveys and assessments of Destruction Island, conducted as part of a biological assessment of USCG activities, describe the sensitive areas of the island. The MOU states what types of activities are allowed and where they are allowed. (Appendix C-10).

1.5.5 National Park Service

Flattery Rocks NWR and Quillayute NWR as mentioned in 1.3.2 Historical Overview, were included within the exterior boundaries of ONP in1986 but are managed as national wildlife refuges by the Service. The ONP assists the Refuge in developing informational and educational programs, providing law enforcement, monitoring trespass, and conducting cooperative research. In addition, ONP and the Service have entered into an agreement whereby ONP will assist the Service in wildfire suppression on Refuge lands as resources are available.

1.5.6 Environmental Education

Environmental education along Washington's Olympic Coast is currently carried out by a variety of entities, including the Service, NPS, NOAA, Tribes, and Olympic Park Institute. Each off-refuge program incorporates the Washington Islands NWRs in some way. Both NOAA and the NPS offer naturalist-led programs during the tourist season along the mainland coast that discuss coastal ecology. The Makah Museum and Cultural Center, in cooperation with the Sanctuary,

offers educational programs about the ecology and tribal aspects of the coast and islands. The Olympic Park Institute also offers coastal and island ecology seminars.

1.5.7 Northern Pacific Coast Regional Shorebird Management Plan

The Northern Pacific Coast Regional Shorebird Management Plan establishes regional goals and objectives for western Oregon and Washington (Drut and Buchanan 2000). Regional goals under the plan are to: "(1) measurably increase populations, over the next 10 years, of species impacted by current or recent declines at population or flyway levels, and (2) stabilize and maintain current levels of breeding, wintering, and migrating populations of other shorebird species within the region/flyway." The regional plan also identifies research and monitoring goals. Important shorebird habitats identified under the plan include coastal estuaries, beaches, rocky shorelines, and pelagic and freshwater systems. The Refuges are categorized under the rocky shores and pelagic systems. The Northern Pacific Coast Plan covers 40 shorebird species. High priority species that use the Refuges include black oystercatcher, ruddy and black turnstones, surfbird, rock sandpiper, and 19 others. The Refuges are known to host breeding populations of black oystercatchers and a large variety of migrating species.

1.5.8 Regional Seabird Conservation Plan, Pacific Region

A Seabird Conservation Plan was recently completed for the Pacific Region (USFWS 2005). The Seabird Plan identifies Service priorities for seabird management, monitoring, outreach, planning, and coordination, at the regional scale. It includes: a review of seabird resources and habitats, a description of issues and threats, and a summary of current management, monitoring and outreach efforts. All species are prioritized by conservation concern at the regional scale and recommendations for conservation actions are identified. The plan gives a brief species profile for each of the 60 breeding species and provides a summary of current information on population size, status, ecology, distribution, habitats, threats, and recommended actions. The Washington Islands NWRs provide habitat for more than 70 percent of Washington's nesting seabirds and support some of the largest seabird colonies in the continental United States. The Refuges will be integral to the successful implementation of the Pacific Region Seabird Conservation Plan.

1.5.9 National and Regional Waterbird Conservation Plan

The North American Waterbird Conservation Plan (Kushlan et al. 2002) was developed through an international, broad-based partnership of individuals, institutions, and agencies. It sets forth goals and priorities for waterbirds (including seabirds) in all habitats at the continental scale, and provides an overarching framework and guide for conserving waterbirds. A regional waterbird conservation plan for western Oregon, Washington, and northwestern California is currently being developed as a component of this continental plan. As a cooperative effort between agencies and private organizations, the regional plan will cover all waterbird species except

seabirds (e.g. loons, herons, and egrets). Seabirds are covered in the Service's Regional Seabird Conservation Plan (sec. 1.5.8, USFWS 2005) and the California Current Marine Bird Conservation Plan (Mills et al. 2005). National and regional waterbird plans aim to facilitate conservation activities at various geographic scales, including planning, research and monitoring, outreach, and habitat protection and management.

1.5.10 Comprehensive Plan for Coastline Management

In December 2000, NOAA, the U.S. Geological Survey (USGS), the Department of Agriculture, and the U.S. Environmental Protection Agency (EPA) released the first comprehensive strategy for research and monitoring in national waters (NOAA et al. 2000). This strategy outlines plans for these Federal agencies to assess the health of the Nation's coastal resources. Recommended actions include enhancing and adapting existing monitoring programs to support an integrated national program, integrating interagency research efforts to fill data gaps, conducting periodic national and regional coastal assessments, improving data management, establishing mechanisms to assess and adjust monitoring and research to meet changing national coastal priorities, and developing an implementation plan for further action. These strategies could aid in the collaboration between NOAA and the Service along the outer Washington Coast.

1.6 Applicable Legal Mandates

As stated previously, the National Wildlife Refuge System Improvement Act of 1997 mandates preparation of CCPs. The National Environmental Policy Act (NEPA) of 1969 requires environmental analysis for Federal actions, including comprehensive plans. Appendix C contains a list of other mandates, laws, and executive orders that may affect implementation of the CCP. The list includes the: Coastal Zone Management Act (1972); Endangered Species Act (1973); Wilderness Act (1964); Treaty of Olympia (1856); Treaty of Neah Bay (1855); and Executive Order 13175 Consultation and Coordination with Indian Tribal Governments (2000).

1.6.1 Mandates Specific to the Washington Islands NWRs

A subset of laws, executive orders, and agreements form the foundation of purpose and management guidelines for the Washington Islands NWRs. These laws and agreements which specifically pertain to the Refuges include (also see Appendix C):

- Executive Orders 703, 704, and 705, 1907 (established the three Reservations);
- Presidential Proclamation by Franklin D. Roosevelt, July 30, 1940, granted under 50 Stat. 917 (renamed "Reservations" to current "National Wildlife Refuge" names);
- Public Land Order 4095, 1966 (order removed James Island from the NWRS);
- Public Law 91-504, 1970 (act designated Washington Islands Wilderness);
- Public Law 99-635, 1986 (act expanded the boundaries of ONP to include Flattery Rocks and Quillayute Needles NWRs);

- Public Law 100-226, 1987 (act restored administration of Flattery Rocks and Quillayute Needles NWRs within ONP Boundary to the Fish and Wildlife Service);
- MOU with National Park Service, 1993; and
- MOU with United States Coast Guard, 2003.

1.6.2 Service and Refuge System Policies

Several Service and Refuge System policies act as important guidelines for evaluating and directing actions and management of the Washington Islands NWRs. Policies that apply to the Refuges include:

- Refuge Planning Policy, 2000 (guides process for developing refuge management plans);
- Regional Marine Bird Policy, revised 1985 (this policy guides seabird management actions);
- Biological Integrity Policy, 2001 (this policy provides guidance for preserving the biological integrity, diversity, and environmental health of refuge lands);
- Fire Management Handbook, 2005 (outlines Service policy, authorities, and responsibilities for fire management on refuge lands);
- Wilderness Management Policy, 1986 (this policy, currently being updated, provides guidance to national wildlife refuges for the implementation of the Wilderness Act of 1964 and the National Wildlife Refuge Administration Act of 1966, as amended); and
- Native American Policy, 1994 (guides government to government relationships in the conservation of fish and wildlife resources).

1.7 Public Involvement

To incorporate public input, the Service developed a Public Outreach Plan with the following goals: (1) raise public awareness of the purpose of the Washington Islands NWRs; (2) inform the public about the mission and purpose of the National Wildlife Refuge System and the process of comprehensive conservation planning; (3) make the public aware of the threat to seabird populations from pollution, invasive species, disturbance, and habitat loss and degradation; (4) identify public concerns and desires for the Washington Islands NWRs; (5) build long-term community support for the Washington Islands NWRs and the conservation of marine wildlife resources; (6) build cooperation with the Tribes, NOAA, NPS, WDNR, Washington State Parks, and WDFW to conserve marine wildlife resources; and (7) identify education opportunities to continue improving public knowledge of the Washington Islands NWRs mission and purpose. Involvement with local, State, and Federal agencies; local government entities; conservation groups; Native American Tribes; and the general public occurred through meetings and publications. Early in the planning process (scoping) the Service received written and/or verbal comments from the following agencies, groups, and individuals.

- Makah Tribe
- Quileute Tribe

- Quinault Indian Nation
- Washington Wilderness Coalition (Seattle, WA)
- Olympic Park Associates (Sequim, WA)
- Port Angeles Chamber of Commerce (Port Angeles, WA)
- Local and regional citizens
- Washington Native Plant Society-Olympic Peninsula Chapter (Poulsbo, WA)
- NOAA-Olympic Coast National Marine Sanctuary (Port Angeles, WA)
- Washington State Parks and Recreation Commission (Olympia, WA)

1.7.1 Interagency Meetings

One interagency meeting was held to gather feedback from other agencies with interest in the Refuges. This meeting was held in conjunction with a Marine Sanctuary Advisory Committee meeting. Service representatives announced that the Service was initiating the CCP process for the Refuges and described the process to the Advisory Committee on March 3, 2000.

1.7.2 Washington Department of Fish and Wildlife Meeting

The Service's CCP Planning Team met with representatives from WDFW on February 8, 2005, to provide updated information on CCP development and obtain feedback.

1.7.3 Planning Updates

In addition to meetings, information on the development of the Washington Islands NWRs CCP/EA was disseminated through Planning Updates. Planning Update #1 was published in March 2000 and provided an introduction to the Washington Islands NWRs, a description of the CCP/EA planning process, and a mail-in response form to provide input on major issues and vision planning. The second Planning Update was published in March 2001. The third Planning Update announced the availability of the Draft CCP/EA for public review in May of 2005. The fourth and final Planning Update will be available in 2006 concurrent with the approved Washington Islands Comprehensive Conservation Plan.

1.7.4 Issues and Opportunities Identified

Effective long-term management of the Washington Islands NWRs will require among other things, integration of the perspectives and concerns of numerous interested parties. To explore all refuge management issues and opportunities, the Service reviewed and considered comments received from the public, nongovernmental organizations (NGOs), other agencies, and Tribes. Public involvement and tribal consultation for the Washington Islands NWRs CCP/EA was conducted with the purpose of identifying issues of concern, as well as potential opportunities related to future management direction.

Interested Public

Public input received from the Planning Update response forms was used to identify the issues, concerns, and opportunities to consider during development of the CCP. These are listed below in order of frequency of comment, with the most commonly reported concern first.

- Wildlife disturbances from aircraft overflights
- Wildlife disturbances from oil spills
- Wildlife disturbances from recreational boating
- Wildlife disturbances from marine invertebrate harvests
- Other wildlife disturbances
- Invasive species management
- Ecotourism
- Interagency coordination of area management
- Law enforcement
- Research support

Nongovernmental Organizations

Predominant issues reported in the response forms and letters are listed below.

- Wildlife disturbances from overflights
- Wildlife disturbances from commercial fishing
- Wildlife disturbances from shellfish harvests
- Wildlife disturbances from recreational boating
- Wildlife disturbances from oil spills
- General wildlife disturbance
- Invasive species management

Other Agencies

Specific issues, concerns, and opportunities raised by Federal, State, and local agencies are summarized below.

- Management/enforcement opportunities with ONP and the Washington State Parks and Recreation Commission for areas adjacent to the Refuges.
- Inventory of archaeological and historical materials and structures within the Refuges.
- Coordination of refuge interpretive signs on State lands with the Washington State Parks and Recreation Commission.
- Human disturbance to refuge plants and animals.
- Invasive and nuisance species management on refuge islands.
- Interagency cooperation, including cooperative research and monitoring efforts.
- Pollution threats to the Refuges and vicinity.
- Educational and visitor experience analysis and management.
- Cultural resource identification and management.

1.7.5 Tribal Consultation

The Washington Islands NWRs are important to the culture of the Makah, Quileute, Hoh, and Quinault Tribes. These Tribes were individually contacted to conduct government-to-government

consultation meetings. At each meeting, refuge staff presented the CCP process and/or document to tribal representatives and asked them to identify important issues and concerns. The Makah, Quileute, and Quinault identified the following issues. The Hoh Tribe commented on the Draft CCP.

Quileute Tribe

The Quileute Tribe met with Washington Islands NWRs staff on May 17, 2000, to discuss CCP issues and goals. They met again on August 29, 2003, and May 25, 2004, to discuss tribal comments on the Interim Draft CCP. They requested a meeting with the Service's Regional Director which took place on July 7, 2004. The Quileute described the following concerns with regard to the Washington Islands NWRs.

- Development of baseline intertidal information that could be used to assess mainland intertidal disturbances.
- Interagency cooperation.
- Overflight disturbances.
- Treaty rights to maintain use of resources and access.
- Recognition of tribal role/interest in refuge management and fishing/hunting rights.
- Coordination of interpretive opportunities (e.g., seabird exhibit in marina).
- Seabird bycatch assessment.
- Commercial fishing impacts assessment.
- Destruction Island clean-up opportunities.
- Oil spill preparedness.
- Annual meetings between the Tribe and the Service and more often when decisionmaking processes call for it.

Quinault Indian Nation

The Quinault Indian Nation natural resources staff met with Washington Islands NWRs staff on October 25, 2000, to discuss CCP issues and goals. On August 28, 2003, and May 24, 2004, the Service met with tribal leaders and natural resources staff to discuss the Tribe's comments on the Interim Draft CCP. The Quinault Indian Nation's representatives described the following concerns regarding the Washington Islands NWRs.

- The Quinaults' tribal treaty rights to "usual and accustomed areas" extending from Grays Harbor to Destruction Island.
- How the CCP would address treaty rights including fishing, hunting marine mammals, and gathering.
- Boundary and island ownership issues between the Quinault Indian Reservation and the Refuges.
- What opportunities would be available for contract work for their natural resource staff.
- Providing prior notification when Refuge staff need to access Quinault Reservation lands.

Makah Tribe

The Makah Tribe met with Washington Islands NWRs staff on June 20, 2000, to discuss CCP issues and goals, and again on November 25, 2003, to discuss the Tribe's comments on the Interim Draft CCP. The Makah Tribe's representatives described the following concerns regarding the Washington Islands NWRs.

- How would the Sanctuary relate to refuge management?
- Right of access, under the Treaty of Neah Bay, to Flattery Rocks NWR which is entirely encompassed within the Tribe's usual and accustomed grounds and stations.
- Restrictions to fishing and gillnets.
- The Tribe states that the fishing, hunting and gathering of marine resources, such as gathering eggs, collecting sea foods, and subsistence hunting of marine mammals, are tribal rights reserved by the Treaty of Neah Bay. The Tribe wants to protect these fundamental rights from any adverse effects of the CCP. The Tribe considers these islands within their usual and accustomed ground and stations to be subsistence resources in case of future need.
- The Service's management authority over the right of access to the Refuge's lands and adjoining waters and over certain islands, particularly Ozette Island.
- The Service's position on the topic of a dedicated rescue tug.
- On the topic of boat tours, the Tribe implied that this type of activity could grow in the future.
- Threats to seabird habitat/populations from low flying aircraft.
- The Tribe doesn't know how many common murres are taken each year, but they believe they have a right to gather them.
- The Tribe has observed an increasing trend of people launching boats and kayaks at the Neah Bay Marina. Related to the education issue, the Tribe has discussed the possibility of the Sanctuary leasing space at the Neah Bay marina kiosk to display education and interpretation materials.
- The Tribe has a research agreement with the Department of Commerce on Reservation lands and offshore waters and would like something similar with Service. The Tribe would like information on who is doing research and access to the data.

Tribal Treaty Rights

The Service consulted with the four Native American Tribes in the vicinity of the Washington Islands National Wildlife Refuges. While the Tribes and the Service discussed tribal treaty rights, the Service believes that defining the application of tribal treaty rights is outside the scope of this CCP planning effort. The Service will continue meeting with the Tribes independent of the CCP process to develop memorandums of understanding that are both respectful of the rights and needs of the Tribes and consistent with preserving the wildlife and wilderness values of the Washington Islands Refuges. Neither the existence of this CCP/EA nor any portion of its contents is intended to enlarge or diminish treaty rights or to have any influence over the resolution of unadjudicated treaty rights.

1.7.6 Comment Response Process on the Draft CCP/EA

Public comments on the Draft CCP/EA were accepted during the official public comment period from June 1 through June 31, 2005; in addition, comments dated by July 15, 2005, were also accepted and analyzed. The comments were used to develop the Final CCP/EA and refine the Preferred Alternative (B). Summarized comments, Service responses, and copies of the original comments can be found in Appendix H.

1.8 Summary of Key Planning Issues

The CCP Planning Team reviewed the Refuges' resource conditions, public comments, and input from NGOs, agencies, and the Tribes, to formulate the following list of key issues. The key issues have provided the basis for the formulation of the alternatives discussed in detail in Chapter 2.

Issue 1. Public Awareness

The hundreds of islands and rocks that dot the Washington coastline are one of the State's most recognized symbols. However, the public does not generally identify them as National Wildlife Refuges or designated wilderness nor adequately understand their importance as a critical resource to wildlife. Public awareness in the form of education and interpretative programs is currently being promoted by a variety of agency groups including the Service, NPS, Tribes, WDNR, U.S. Forest Service, and NOAA. The Service believes that this presents an opportunity for cooperative efforts among agencies and tribes. Currently, there is an interagency plan for a future interpretive center somewhere on the coast.

Issue 2. Interagency and Tribal Coordination

Interagency cooperation is needed to bring together State and Federal agencies to establish an understanding of and protocols for management and use of the NWRs, the surrounding marine environment, and shared fish and wildlife resources. Tribal consultation and coordination are necessary to conserve fish and wildlife resources and to fulfill the Federal government's trust responsibilities related to the four Tribes near the Refuges. Issues that need to be addressed in the CCP include island clean-up, use of Destruction Island, joint interpretative programs, law enforcement, off-refuge threats, tidal zone management, overflight disturbance avoidance, species management, and cooperative conservation efforts including the need for additional agreements with tribes and other agencies.

Cleaning up Destruction Island has been identified as a CCP issue. There is waste, debris, and unused structures associated with USCG and U.S. Navy activities. The USCG currently has an MOU with the Service regarding Destruction Island management. This MOU, signed in 2003, describes the responsibilities of both agencies for their work at Destruction Island, and Smith Island. The document outlines protective measures that the USCG will undertake, while performing required duties, to ensure that harm to wildlife and habitat is minimal. The USCG currently lands on Destruction Island for lighthouse maintenance, as described previously. The

Service recognizes the lighthouse maintenance work for its value to both protecting human life and safeguarding wildlife along the outer Washington Coast. Oil spill threats are a significant issue along the coast, and the Destruction Island lighthouse is considered an important aid in safe tanker navigation. However, it is also important to address chronic disturbances to island wildlife caused by USCG activities. In addition, clean-up of U.S. Navy generated debris needs to be a coordinated effort.

Education and interpretative programs are currently being operated off-refuge by a variety of agency groups including NPS, Tribes, WDNR, U.S. Forest Service, and NOAA. This presents the opportunity for cooperative efforts among agencies.

There are many off-refuge activities that threaten the integrity of the Washington Islands NWRs ecosystem that need to be addressed at an interagency level. These threats include oil spills, fishery bycatch, and marine debris. In the past 15 years, oil and fuel spills from the Tenyo Maru and Nestucca vessels have killed more than 70,000 refuge seabirds in Washington and Oregon (Tenyo Maru Oil Spill Natural Resources Trustees 2000, Momot 1995). Bycatch is the discarded non-target portion of a fishing catch. This occurs to some degree in all types of fishing, however, gillnets and longlines kill the greatest number of seabirds in our area (USFWS 2005, Forney et al. 2001, Melvin et al. 1999). Marine debris, such as plastic litter and fishing gear around refuge islands, entangle seabirds and marine mammals (WDNR 1988). Agencies involved with these issues include the Service, NOAA, NPS, WDNR, WDFW, and the Tribes.

The overlap in management responsibilities that was identified in CCP comments is most extreme in the tidal zone, where the Service, NPS, WDNR, NOAA, and the Tribes are all involved in management. The tidal zone is the gateway to refuge lands. The management and health of this habitat is very important to the viability of the island habitats and species dependent on them. The CCP will need to address opportunities for cooperation among agencies and Tribes for tidal zone management.

Marine mammal protection along the outer coast is managed by NOAA Fisheries, with the exception of sea otters which are the responsibility of the Service. The sea otter is the only marine mammal species within the boundaries of the Washington Islands NWRs for which the Service has primary responsibility. The WDFW conducts surveys of marine mammals in State waters. The WDFW, NOAA Fisheries, and the Service need to coordinate closely over sea lions and seals that use the refuge islands for pupping and haul-out sites. When on refuge lands, these mammals are also a wildlife resource responsibility of the Service.

There are a number of spiritually significant sites for the Tribes along the Washington Coast. Destruction Island is culturally significant to the Hoh and Quileute Tribes (NOAA 1993). The Makah Tribe considers Ozette and Tskawahyah (or Cannonball/Indian) Islands to be of cultural and spiritual importance. Additional opportunities are available to recognize and protect the spiritual and cultural aspects of the three Refuges.

There are many opportunities for more cooperation in terms of conservation and preservation programs. Tribes and Federal and State agencies should be consulted to explore possible collaborative efforts.

Issue 3. Disturbance

Biologists, agencies, Tribes, conservation groups, and interested members of the public have all brought attention to the serious issue of disturbance to sensitive seabirds and marine mammals. There are a variety of potential disturbance threats to the Washington Islands NWRs, ranging from aircraft disturbances to sea kayakers and fishing activities. The Service's goals for the Washington Islands NWRs are to minimize or eliminate disturbance to wildlife. Island trespassing from boats is rare. Due to the dangerous surf conditions, gaining access to the rocks and islands of the Washington Islands NWRs is difficult. Low tide provides more opportunity for people to gain access to these islands. Destruction and Ozette Islands receive the majority of trespassing incidents. Tribal access is outside the scope of this CCP and will be addressed by a MOU developed in a process separate from the CCP.

Disturbance is a larger issue from the air, with helicopters and other aircraft flying low over seabirds and marine mammal areas. Biologists, NPS staff, and conservation groups have all brought attention to the incidences of overflight disturbances to wildlife on refuge islands. Overflight disturbances disrupt seabird and marine mammal breeding and resting activities. Currently, there is a Federal Aviation Administration (FAA) advisory and Sanctuary regulation that requires a 2,000-foot (610 m) minimum flight altitude for aircraft flying over the islands. However, this regulation is difficult to enforce due to the remote nature of the region and is often violated. For the CCP, this issue will overlap with interagency cooperation, as work with NOAA and the FAA will be needed to address this concern.

Issue 4. Monitoring and Research

Scientific research, surveys, and monitoring are conducted by the Service and various other groups on the Washington Islands NWRs. The purpose is primarily to further the knowledge and conservation of the species the Refuges were established to protect. Other research groups which have conducted research on or near the Refuges include universities, other educational institutions, WDFW, NPS, WDNR, NOAA, other Federal and State agencies, Tribes, and private researchers. Research topics vary from archeological to natural resources. Intra-agency research generally focuses on wildlife species of special status, and long-term seabird and fisheries monitoring.

The Service manages the type and amount of research conducted on the Refuges through written agreements and special use permits. Based on its experience in managing research, the Service is concerned with unnecessary disturbance, unreliable methodologies, safety, and compatibility with wilderness designation. The Service supports cooperative research efforts, especially those that promote long-term monitoring, are directed toward minimizing threats or resolving conflicts with Refuge resources, or increase knowledge of species and populations.

Issue 5. Contaminants

Refuge staff, agencies, Tribes, conservation groups, and the public agree that the area is under significant threat from oil spills. It is within a heavy traffic area for ocean transport of oil and freight that can be treacherous because of severe weather and difficult navigation. In the past 15 years, oil and fuel spills from the Tenyo Maru and Nestucca vessels have killed more than 70,000 refuge seabirds in Washington and Oregon (Tenyo Maru Oil Spill Natural Resources Trustees 2000; Momot 1995).

Marine debris, such as plastic litter, fishing gear, gillnets, and other marine debris, has been documented around refuge islands, and entangles seabirds and marine mammals (WDNR 1988). However, the inaccessibility of the islands makes removing contaminants and debris a difficult and dangerous task. It is not fully known what contaminants and debris might remain on islands used for military activities during WWII. Refuge staff supports interagency and tribal education efforts to reduce introduction of debris in the marine environment.

Issue 6. Invasive Species Management

The effects of invasive nonnative species are not clear for the Washington Islands NWRs. Research and impact determinations are needed. Known invasive species include European rabbits on Destruction Island and a number of plant species on many of the islands (Barrett 1979, Cornelius 1982, USFWS 1989, NOAA 1993). Past research from other seabird nesting islands where rabbits have been introduced has shown mixed results in terms of adverse effects on seabird reproduction (Aubry and West 1984, Rodway et al. 1990, Tomich et al. 1968, Warner 1963). Based on Aubry and West's 1984 research on Destruction Island, rabbits are considered a threat to the island's indigenous small mammal populations (USFWS 1983).

Chapter 2 Alternatives, Goals, Objectives, and Strategies

2.1 Alternatives

The Service has developed alternatives that represent options for managing the Washington Islands Refuges over the next 15 years. Two alternatives for managing the Refuges follow:

- Alternative A: No Action (Status Quo).
- Alternative B: Proposed Action (Preferred Alternative).

2.1.1 Alternative A: No Action

The National Environmental Policy Act requires an analysis of the no action or status quo alternative, in an EA against which the effects of "action" alternatives can be compared and evaluated. Under the No Action Alternative, the Refuges would continue to be managed as they have been over the past several years. Essentially, this means that the Service would continue to follow guidance contained in the 1989 revision of the Washington Islands NWRs Management Plan. Goals outlined in the management plan include:

- Provide habitat and protection for endangered and threatened species that are important in the North Pacific Coast.
- Provide habitat to maintain seabird populations at not-less-than current levels.
- Protect habitat to maintain waterfowl and other wildlife at not-less-than current levels.
- Cooperate with agencies of higher education, private organizations and individuals in providing technical assistance and research opportunities.
- Protect and preserve scientific sites located on the Refuges.
- Preserve and protect the unique ecosystems associated with the Washington Islands Refuges.
- Provide a quality program of interpretation.
- Provide opportunity for wildlife/wildlands observations.

Additionally, the Refuges have never been open to the general public and this management would continue. Guidance and Federal mandates that were developed after the 1989 Management Plan was completed would also apply to the No Action Alternative. For example, Executive Order 13175 (2000) directs the Service to consult and coordinate with Native American tribal governments. Under the guidance of the Washington Maritime National Wildlife Refuge Complex Fire Management Plan (2005), there would be full suppression of

wildland fires. The level and priority for staffing and funding would remain similar to current conditions (see Appendix G). Any changes in this regard would be a result of needs identified through compatibility determinations on an as needed basis and/or though the Refuge Operational Needs System (RONS) list on an annual basis.

2.1.2 Alternative B: Proposed Action

The Refuges are composed of islands and rocks that are extremely important habitat for seabirds, marine mammals, and other wildlife, and are difficult (if not impossible) to safely access. Therefore, all of the Washington Islands NWRs will remain closed to public use and access. The scope of tribal access to the Refuges will be discussed through the development of agreements between the Service and each Tribe, in efforts separate from the CCP process. Because of the limited variance that would be possible between action alternatives, it was determined that Alternative B would be the only action alternative developed as part of this EA.

The goals, objectives, and strategies described in Section 2.2 and 2.3 represent the Proposed Action refuge staff would implement. Therefore sections 2.2 and 2.3 can effectively be considered the CCP.

2.2 Goals, Objectives, and Strategies

This chapter presents the goals, objectives, and strategies developed for the Washington Islands NWRs. Goals are broad statements for managing refuge resources and will remain unchanged for the 15-year time frame of the CCP. They are derived from the mission of the National Wildlife Refuge System, the enabling legislation for the individual refuges, and purpose and concerns identified for the Washington Islands NWRs. The objectives have been developed from the goals and serve as the framework to guide ongoing decision-making by the Service and coordination with other responsible parties. They are, where possible, quantified statements of a standard to be achieved or work to be accomplished. Strategies further define the objectives as specific tasks intended to guide refuge staff in the activities required to implement the objectives. The six goals developed for the Washington Islands NWRs are:

- Protect migratory birds and other native wildlife and their associated habitats, with special emphasis on seabirds.
- Protect and support the recovery of federally listed threatened and endangered species and birds of conservation concern, and Washington State special status species and their habitats.
- Protect and manage the Washington Islands Wilderness Area to maintain its wilderness character and values.
- Through effective coordination and cooperation with others, promote conservation of refuge resources, with special emphasis on governmental agencies and Tribes with adjoining ownership or management responsibilities.

- Continue and enhance long-term monitoring of wildlife and habitat resources and sustain applied scientific research.
- Increase public interpretation and awareness programs to enhance appreciation, understanding, and enjoyment of refuge resources.

2.3 Management Themes

The goals, objectives, and strategies have been categorized according to the following six management themes, each of which has been assigned a two-letter acronym for organizational purposes:

- Wildlife and Habitat Protection and Management (WH)
- Sensitive Species Protection (SS)
- Wilderness Protection (WP)
- Cooperative Programs (CP)
- Research Activity Management (RA)
- Public Education Management (PE)

For each of the management themes, the applicable goals are presented first, followed by the objectives and strategies. Following the strategies is a discussion intended to provide further background and understanding pertaining to the development of each objective and the applicable strategies. Except where noted, all objectives would have a 15-year time frame for completion. All objectives would be carried out by the Washington Islands NWR staff, unless otherwise noted in objective statements.

2.3.1 Wildlife and Habitat Protection and Management (WH)

WH Goal: Protect migratory birds and other native wildlife and their associated habitats, with special emphasis on seabirds.

Objective WH1: Continue to promote an undisturbed, natural environment across the Refuges by prohibiting public access on an ongoing basis.

Achievement Strategies:

A. Maintain the policy of restricted public access to the Refuges and enforce existing refuge regulation on trespass (50 CFR 26.21).
B. Continue to document incidences of trespass. Results will be summarized in the annual refuge report, as described under Objective CP9.
C. Work with ONP and Tribes to develop signs and other deterrents to keep the public off islands that are accessible at low tide. Cooperative efforts under which this program will be carried out are established under Objectives CP1, CP3, and CP5.

D. Continue and enhance efforts to promote a voluntary 200-yard (183 m) boat-free zone around refuge islands in cooperation with other appropriate groups and enforce existing refuge regulations on wildlife disturbance (50 CFR 27.51).
E. Work with WDNR, the Sanctuary, and the Tribes to secure a 200-yard (183 m) tideland lease area around islands with important wildlife areas.
F. Assist in the implementation of the regional seabird conservation plan (USFWS 2005).
G. Negotiate MOUs with Tribes regarding the time, place, and manner of tribal access to the Refuges where appropriate and compatible.
H. Resurvey Destruction Island's rhinoceros auklet and small mammal populations by 2009.

Discussion: Nesting seabirds and marine mammals are particularly vulnerable to human disturbances. Buffer zones have been shown to minimize disturbance to waterbirds (Rodgers and Smith 1997). Islands that are accessible from the mainland during low tides have been identified by refuge staff as vulnerable to potential impacts. Restricting human use of the refuge islands will protect these species from such negative impacts and fulfill Wilderness Area goals. One of the principles of wilderness stewardship is managing human use so that it does not impact the integrity of natural and biological processes (BLM et al. 1995). Offshore islands are dangerous and unstable environments for human use and access; restricting public access will also enhance public safety on the outer coast. For nearshore, low-tide accessible islands, the Service will work with local landowners, such as the ONP and Tribes, to deter trespassing.

Objective WH2: Support regional efforts to reduce the risk of oil spills near refuge islands to protect seabird and other marine wildlife. Activities will include attending periodic drills, meetings and training, and providing on-site resource knowledge in the event of a spill.

Achievement Strategies:

A. Participate in planning and training efforts that identify opportunities to reduce oil spill risks to refuge resources.
B. Support the Sanctuary's "Area To Be Avoided."
C. Support the placement of a mission capable rescue tug boat at Neah Bay.
D. Support improving vessel traffic service, weather prediction sensors, decision-making tools for dealing with vessel controls, and broader standby tug availability.
E. Send appropriate staff to Hazardous Materials, Shoreline Assessment, and Incident Command training.
F. Participate in periodic updates of the Outer Coast Geographic Response Plan.
G. Participate in Natural Resource Damage Assessment (NRDA) restoration planning and implementation.
H. Work with NOAA to ensure refuge areas are identified on navigation charts.

Discussion: Oil spills are considered by refuge staff and CCP commenters to be the biggest threat to the continued health of refuge resources. A 1997 USCG study found that the outer Olympic Peninsula coastline has a high likelihood of an oil spill accident, as well as high sensitivity to oil spills and low capability for response to the spill (*Tenyo Maru* Oil Spill Natural Resources Trustees 2000). Many species, including seabirds and marine mammals, are vulnerable to such pollution events. Prevention and preparation, as exemplified in strategies above, are the keys to reducing oil spill impacts on the refuge islands. The Service will continue to work with the Washington Department of Ecology and other partners to address the use of in-situ burning and dispersants. It is also important to assist with planning, design, and implementation of restoration projects that affect wildlife populations or the Refuges themselves.

Objective WH3: Coordinate with the USCG to remove as much human-generated debris as feasible on Destruction Island by 2019.

Achievement Strategies:

A. Conduct an assessment to prioritize debris removal tasks by 2010.
B. Initiate cooperative clean-up of debris from Destruction Island by 2011;

Discussion: See discussion under Objective CP4.

Objective WH4: Preserve refuge islands in a native condition by monitoring for invasive species and develop and implement control measures on an ongoing basis as appropriate and feasible, starting in 2008.

Achievement Strategies:

A. Conduct an environmental assessment for removing European rabbits from Destruction Island by 2010.
B. Survey islands for invasive species at regular intervals or when information exists regarding potential infestations. Implement control measures as appropriate and feasible.
C. Monitor management efforts to evaluate the success of control measures and responses of native wildlife, and adapt management if results are not satisfactory
D. Coordinate with regional efforts and create a geographic information system (GIS) database and map of identified infestations. Link this map to treatment records and effectiveness measurements. A refuge GIS is proposed under Objectives WH5 and RA2.

Discussion: Invasive species are a potential threat to the native flora and fauna on the refuge islands, and control of these species, when possible, is a priority of the Refuges as addressed in Executive Order 13112. The 1983 annual report for the Washington Islands NWRs stated that there is a "need for alternative control measures of serious pest species." This statement

was made in reference to past unsuccessful efforts to eradicate exotic rabbits on Destruction Island but should extend to all exotic invaders. The purpose of invasive species identification and control is to preserve the integrity of existing natural conditions.

Objective WH5: Promote accurate and effective management of wildlife resources through establishing a system for managing mapped data for the Washington Islands Refuges by winter of 2007.

Achievement Strategies:

A. Secure the funding needed to develop an in-house GIS.
B. Acquire existing natural resource GIS data layers and maps for the Refuges, including data available from other agencies and Tribes.
C. Update databases and maps as necessary**.**
D. Coordinate with the Service's regional efforts to develop a GIS database of all seabird colonies and key roost sites in the region, with information on ownership, protected status seabird species, breeding status, and abundance (see USFWS 2005: objectives 1a (v) and 7f).

Discussion: Conservation and management of resources requires ready access to current information on the entire system and its integration into management decisions. Many of the resources associated with the Refuges have been inventoried and mapped. These databases can be very useful to management if acquired and updated routinely. For example, GIS can provide preparation for and enhance response to catastrophic events like oil spills by enabling the Service to quickly and accurately identify resources at risk.

Objective WH6: Work with others to develop and implement an aircraft impacts awareness program to reduce overflight-induced wildlife disturbances on refuge islands starting in 2009.

Achievement Strategies:

A. Continue to produce educational materials that will be distributed to airports, popular landing strips, aircraft associations, aircraft publications, and aircraft-based businesses. See CP7 for cooperative efforts for evaluating and disseminating this information.
B. Promote the 2,000-foot (610 m) minimum flight altitude over the islands.
C. Record any observed incidents and report violation trends to appropriate law enforcement personnel and to the FAA.
D. Enforce wildlife disturbance regulations.

Discussion: Protection of wildlife species, especially seabird populations, is a primary refuge goal. Refuge biologists, ONP staff, Sanctuary staff, and conservation groups have all brought attention to the incidences of overflight disturbances on the refuge islands. These

incidents disrupt seabird and marine mammal breeding and resting activities. The Service will use existing refuge regulations to enforce wildlife disturbance incidences by aircraft (50 CFR 17.34). National Wildlife Refuge boundaries are designated on updated FAA aeronautical charts and there is a Sanctuary-regulated, 2,000-foot (610 m) minimum flight altitude over the refuge islands. The Service will cooperate in a proactive approach to educate the public on low overflights and their impact on refuge wildlife. Documenting the occurrences of overflights will aid in communicating the problem to the FAA and the public with regards to the level of disturbances.

Objective WH7: Develop and implement a boating impacts awareness education program to reduce boating disturbance to wildlife beginning in 2008.

Achievement Strategies:

A. Produce educational materials that will be distributed to marinas, boat ramps, popular kayak launch areas, boating associations, boating publications, boat-based businesses, and sport and commercial fishing regulations and pamphlets.
B. Continue and enhance efforts to promote a voluntary 200-yard (183 m) boat-free zone around refuge islands.
C. Monitor boating activity near refuge islands.
D. Enforce trespass regulations for the Refuges. Enforcement of trespassing policies is also addressed under Objective CP3, CP5, and CP6.
E. Enforce wildlife disturbance regulations

Discussion: Boating has been identified by refuge staff, local citizens, and conservation groups as a source of impacts to nesting seabirds and resting marine mammals. However, there is a public desire to boat in the area and to increase ecotourism boating opportunities. Refuge islands will need to be protected from near-refuge boating impacts, thereby allowing for undisturbed wildlife nesting, feeding, and resting activities. Nesting seabirds and marine mammals have been documented in scientific literature to be particularly vulnerable to disturbances (see Affected Environment for further discussion on this topic). Creating a boat-free zone of 200 yards (183 m) around the islands that is free from boating disturbances will benefit these sensitive species. In addition, off-shore islands are dangerous environments; restricting public access will also enhance public safety on the outer coast. The Service will use existing refuge regulations to enforce wildlife disturbance incidences (50 CFR 27.51).

Objective WH8: Develop a new Washington Maritime National Wildlife Refuge Complex headquarters located at the Dungeness National Wildlife Refuge to assist in the effective and efficient management of refuge resources.

Achievement Strategy:

A. Demonstrate need and secure funding for new facility.

Discussion: Washington Islands NWRs are only three of the six national wildlife refuges administered by the Washington Maritime NWR Complex. The others are Dungeness NWR, Protection Island NWR, and San Juan Islands NWR. The current headquarters, located between Sequim and Port Angeles, Washington, is not sufficient for management, research, or educational program needs. This objective calls for increased facility support to meet the demands of all six refuges to be sited at Dungeness NWR, because it is centrally located and has the highest visitor use.

Objective WH9: Promote coordinated management of west coast marine national wildlife refuges.

Achievement Strategies:

B. Initiate regular meetings of west coast refuge managers and biologists to discuss management activities and issues.
B. Improve consistency on allowed and prohibited activities.
C. Work on improving consistency on data gathering and data management

Discussion: While refuge managers from Washington, Oregon, and California informally coordinate activities and actions associated with seabird and island management, a more formal arrangement is proposed. This will help insure continuity of management of marine refuges along the west coast and the way the public perceives these refuges.

2.3.2 Sensitive Species Protection (SS)

SS Goal: Protect and support the recovery of federally listed threatened and endangered species (TES) and birds of conservation concern (BCC), and Washington State special status species and their habitats.

Objective SS1: Continue coordination with others to identify, monitor, protect, and contribute to the recovery of plants and animals that are federally listed as: TES; proposed or candidates for Federal listing as TES; federally listed as BCC; State-listed as threatened, endangered, or sensitive; proposed or candidates for State listing; or State priority species.

Achievement Strategies:

A. Update and add existing data on sensitive species into GIS database. A refuge GIS is established under Objectives WH5 and RA2.
B. Secure funding for continued monitoring of peregrine falcons, bald eagles, Steller sea lions, and brown pelicans.

C. Provide protection for State-listed species occurring on refuge islands.
D. Determine population status of Destruction Island shrew.
E. Cooperate with international efforts to monitor black oystercatchers range-wide, evaluate population trends, and develop conservation measures.

Discussion: The Service enforces Federal wildlife laws, including the Endangered Species Act (16 USC 1531 et seq.), and is responsible for assisting other Federal and State agencies in the recovery of listed species. The responsibilities of an individual refuge include these Service-wide duties for species protection. Mapping and identification of key habitat areas are important first steps for managing sensitive species. Peregrine falcon eyries, bald eagle nest sites, Steller sea lion haul sites, and sea otter and brown pelican use areas have been documented, mapped, and entered into a WDFW non-game data system. Establishing an in-house GIS system will facilitate access to existing data and will expedite refuge management. Monitoring is an important next step to ascertain the population levels and trends of sensitive species and key life history parameters for refuge populations. This information will assist in the sound management of sensitive species such as the Destruction Island shrew.

2.3.3 Wilderness Protection (WP)

WP Goal: Protect and manage the Washington Islands Wilderness Area to maintain its wilderness character and values.

Objective WP1: Preserve and enhance the wilderness character of the Refuges by removing human-generated debris from refuge islands, where feasible, on an ongoing basis.

Achievement Strategies:

A. On scheduled visits to islands, search and remove debris if possible.
B. Where appropriate, seek clean-up assistance from the U.S. Navy, USCG, volunteer groups, Tribes, and other agencies. Cooperative efforts with the U.S. Navy and USCG are established under Objectives CP4 and CP8.
C. Partner with other agencies and groups in educating the public to the adverse effects of marine debris.

Discussion: The Wilderness Act defines wilderness as an area which is protected and managed to preserve its natural conditions and which generally appears to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable. This objective provides for the enhancement of wilderness character through clean-up of man-made debris that is environmentally and aesthetically undesirable.

Objective WP2: Continue to promote and preserve the wilderness characteristics of the Refuges by prohibiting human-caused visually intrusive alterations on refuge islands on an ongoing basis.

Achievement Strategy:

A. Review and evaluate visual intrusion aspects of all research projects on the Refuges using the Minimum Requirement Analysis to ensure low intrusion levels.

Discussion: Under the Wilderness Area designation (1970), refuge islands (except Destruction Island) shall be protected in their pristine and natural conditions. The Service recognizes its obligations under this designation and has put forth this objective to preserve the visual characteristics of the area. The purpose of this objective is to allow refuge staff to evaluate proposed actions on refuge islands from a visual impact perspective and prohibit those with predicted negative results.

2.3.4 Cooperative Programs (CP)

CP Goal: Through effective coordination and cooperation with others, promote conservation of refuge resources, with special emphasis on governmental agencies and Tribes with adjoining ownership or management responsibilities.

Objective CP1: By 2007, begin working with Tribes on issues and resources of mutual interest to promote conservation.

Achievement Strategies:

A. Meet annually or more often if needed, with Tribes.
B. Identify areas of mutual interest including research, monitoring, and resource protection efforts. See Service-identified areas of interests under Objectives WP1, Objective RA1, and Objective PE3.
C. Provide annual updates on the year's activities. This strategy is also addressed under Objective CP10.
D. Negotiate memorandums of understanding with Tribes regarding the time, place, and manner of tribal access to the Refuges where appropriate and compatible.
E. Work on resolving any ambiguities between Native American reservation and refuge boundaries.

Discussion: The Hoh, Makah, Quinault, and Quileute Tribes have all expressed interest and concern for natural and cultural resources on refuge islands. These islands are also important to the Tribes for tribal identity and spirituality. The Service will continue to work with the Tribes on a government-to-government basis to address areas of mutual interest and concern.

Objective CP2: Beginning in 2007, work with WDFW on issues and resources of mutual interest to promote conservation.

Achievement Strategies:

A. Continue joint wildlife surveys with WDFW; see cooperative projects under Objective SS1.
B. Explore joint research opportunities with WDFW; see Objectives RA1 and RA4.
C. Coordinate with WDFW law enforcement to protect refuge wildlife and the resources on which they depend.
D. Report accomplishments in periodic reports and/or publications.

Discussions: Cooperation between WDFW and the Service will help both agencies by sharing information, funding, and expertise. Mutual interests include: continuing joint wildlife surveys, educational programs, species management, and developing joint research projects.

Objective CP3: Coordinate with the Tribes, the Sanctuary, ONP, and WDNR in managing for the protection and conservation of intertidal and subtidal zones surrounding the refuge islands by fall 2008.

Achievement Strategies:

A. Jointly identify zones, management responsibilities, and land use policies for intertidal and subtidal areas by 2008.
B. Jointly develop a conservation policy and enforcement plan for intertidal and subtidal zones by 2010; see Objectives WH4 and WP1.
C. Jointly monitor for marine debris and implement measures for its removal.

Discussion: The intertidal and subtidal zones of the refuge islands are important habitats; not only are they vital to the continued health of many unique flora and fauna, but they are also the entry way for the terrestrial island habitats. Land use policies must be designed to protect both tidal and terrestrial habitats. The intertidal and subtidal land management is complicated with overlapping designations and management responsibilities. The intent of this objective is to pull together all agencies with management responsibilities and interest in the island tidelands and to identify opportunities for conservation of refuge habitats.

Objective CP4: Coordinate with the USCG to update the existing MOU for Destruction Island, which will clarify the roles of the two agencies on the island and thereby aid in the conservation of refuge resources by 2010.

Achievement Strategy:

A. The MOU will address USCG and Service operations and maintenance.

Discussion: Destruction Island is a unique island within the Refuges due to overlapping management responsibilities of the Service and USCG. There is an existing MOU; however, it needs to be revised to address current concerns. Refuge concerns for Destruction Island include wildlife disturbances and debris impacts. Disturbance and pollution can negatively impact many sensitive refuge wildlife species, especially nesting seabirds, bald eagles, and the endemic Destruction Island shrew. This objective is needed to allow the Service and USCG to address these mutual issues of concern.

Objective CP5: Coordinate with the NPS to update the existing MOU for joint refuge law enforcement on low-tide accessible islands by 2008.

Achievement Strategies:

A. The MOU will address trespass law enforcement, educational programs, fire suppression support, and refuge boundaries; see Objectives WP1, WP2, RA1, and Objective PE3.
B. Secure joint funding for a seasonal ranger stationed along the coast. The duties of this ranger will include law enforcement and education.

Discussion: Law enforcement is extremely difficult on off-shore islands. The islands are difficult to gain access to and even to patrol. Teaming the NPS with the Service will boost the effectiveness of law enforcement for both agencies. The enforcement of the no-trespass policy is important in protecting vulnerable wildlife, research projects, and natural resources. Understanding Tribal access agreements will be an important component of the ranger's duties. It is important to maintain the NPS radio facility on Destruction Island to facilitate law enforcement and ONP emergency communications.

Objective CP6: Coordinate with the Sanctuary to develop an MOU covering mutual resource issues by 2007.

Achievement Strategy:

A. The MOU will address cooperative law enforcement, oil spill response planning and action, overflight restrictions, research, educational programs, and Refuges' and Sanctuary management responsibilities; see Objective WH1, Objective RA1, and Objective PE3.

Discussion: The overlap between the Sanctuary and the Refuges' boundaries represents a management challenge for NOAA and the Service. The common goal between the resource managers is habitat protection; however, details for specific issues need to be developed. Oil spill preparation is a topic that many local citizens and regional conservation groups are concerned about. Other issues this objective will address include law enforcement and educational opportunities. The public also voiced concern over the confusion generated from

multi-agency responsibilities over the region. It is clear that all involved or interested in the conservation of the region would benefit from clear descriptions of roles and policies.

Objective CP7: Work with others to reduce wildlife disturbances from aircraft flying over refuge islands through education, monitoring, and enforcement by spring 2010.

Achievement Strategies:

A. Working with the FAA, jointly identify refuge areas on aeronautical charts and develop "notice to pilots."
B. In communications with the FAA, stress bird-strike safety concerns for pilots.
C. Coordinate with ONP and the Sanctuary on carrying out an overflight impacts education program that will promote the 2,000-foot (610 m), flight-free ceiling over refuge islands. Use educational materials developed under Objective WH6.
D. Coordinate with the ONP, Sanctuary, and Tribes on monitoring overflight incidents and wildlife response as opportunities arise, and document results in annual reports.
E. The Service will use existing refuge regulations to enforce wildlife disturbance violations (50 CFR 27.34).

Discussion: Protection of seabird populations is a primary refuge goal. Refuge biologists, ONP staff, and conservation groups have all brought attention to the incidences of overflight disturbances on the refuge islands. These types of disturbances have been documented to disrupt seabird and marine mammal breeding and resting activities. Currently, the Sanctuary has established a minimum flight altitude of 2,000 feet (610m) for aircraft flying over the islands. The FAA is the enforcement agency of the aircraft industry. To maintain a minimum overflight altitude over the Refuges, the FAA needs to support the policy. This objective encourages bringing these two agencies to the table to discuss the issue and develop ways to prevent overflight disturbances.

Objective CP8: Beginning in 2007, work with the U.S. Department of Defense (DOD) on issues and resources of mutual interest to promote conservation.

Achievement Strategy:

A. The joint program will address clean-up of debris and unwanted structures; see Goal WP, Objective WP1.

Discussion: The U.S. Navy and Air Force (DOD) have a long history (1944-1993) of using refuge islands for bombing practices. Private citizens, conservation groups, and refuge biologists are concerned about the remaining military debris on off-shore islands and its potential impacts to the ecosystems. This objective provides an opportunity for the Service to initiate discussions with the DOD about island clean-up and other issues remaining regarding land use by the military.

Objective CP9: Beginning in 2007, cooperate with interested nongovernmental organizations (NGOs) to promote awareness of the Refuges and conservation of the Refuges' habitats, cultural resources, and wildlife and the resources upon which they depend.

Achievement Strategies:

A. Conduct outreach targeting NGOs to increase support and appreciation for the Refuges.
B. Seek NGO assistance in implementing the CCP.
C. Seek assistance in identifying strategies relating to inventorying, monitoring and managing the marine fish and other resources that seabirds and marine mammals depend on for food.
D. Meet with NGOs as requested to explore cooperation opportunities in areas of mutual interest.

Discussion: Various nongovernmental organizations representing differing interest groups have long had an interest in the fish, wildlife, and marine environment of Washington State. Many citizen-based conservation organizations have been strong supporters of national wildlife refuges nationwide. Other organizations are more specific in their interests such as wilderness values, seabird conservation, or coastal management. All of these groups can assist with citizen-based involvement and support to accomplish the objectives and strategies outlined in this CCP.

Objective CP10: Promote cooperation and long-term conservation of refuge resources by producing an annual summary report every March starting in 2007.

Achievement Strategies:

A. The Service will produce a complex-wide annual narrative report as a partial source for the summary report.
B. The report will include a summary of research/monitoring activities and findings; trespass and disturbance incidents; major management actions; a listing of publications and public lectures made by refuge staff or associated researchers; staff names and responsibilities; educational program activities; and other highlights that occurred on the Refuges. See Objective WH1.
C. The summary report will be mailed to associated agencies, Tribes, and interested parties.

Discussion: Research results are often available only to the scientific community. The purpose of this objective is to communicate refuge research results to the interested public, as well as other agencies, to increase understanding of the Refuges, the regional ecosystem, and natural resources. This report will not only communicate research results but also staff changes, educational program activities, and other highlights. All these items will foster a

sense of community for the regional context of the Refuges. Due to the restricted nature of the islands, the public is distanced from refuge activities. This annual report will be a method for the Service to reach out once a year to inform the public and organizations about their work and ongoing concerns. This will promote support and respect for the Refuges.

2.3.5 Research and Monitoring Activity Management (RA)

RA Goal: Continue and enhance long-term monitoring of wildlife and habitat resources and sustain applied scientific research.

Objective RA1: Continue to promote management-related research and monitoring.

Achievement Strategies:

A. Establish and develop partnerships with Tribes, State, other Federal agencies, and Canada, as well as universities and conservation groups to pursue joint research projects.
B. Encourage research organizations to perform cooperative research projects that explore factors affecting refuge wildlife, especially the effects of overflight and boater disturbances on seabirds and marine mammals, and gillnet impacts on sea otters and seabirds.
C. Identify and pursue funding opportunities.
D. Conduct an ethnographic study of the Washington Islands Refuges.

Discussion: The National Wildlife Refuge System encourages compatible research activities on refuge lands. Research and monitoring projects on refuge islands enhance scientific understanding of the ecosystems and lead to better management. Long-term monitoring efforts are extremely valuable in terms of the information provided and in adaptive management techniques. Human use issues are likely to increase in terms of pressures on the refuge resources due to developing local and regional markets. This may lead to additional and new types of human impacts. This is likely to present management challenges, which can be approached with proactive applied research projects and long-term monitoring efforts. The Service is supportive of ethnographic research that does not negatively impact wildlife and wilderness resources of the Refuges.

Objective RA2: Update the Refuges' seabird monitoring plan by 2010, to benefit seabird populations.

Achievement Strategies:

A. Assist in the development of a monitoring manual for California Current System (CCS) seabirds and integrate it with the Refuges' seabird monitoring plan.

B. Map seabird colonies using GIS and population parameters such as population estimates and reproductive data.
C. Integrate refuge GIS data with GIS seabird colony catalogues for Washington, Oregon, and California.
D. Continue annual common murre, cormorant, and brown pelican inventories.
E. Update population estimate of rhinoceros auklets on Destruction Island and institute regular population monitoring.
F. Explore low impact methods of determining population sizes of tufted puffin and ancient murrelet at key refuge breeding colonies.
G. Contribute to implementing the Regional Seabird Conservation Plan and North American Waterbird Conservation Plan.

Discussion: Seabird research and monitoring has been carried out on refuge islands for over 25 years. The purpose of this objective is to ensure that this work not only continues but is enhanced and improved to provide refuge management and resource managers with the tools to make conservation decisions. Due to natural history traits, seabirds are a difficult fauna to study and understand. Long-term research and directed applied studies better our understanding of these resources. Population estimates are a basic database that needs to be established to make informed management decisions for the Refuges and for world-wide seabird conservation. It has been shown that long-term monitoring programs of water-based avian species can substantially contribute to improvements for recovery from oil spills and other catastrophes (Parsons 1996). The Service is working with USGS and other seabird experts to develop a regional monitoring program for seabirds of the California Current System that involves standardized protocols for data collection, analyses, and reporting. Integration of refuge monitoring with this regional effort will provide a broader context for analyses of trends and environmental and human-caused factors that influence these trends.

Objective RA3: Continue to promote the publication and communication of monitoring and research findings by refuge staff on an ongoing basis.

Achievement Strategies:

A. Encourage refuge staff to continue publishing in peer-reviewed scientific journals.
B. Encourage refuge staff to attend professional society and agency sponsored meetings/conferences.
C. Promote dissemination of relevant agency reports (also see strategy CP9).

Discussion: Communication of monitoring and research findings is the responsibility of the Service. Encouraging refuge staff to publish research findings in peer-reviewed journals and providing other means to disseminate refuge monitoring and research information helps foster understanding and respect for refuge management actions and conservation of natural resources. Research presentation also provides a forum for research and management improvements through the peer-review forum. The Service should pursue peer-reviewed

presentations to maintain a high caliber of refuge research. Refuge scientists will also be encouraged to include research findings in public interpretive programs. Information on the locations of extremely fragile natural resources, or those subject to vandalism, will not be included in final studies and reports for public distribution.

Objective RA4: Promote regional conservation through developing compatible and comparable research/monitoring methods and data on an ongoing basis.

Achievement Strategies:

A. Modify seabird, black oystercatcher, and marine mammal monitoring methods to make them as comparable as possible to other monitoring programs along the west coast (also see strategy RA2).
B. Require outside researchers to use regionally comparable field methods while performing work on the Refuges, where feasible and appropriate.
C. Coordinate with the WDFW, Tribes, and other Federal agencies involved in monitoring efforts for opportunities for compatible development.

Discussion: Modification of databases and methods to be comparable and compatible to other research is a cost-effective way to conduct comprehensive refuge research. Being able to compare refuge data with other local, regional, and even global data will help guide ecosystem management priorities for refuge resources. It will also promote the Service's ecosystem approach to resource management, as well as enhance the world-wide scientific connection and understanding.

Objective RA5: Increase effective management of the Refuges by establishing a comprehensive refuge office research library of current and previously published relevant scientific papers and publications, maps, photos, reports, theses, and dissertations, including those resulting from research and monitoring projects conducted on the Refuges and in the surrounding region, by 2010.

Achievement Strategies:

A. Obtain copies of all reports and other materials relevant to the Refuges.
B. Provide library training for refuge staff.
C. Pursue funding for including library space in the new office.
D. Scan copies of unpublished reports to provide computer backup.
E. Archive photographs and maps.
F. Develop data management system for storage and retrieval of monitoring and other data. (See objective WH5)

Discussion: The research that has been conducted along the outer coast has led to the current understanding and formation of remaining questions about the uniqueness and value of the

Refuges' natural resources. Documentation and understanding of past and current research will contribute to future studies and management actions.

2.3.6 Public Education Management (PE)

PE Goal: Increase public interpretation and awareness programs to enhance appreciation, understanding, and enjoyment of refuge resources.

Objective PE1: Promote appreciation and interpretation for the Refuges through the development and project implementation of a visitor contact center located at Dungeness NWR as soon as funding is appropriated.

Achievement Strategy:

A. This will be a joint facility with the new Washington Maritime National Wildlife Refuge Complex headquarters. See Objective WH8.

Discussion: Interpretation and education are essential to increasing public support for wildlife resources and in turn the National Wildlife Refuge System. Providing a visitor contact center, is an important step in making the educational connection to the public, especially for the Washington Islands Refuges where access is prohibited. The restricted nature of the islands calls for well-developed off-site visitor contact and interpretation centers.

Objective PE2: Promote awareness and understanding of the Washington Island Refuges and wildlife resources by developing a website for the Washington Maritime National Wildlife Refuge Complex by 2007.

Achievement Strategies:

A. Include on the website photographs and natural history information on refuge islands and how they are used by breeding seabirds and marine mammals.
B. Place an annual biological summary and other pertinent reports or announcements on the website.
C. Provide website maintenance training to refuge staff.

Discussion: The Service can use the World Wide Web to reach a broader audience with their environmental educational programs. This medium will provide worldwide awareness and appreciation for the regional and worldwide context of the Refuges' resources. The website can offer a virtual visit to the restricted refuge islands. This medium will also provide the Service with input and collaboration on a worldwide scale, which is particularly important with marine and avian resources that commonly cross international borders.

Objective PE3: Promote refuge conservation and awareness by coordinating with other agencies, Tribes, and organizations to develop off-site interpretive facilities by 2010.

Achievement Strategies:

A. Coordinate with ONP and the Sanctuary to develop an interagency interpretive center somewhere on the coast.
B. Coordinate with Washington State Parks and Recreation Commission, Washington Department of Transportation, ONP, and the Sanctuary to develop off-refuge viewing and interpretation opportunities.
C. Work with the Tribes and other partners to interpret cultural resources of the area.
D. Coordinate with Tribes on development and placement of interpretive exhibits/materials on tribal lands.
E. Establish a remote viewing camera on at least one seabird colony and coordinate the placement of a viewing screen at a high public use area on the outer coast, and also provide a link to the seabird colony on the refuge website.
F. Hire seasonal interpretive staff to work at the interagency interpretive center.

Discussion: Current off-refuge interpretation facilities exist but are very limited and are in need of repair and upgrading. Off-refuge interpretive panels within the Olympic National Park at Rialto Beach, Second Beach, Ruby Beach, and Kalaloch are extensively weathered, missing, or need repair. The National Wildlife Refuge System Improvement Act (PL 105-57) identifies compatible environmental education as a priority wildlife-dependent use. The impacts of human disturbances and difficulty of access on the Refuges prevent the educational programs from being located on the islands. Off-site facilities are used as an alternative for providing public education about refuge resources. This method offers local visitors and residents a way to experience the islands without detrimental impacts to the resources. The technique of remote viewing by a video camera will provide public observation of refuge wildlife. Tribal, State Parks, and ONP cooperation is needed because the only vantage points from the mainland are from their lands. These areas are well used by the public, and it is from these areas that visitors see the islands and become interested in the island ecosystems. The ethnographic study identified under RA1 will assist in the development of cultural resource interpretive materials.

Objective PE4: Satisfy public desires to see charismatic species and learn about the Refuges by developing traveling interpretive displays and handout materials about refuge wildlife by 2008.

Achievement Strategies:

A. Seek funding for a permanent outdoor recreation planner staff position.
B. Seek funding for traveling refuge interpretive displays and materials on refuge wildlife.
C. Update refuge wildlife fact sheets and brochures.

Discussion: Annually, over one million visitors view the Refuges, creating a tremendous opportunity to provide information about the Refuges and the resources requiring protection. The outdoor recreation planner position is critical for planning/coordinating and implementing an interpretive/education program. The impacts of human disturbance and difficulty of access on the islands prevent the Service from locating educational programs on refuge islands. Traveling displays and materials could be used as an alternative for providing public education about refuge resources. This method offers diversity and flexibility to education providers to reach the largest audience possible. These strategies also address public requests for ecotourism without impacts to wildlife.

2.4 Common Features Among the Goals, Objectives, and Strategies

Effective and efficient management of the Refuges is dependent on reliable and well-synthesized data. Hence, there are some common themes that run across many of the goals, objectives, and strategies such as development of cooperative efforts, monitoring plans, GIS, as well as annual report writing. Our obligations to protect and manage cultural resources, conduct fire suppression, and use the "minimum requirement analysis" tool for wilderness areas, while not elaborated on in the goals, objectives, and strategies are still an important part of the management of the Refuges.

Groups of organized associations or entities can often achieve more when working together than separately. The Service recognizes that cooperation among Federal, State, and tribal agencies serves to promote management stability and enhance regional conservation efforts. It is with this holistic approach in mind that the Service will attempt to obtain natural resource and management agreements between the Service and other neighboring agencies, such as the WDNR, WDFW, USCG, NOAA, other State and Federal agencies, and Tribes. Cooperative efforts may include island clean-up, law enforcement, data exchange, and coordinating research and monitoring efforts.

Refuge wildlife monitoring is a priority for the National Wildlife Refuge System (USFWS 1999). Refuge monitoring plans include a wide array of data collected on natural resources such as seabirds, marine mammals, threatened and endangered species, and human disturbance impacts. Monitoring efforts across long time periods provide extremely useful data, especially in highly dynamic systems such as the marine refuge islands. Environmental changes and uncertainty are very common in marine systems, as exemplified by El Niño and other oceanic fluctuations. These fluctuations can add uncertainty to the validity of short-term scientific research; the only way to counter this problem is through long-term studies. Long-term monitoring data support adaptive management procedures, which the Service promotes nationwide.

The use of GIS is a useful method for organizing and synthesizing complex data sets on a spatial scale, such as the Service would be producing through the proposed monitoring and research

projects. It enables the Service to look at multiple layers of data across a spatial scale. This powerful instrument is very useful in resource management decision-making, although it must be made very clear that the results of GIS data analysis are only as accurate as the data put into it. Using GIS can help the Service effectively guide research and management directives.

Preparing an annual report will be an important data compilation and review tool, which will help the Service manage the Refuges holistically and inform the public and other agencies about current activities. This report will include narrative summaries of monitoring programs, island disturbances, and other events involving the islands or their resources over the previous year. The Service will continue to uphold Federal laws protecting cultural resources, including the National Historic Preservation Act (NHPA), Archeological Resources Protection Act, and Native American Graves Protection and Repatriation Act. These laws also require consultation with Native American Tribes, the State Historic Preservation Office, and other preservation partners. The NHPA requires all projects that use Federal funding, permitting, or licensing to be reviewed by a cultural resource professional to determine if there is the potential to affect cultural resources. If needed, an inventory must be conducted, and appropriate actions to mitigate effects must be identified, prior to implementation of the project.

Fire suppression will be conducted as described in the Washington Islands National Wildlife Refuges Wildland Fire Management Plan (FMP), 2005. A summary of the FMP can be found in Appendix F. Under the guidance of the FMP, all wildland fires will be suppressed using the appropriate management response. There will be no prescribed fires or pile burning on any of the refuges, and managing wildland fires for resource benefit (wildland fire use) is not an option at this time. The Service already works cooperatively through the Puget Sound Interagency Communication Center for wildland fire suppression on the Washington Maritime National Wildlife Refuge Complex, of which Washington Islands NWRs are a part.

Appendix E-1 contains a “minimum requirements analysis” (MRA) as described in wilderness stewardship planning policy, for research, monitoring, and clean-up activities in wilderness. Additional MRAs would be prepared if implementation of strategies involved the use of motor vehicles, motorized equipment, aircraft landings, mechanical transport, or structures or installations in designated wilderness areas. Researchers requesting a permit to conduct research on the Refuges which is not already covered under the existing MRA will be required to complete an MRA for refuge manager review and approval.

2.5 Comparison of Alternatives

Table 2-1 highlights and compares some of the actions associated with the two alternatives. These comparisons are organized based on the key planning issues identified in Chapter 1. No attempt was made to include all actions.

Table 2-1: Comparison of Alternatives

Issues	Alternative A: No Action	Alternative B: Proposed Action
Public Awareness	-Off-site interpretation would remain limited to a few highway panels.	-Develop a visitor contact station with interpretive exhibits and a resource library at new headquarters. -Develop interagency interpretive center on the coast to provide off-refuge education to public. -Develop a website to provide information on breeding seabirds and marine mammals. -Seek funding for a staff position to implement an off-site education program to include boating and aircraft impact awareness.
Interagency and Tribal Coordination	-Current coordination and cooperation levels would remain in place. -MOUs currently exist with NPS and USCG. -Communication and coordination is limited.	-Seek increased agency cooperation to implement oil spill preparation measures. -Develop cooperative plans to clean-up pollution and debris. -Develop MOUs with Tribes to better address refuge management with respect to Federal laws and the Service's Native American Policy. -Provide annual activity updates to increase coordination and cooperation.
Disturbance	-No 200-yard boat-free zone. -Cooperative agreements with ONP to enforce trespassing would continue.	-Increase efforts to establish a voluntary 200-yard boat-free zone and encourage enforcement of a 2,000-foot minimum flight altitude above islands. -Reduce trespassing events by enforcing refuge regulations and enhancing cooperation with ONP and the Tribes.
Monitoring and Research	-Current long-term monitoring and applied scientific research levels would continue.	-Participate in implementation of regional seabird plan. -Encourage compatible research and long-term monitoring to enhance refuge management. -Develop a library and spatial data (GIS) that would increase the Refuges' capacity to effectively manage biological resources.
Contaminants	-No change to current level of protection against oil spills. -Contaminants and debris on Destruction Island and other islands may remain.	-Enhance oil spill readiness efforts. -Facilitate clean-up of contaminants on Destruction Island. -Survey other islands for pollution and cleanup as necessary over time.
Invasive Species Management	-Information available on presence of invasive species would remain limited.	-Initiate invasive species management strategies such as elimination of European rabbits on Destruction Island.

Chapter 3 Affected Environment

3.1 Introduction

This chapter identifies the current environmental conditions on the Washington Islands NWRs that could be affected by the alternatives presented in Chapter 2. To the extent possible, the descriptions of environmental topics are commensurate with the importance of the impact. The environmental consequences of the alternatives on the affected environment presented below are described in Chapter 4.

3.2 Climate and Ocean Conditions

The climate in the vicinity of the Washington Islands NWRs is characterized by wet and mild conditions. Summer weather systems come from the North Pacific, leading to foggy, cool summers with limited rainfall. Winter weather comes from the southwest, bringing abundant rainfall and mild temperatures. Annual rainfall fluctuates between 72 and 132 inches (182 to 335 cm), with an average of 105 inches (267 cm). Windy conditions are quite common, with the highest wind speed for the region clocked at 94 mph (151 kph) at Tatoosh Island (November 1942) (NOAA 1993).

Ocean surface water temperatures average between 48^{o}F and 57^{o}F (9^{o}C and 14^{o}C) near the coast (NOAA 1993). Sea surface temperature anomalies are common in this region, which can raise or lower water temperature by as much as 2 to 3 degrees (Brueggeman 1992). The Washington Islands NWRs are located near the northern extent of the California Current System (CCS). The CCS extends from British Columbia to Baja California and is one of the most ecologically diverse and productive marine ecosystems in the world. Water currents generally follow a northward direction up the coastline during the winter and shift to a southward flow during summer months. Wind, ocean floor bathimetry, shoreline configuration, and freshwater inflow all contribute to fluctuations in seasonal current flow patterns (NOAA 1993). Under certain northerly wind conditions, coastal upwelling can occur, which is most frequent during the summer and fall months (Brueggeman 1992). Upwelling is the wind-driven transportation of cold, dense, nutrient-rich water up toward the ocean surface, and it has been found to be critical to biological productivity in this region (Hickey 1996). The upwelling season reaches its maximum levels during July and August (Short 1992). Tidal fluctuations within the islands and coastal areas are large, averaging 11.5 feet (3.5 m). This large tidal difference allows for an extensive intertidal zone, with associated rich intertidal habitats.

The Columbia River Plume also influences the outer coast's waters and is considered a unique feature of the refuge area (Hickey 1996). This freshwater incursion affects currents, water

properties, nutrients, and productivity, as the water flows north during the winter months, although variable winds can drive the plume north at anytime of year (Hickey 1996).

The Strait of Juan de Fuca, submarine canyons, coastal promontories, and plumes from coastal estuaries are also potential influencing forces on waters surrounding the Refuges. These forces are not well understood along the coast, and their degree of influence remains uncertain (Hickey 1996).

The current understanding of the phytoplankton and zooplankton systems is also limited along the outer coast. These highly productive systems are known to vary with upwelling fluctuations (Horner 1996).

3.3 Geology and Soils

The islands and rock formations that make up the Washington Islands NWRs are the basalt and granite bedrock remnants of areas once covered by glacial till. These areas were once contiguous with the Olympic Peninsula mainland but were eroded away by rising ocean levels and subsequent wave and current action (USFWS 1989). Other geological processes, such as submergence and uplift, have also influenced the shapes and locations of the islands. Glacial materials still crown the flat tops of many of these rocky islands. The island and rock formations of this region are very steep table formations, with many rising up to several hundred feet above the water surface. Island size varies from small sea stacks less than one acre (0.4 ha) to the largest island (Destruction Island) at 34.5 acres (14 ha).

3.4 Biological Resources

The Washington Islands NWRs are located within the Sitka Spruce (*Picea sitchensis*) vegetation zone, which covers the coastal regions from northern California to Alaska (Cassidy et al.1997). This vegetation type is described as a “fog belt” that runs in a narrow band along the coastline and onto larger islands. Precipitation, wind, and mild temperatures combine to provide for rapid growth rates of spruce and other adapted vegetation (Cassidy et al.1997). Not all the islands support spruce, and many do not support any vegetation at all. These rocks and islands are generally considered part of the coastal beaches and rocky habitat zone (Cassidy et al.1997). Freshwater habitat is limited to seeps on a few of the larger islands.

Due to the remote nature of this area and the difficulty of getting onto the islands, rocks, and sea stacks, the habitat is generally unaffected by direct human impacts. Some direct human impacts have, however, occurred on a few islands and sea stacks due to: USCG grounds keeping activities on Destruction Island; historic military bombing practice drills; trespassing by recreational boaters; wildlife research activities; and tribal subsistence harvesting activities.

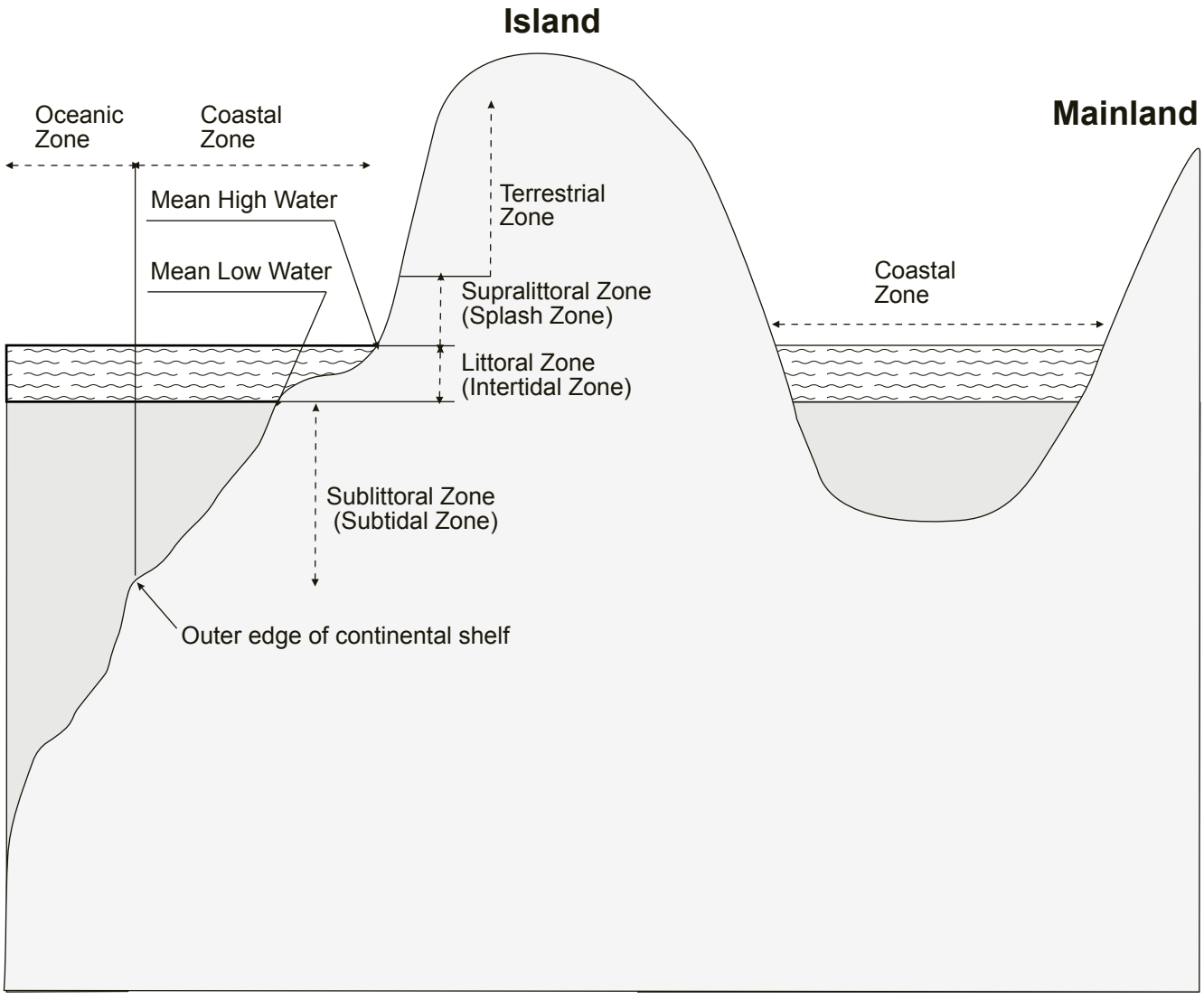
Destruction Island is an example of the influence of human-induced habitat disturbance as shown by reduced herbaceous vegetation in some areas caused by introduced rabbits (Aubry and West 1984). Biological resources on the Washington Islands NWRs are also indirectly affected by humans through impacts such as over-fishing, global warming, and pollution (Ainley et al. 1994). However, these impacts disrupt natural ecosystems and species populations in more subtle ways and are, therefore, difficult but critical to assess (Boersma and Parrish 1999).

As shown in Figure 3-1, the diverse and abundant biological resources of these rocks and islands are organized by zones. The terrestrial zone is the land above the higher, high water mark—this land is not covered by water even at the highest spring tides, except during severe winter storm events. Below the terrestrial zone is the supralittoral zone or splash zone. This area is the land between the spring highest tides and the high water mark of the rest of the year. The splash zone typically receives ocean water by wave spray. Below this zone is the littoral or intertidal zone, which is covered and exposed by seawater twice each day by the high and low tides. Farther into the water is the sublittoral or subtidal zone. This zone begins at the low water mark of low tide and extends out over the continental shelf to the edge of the shelf. Beyond this zone are the bathyal, abyssal, and hadal zones; they all represent deeper waters and will be grouped for the purposes of this document as open ocean.

3.4.1 Vegetation

The rocky intertidal zones around the base of many of the islands and sea stacks contain an estimated 130 plant species (two vascular, five or more lichens, and more than 120 algae) (Dethier 1988). Additional marine vegetation can be found among kelp forests in the subtidal zone, which are generally located in water depths of 7 to 66 feet (2 to 20 m) (NOAA 1993). These habitats are thought to be "one of the world's most productive" marine habitats in terms of abundance and diversity of dependent flora and fauna (NOAA 1993). Bull kelp (*Nereocystis luetkeana*) is the dominant plant within this marine habitat. The outer coast represents 12 percent of the total population of this plant in Washington (WDNR 1999). Bull kelp is currently facing many threats, such as commercial harvests, sedimentation caused by mainland run-off, and boat sewage discharge (Edwards and Foster 2000). Bull kelp is consumed by sea urchins. The presence of a healthy sea otter (*Enhydra lutris*) population prevents the urchin population from growing too high and depleting the valuable kelp resources. Kelp forests support many species, including: many fish species, especially during early life stages; a variety of algae species, many used by commercial industries; a variety of invertebrate species; and larger predators such as sea otters, seals and sea lions.

Vascular plants grow on only a few of the islands, rocks, and sea stacks. Plant species vary among the islands and are only well documented on the larger, more accessible islands (Aubry and West 1984; Barrett 1979; Cornelius 1982; NOAA 1993; Wilson and Manual 1986; Wilson 1991). Most of the islands contain grasses, forbs, and some shrub species. Salmonberry (*Rubus spectabilis*) and salal (*Gaultheria shallon*) are common dominant plants on the islands. A few of



Source: Adapted from Duxbury et al. 2000.

Biological Zones of Washington Offshore Islands NWRs and Vicinity

the islands have a Sitka spruce (*Picea sitchensis*) tree layer. Known shrub layer plants include salmonberry, salal, Hooker's willow (*Salix hookeriana*), red elderberry (*Sambucus racemosa*), and bearberry honeysuckle (*Lonicera involucrata*). Forb communities are known to incorporate Suksdorf mugwort (*Artemisia suksdorfii*), common cowparsnip (*Heracleum lanatum*), Bird's-eye pearlwort (*Sagina procumbens*), and California figwort (*Scrophularia californica*). Grass associations often include spike bentgrass (*Agrostis exarata*), slough sedge (*Carex obnupta*), common velvetgrass (*Holcus lanatus*), orchardgrass (*Dactylis glomerata*), dune wildrye (*Elymus mollis*), annual bluegrass (*Poa annua*), and red fescue (*Festuca rubra*). Orchardgrass, velvetgrass, and bird's-eye pearlwort are nonnative plant species.

3.4.2 Wildlife

Like the vegetation of the islands and rocks, the fauna that utilize the area are arranged within the different habitat zones of the marine and terrestrial systems. Marine fishes are found in the open water surrounding the Washington Islands NWRs. Marine mammals can generally be found in the open waters; however, breeding and resting bring them up into the subtidal and intertidal zones. The subtidal and intertidal habitats also hold many species of marine invertebrates. Avian species are found in the open ocean, intertidal, and upland habitats. Terrestrial fauna are restricted to the upland habitats on the tops of the islands. Species accounts for known refuge wildlife species are described below.

Fish

Commercially valuable species found in this region include spiny dogfish (*Squalus acanthias*), Pacific herring (*Clupea pallasi*), pink salmon (*Oncorhynchus gorbuscha*), chum salmon (*O. keta*), coho salmon (*O. kisutch*), sockeye salmon (*O. nerka*), chinook salmon (*O. tshawytscha*), steelhead (*O. mykiss*), coastal cutthroat (*O. clarki clarki*), Pacific hake (*Theragra chalcogramma*), widows rockfish (*Sebastes entomelis*), Pacific halibut (*Hippoglossus stenolepis*), Petrale sole (*Eopsetta jordani*), starry flounder (*Platichthys stellatus*), arrowtooth flounder (*Atheresthes stomias*), Pacific ocean perch (*Sebastes alutus*), lingcod (*Ophiodon elongatus*), English sole (*Parophrys vetulus*), Dover sole (*Microstomus pacificus*), Pacific cod (*Gadus macrocephalus*), and sablefish (*Anoplopoma fimbria*) (WDFW 2000a).

Groundfish species have experienced a decline in recent years, enough so that the State of Washington has issued a Strategic Plan and Federal agencies are considering listing these species for certain regions. The State's Strategic Plan outlines steps that will be taken in Washington to promote healthy groundfish populations (Palsson et al. 1998). This plan highlights the importance of marine reserves in allowing for groundfish population regrowth areas, the benefits of scientific research, and reduction of bycatch (Palsson et al.1998).

Forage fish are those fish species that make up a critical part of the diet of marine mammals, larger predatory fish, and seabirds. The health of the populations of these fish species is often used as an indicator of the health and productivity of the larger marine system. As forage fish populations fluctuate, so do the species that eat them. Fish species that are known prey items for

Washington coastal seabirds and marine mammals include Pacific herring, surf smelt (*Hypomesus pretiosus*), Pacific sand lance (*Ammodytes hexapterus*), northern anchovy (*Engraulis mordax*), and a few other smelt (*Hypomesus* sp.) species that are grouped for management practices by the (WDFW 2000b). Though most forage fish generally spawn and are harvested in Puget Sound, they travel and forage in the Washington Islands NWRs area and are the main prey items for seabirds, sea lions, seals, and salmon. There have been a few documented spawning areas on the outer coast, including surf smelt around Kalaloch Rocks and north along the coast to the Hoh River (WDFW 2000b). Forage fish are impacted by many non-natural impacts such as commercial and recreational fishing, water pollution, and sedimentation. Basic population assessments have not been carried out for these fish species (except herring, which has been documented as declining) and, therefore, population trends remain uncertain (Bargmann 1998; USFWS 1997). However, the importance of these fish to the entire health of the marine ecosystem is known; therefore, management plans, such as the State's Forage Fish Management Plan, have been enacted (Bargmann 1998). The management plan outlines an ecosystem approach for protecting forage fish species, which includes the protection of spawning grounds (Bargmann 1998). Surf smelt spawning habitat has been documented along the Washington coast on a few intertidal sand-gravel beaches (Bargmann 1998). Spawning habitats for other forage fish need to be assessed for the Washington coast. There is concern over Pacific hake and sardine populations because of the relative importance of these two species in seabird and marine mammal diets.

Marine Mammals

Marine mammals regularly use the islands and rocks in and above the intertidal zone for haul-out and breeding habitat and the surrounding waters for foraging. Haul-out habitat includes offshore rocks, anchored floats, and sand spits that marine mammals rest on during calm, sunny weather (Jeffries et al. 2003; Chapman and Feldhamer 1982; Johnson and Jefferies 1977). Haul-out habitat is characterized by adjacent deep water and some protection from disturbance (Johnson and Jefferies 1977). Marine mammal foraging habitat is found in marine waters around the islands and rocks. Marine mammals using the Washington Islands NWRs area directly include sea otter, harbor seal (*Phoca vitulina*), Steller sea lion (*Eumetopias jubatus*), California sea lion (*Zalophus californianus*), northern elephant seal (*Mirounga angustirostris*), and rarely, northern fur seal (*Callorhinus ursinus*). Under the Marine Mammal Protection Act of 1972, all marine mammals are federally protected.

Sea otter populations, listed by the State as an endangered species, have been increasing from reintroduction efforts in 1969 and 1970; after they were extirpated in the early 1900s (Brueggeman 1992). In 2004, 743 sea otters were counted between Point Grenville at Grenville Bay and Pillar Point in the Strait of Juan de Fuca (Jameson and Jeffries 2004). In 2001, two sea otters were reported using habitat in the Puget Sound. While WDFW has not surveyed inland waters in recent years, there have been credible sightings of scattered individuals in the San Juan Islands and Puget Sound (Jameson and Jeffries 2004). No groups were noted, however, and the number of sea otters in inland waters would not significantly add to the total (Jameson and Jeffries 2004). Most of the State's sea otters are within or near the Washington Islands Refuges. Refuge islands where sea otters have been documented breeding include Sandy Island, Hand

Rock, Destruction Island, and Ozette Island (WDFW 2000c). Sea otters utilize kelp beds and protected bays, especially around Ozette and Bodelteh Islands (Flattery Rocks NWR), and Destruction Island (Quillayute Needles NWR) for foraging (Bowlby et al. 1988).

Sea otters are considered a key species in terms of the ecological influence they have on kelp communities through reducing herbivore abundance (Kvitek et al. 1989; and Lance et al. 2004). Sea otters have also been reported to influence the rocky intertidal zones near Cape Alava, Washington, through their foraging methods of turning over rocks (Kvitek et al. 1989).

Sea otters along the Washington coast are at risk from drowning in fish nets and oil spills (Gerber and Van Blaricom 1999; Kvitek et al. 1989; Riedman and Estes 1990; Lance et al. 2004). Sea otters have been documented to get caught in commercial nets in Washington and California (P. Gearin as cited in Gerber and Van Blaricom 1999; Wendell et al. 1985). Major oil spills, such as the Exxon Valdez oil spill in Prince William Sound, are the greatest threat to sea otters especially when they occur within a limited range, and their population numbers are low as they currently are in Washington (Geraci and Williams 1990; Gerber and VanBlaricom 1999). Even minor oil spills are believed to cause major impacts to sea otter populations (Bonnell et al. 1996). Competition between sea otters and commercial harvest of sea urchins may become a more prominent issue as the otter population increases and expands along the coast (Kvitek et al. 1989).

Harbor seals are generally found in harbors and bays along the coast (Chapman and Feldhamer 1982; Ingles 1965). The State's harbor seal populations have been increasing since the 1970s with the 1999 Washington coastal stock population estimated at 15,958 (Jeffries et al. 2003). Many of these animals use the rocks, reefs, and beaches associated with the Washington Islands NWRs for pupping and haul-out sites (NMFS 2003a; USFWS 1989). During surveys conducted in 1989 and 1990, Destruction Island, Hoh Head, Alexander Island, the reef near Rounded Island, Giants Graveyard, Sea Lion Rock, the reef near Jagged Island, inshore of Hand Rock, and the Ozette Island reef, were all concentration sites for harbor seals (Brueggemann 1992). There are over 90 known haul-out sites that are used regularly along the Washington coast (Brueggeman 1992). Breeding occurs from April though July in Washington (Jefferies 1986). Breeding has been observed at Destruction Island, the Giants Graveyard area, Cape Johnson area, and the Hand Rock area (Brueggeman 1992). Harbor seals are susceptible to disturbance and are easily scared from haul-out areas (Brueggeman 1992; Chapman and Feldhamer 1982). Human disturbance is one of the major causes of pup mortality due to desertion by the mother (Boulva and McLaren 1979). Seals are also impacted by declines in forage fish species, pollution, shooting, propeller wounds, underwater blasting, oil spills, fishing operation entrapment, and other human-related incidents (Barlow et al. 1996; Chapman and Feldhamer 1982).

Steller sea lions, a federally listed species (eastern population threatened; western population endangered), are found across the North Pacific Ocean Rim from Japan to California (NOAA 1993). They were once considered the most abundant sea lion in the northern hemisphere

(Kenyon and Rice 1961). Their dramatic decline has been blamed on disease, entanglement, and prey availability (Merrick et al. 1987; Wooster 1993). Steller sea lions do not migrate but disperse widely outside of the breeding season (NOAA 1993). Pat Gearin of the National Marine Mammal Laboratory believes that 99 percent of all of Washington's Steller sea lions use the refuge areas (pers. comm. Gearin 2000). The estimate for refuge area use by this species is over 1,000 individuals (Gearin 1996). Primary prey items are fish (especially bottom-dwelling fish) and invertebrates, and occasionally marine mammals (Chapman and Feldhamer 1982; Gerber 1993; NOAA 1993). Breeding rookeries are located in Oregon at Rogue and Orford Reefs and in British Columbia at North Danger Rocks, Cape St. James, and Scott Islands (Maggot, Triangle, Sartine, and Beresford Islands) on the northwest end of Vancouver Island. Although breeding rookeries are not present on the Washington Coast, occasionally females with newborn pups are observed in Washington waters and have been documented on Quillayute Needles NWR's Carrol Island. Refuge islands are also used by Steller sea lions for hauling out (WDFW 1993; Speich et al. 1987). Sea lions often return to favorable haul-out sites year after year (NOAA 1993). Carroll Island and Split Rock have been documented as particularly active Steller sea lion haul-out sites (Brueggeman 1992). Human activity around haul-out sites has been documented to influence site tenacity in a negative matter (Johnson et al. 1989). Humans, boats, and aircraft have been documented to disturb hauled-out animals (NOAA 1993). Areas that are repeatedly disturbed can be abandoned permanently (Kenyon 1962). There is no commercial harvest of Steller sea lions. Other human-induced threats to Steller sea lions include fishery-related entrapment, fishery-related prey decline, oil spills and other water pollution, debris entanglement, and disturbance (Barlow et al. 1996; NOAA 1993).

California sea lions range from the Vancouver Islands, in British Columbia, south to Acapulco, Mexico (Brueggeman 1992). Most breed in Southern California and southward into Mexico (Ingles 1965; and Brueggeman 1992). The northern wandering of this species is primarily carried out by males, which come up into the Washington Island NWRs and utilize haul-out and foraging habitats (Speich et al. 1987). Though haul-out sites do shift for this species, Carroll Island, Sea Lion Rock (south of Carroll Island in Quillayute Needles NWR), and the Bodelteh Islands (located in Flattery Rocks NWR) have been identified as important areas (pers. comm. Gearin 2000; Brueggeman 1992). California sea lions eat the same prey species as Steller sea lions and thus compete for food resources (Mate 1976, as quoted in Chapman and Feldhamer 1982). Human-induced threats include oil spills, commercial fisheries-caused prey decline and entrapment (especially the Pacific hake and sardine fisheries and bottom-dragging fishing operations), and disturbance at haul-out areas (pers. comm. Gearin 2000; Barlow et al. 1996).

The core breeding range for the northern elephant seal is Baja California, Mexico, to Point Reyes, California (Chapman and Feldhamer 1982). However, elephant seals have been documented to pup on Destruction Island within the Washington Islands NWRs. They use refuge haul-out areas, such as Destruction Island, during molting. Molting is a vulnerable period when seals shed and regrow their outer coats of fur. Sightings of this species within the refuge area have been increasing over the last decade (Gearin 1996). After breeding and molting

periods end, elephant seals travel north as far as the Aleutian Islands to forage in productive northern waters (Chapman and Feldhamer 1982).

Northern fur seals are occasional visitors to the open waters surrounding the Washington Islands NWRs (Brueggeman 1992). The Washington Islands NWRs are well within the range of the species, which extends from the Arctic south to Baja California, Mexico (Brueggeman 1992). An estimated 80,000 to 90,000 animals migrate past refuge islands along the 100 fathom isobath during March and April (Gearin 1996). The majority of fur seal sightings in Oregon and Washington have been females and juveniles (Brueggeman 1992). The forage prey for this species includes bottom fish such as Pacific hake, squid (order Decapoda), ratfish (*Hydrolagus colliei*), and small sharks (order Chlamydoselachiformes) (Chapman and Feldhamer 1982). Entanglement in commercial fishing operations has been documented to impact populations of this marine mammal (Brueggeman 1992; Chapman and Feldhamer 1982).

Additional marine mammals documented in the waters around the Washington Islands NWRs include many whale and dolphin species (NOAA 1993). The gray whale (*Eschrichtius robustus*) and Pacific harbor porpoise (*Phocoena phocoena*) are considered common species in the nearshore waters of the region (Brueggeman 1992; Speich et al. 1987). Gray whale use of the region generally peaks in the spring and fall migration periods. In addition to migrational use of the area, the Pacific Coast Feeding Aggregation of gray whales can be observed utilizing the waters along the Washington coast during the summer (NMFS 2002).

The Pacific harbor porpoise is the smallest, and one of the most common cetaceans along the Pacific coastline, within 24 miles (38.5 km) of shore (Leatherwood et al. 1982). There is growing concern over harbor porpoise population declines in Oregon and Washington, which has lead to an increase in research (Brueggemen 1992). Human-induced disturbances and entanglement in fishing nets are believed to highly impact this marine mammal (Chapman and Feldhamer 1982; Speich et al. 1987).

Marine Invertebrates

The rocky intertidal zones of the Washington Islands NWRs are estimated to contain roughly 180 invertebrate species (Dethier 1988). Intertidal invertebrate species important to the Tribes as well as those of commercial importance include the following: California mussel (*Mytilus californianus*), native (Olympia) oyster (*Ostrea lurida*), Dungeness crab (*Cancer magister*), limpets (family Fissurellidae), chitons (class *Amphineura*), ocean pink shrimp (*Pandalus borealis* and *P. jordani*), and many crustacean species. The sandy beaches of the mainland coastline of this region provide the majority of the Pacific razor clam (*Siliqua patula*) harvest area for the entire west coast (NOAA 1993). Local Tribes, including the Quinault, Quileute, and Hoh, and recreational and commercial fisheries, harvest razor clams along the outer coast of Washington (Gerber and VanBlaricom 1999). Outer coast populations of Dungeness crab are considered to be important to the statewide population of this highly valuable commercial species (D. Armstrong, as cited in Gerber and VanBlaricom 1999). Washington State has identified the refuge areas as known Dungeness crab habitat (WDFW 2000e). Other invertebrate

species possible in the intertidal zones of the Washington Islands NWRs include the introduced Pacific oyster (*Crassostrea gigas*), blue mussel (*Mytilus galloprovincialis, M. trossulus*, and hybrids), weathervane scallop (*Patinopecten caurinus*), market squid (*Loligo opalescens*), North Pacific octopus (*Octopus doefleini*), black turbans (*Tegula funebralis*), limpets (*Tectura scutum* and *Lottia pelta*), black chitons (*Katherina tunicata*), and giant chiton (*Cryptochiton stelleri*). Crustaceans likely on and around the islands of the Washington Islands NWRs include red rock crab (*Cancer productus*), spot shrimp (*Pandalus platyceros*), pink shrimp (*Pandalus jordani* and *P. borealis*), sidestripe shrimp (*Pandalopsis dispar*), gooseneck barnacle (*Pollicipes polymerus*), and acorn barnacles (*Semibalanus cariosus* and *Balanus nubilus*). The State has identified hardshell subtidal clam habitat around Anderson Point, Bahobohosh Point, the southern side of Cape Flattery, and just north of Cape Alava (WDFW 2000d).

Other invertebrates, known collectively as enchinoderms, located in the intertidal and subtidal areas of the islands and rocks of the Washington Islands NWRs, are green sea urchin *(Strongylocentrotus droebachiensis*), red sea urchin (*S. franciscanus*), purple sea urchin (*S. purpuratus*), and sea anemone (*Anthopleura elegantissima* and *A. xanthogrammica*). The WDFW has identified sea urchin habitat around Fuca Pillar off the coast of the Makah Indian Reservation (WDFW 2000e). The Makah Tribe operates a commercial sea urchin fishery in the Strait of Juan de Fuca (pers. comm. Arnold 2001). Human-induced threats to marine invertebrates in Washington State include oil spills and harvest exploitation (pers. comm. Dethier 2000; Gerber and VanBlaricom 1999).

Birds

Breeding Seabirds

The Washington Islands NWRs are well known for their avian resources, supporting breeding populations of landbirds and seabirds. The habitat continuum between the terrestrial and marine systems has led to rich and highly productive avian populations (NOAA 1993). The interaction and dependency between the landbird and seabird populations on Washington's outer coast is complex and closely tied to marine resources.

The area's importance for breeding seabirds has been recognized since 1907, when the reservations (which later became the Washington Islands NWRs) were established for colony protection. A survey of seabird abundance along the Oregon and Washington coast found Olympic Peninsula seabird colonies to be important sites for regional seabird populations (Brueggeman 1992). The islands and rocks in this area provide habitat for over 72 percent of Washington's nesting seabirds and are among the largest colonies in the continental U.S. (Speich and Wahl 1989; NOAA 1993). Thirteen species make up the approximate 200,000 breeding seabird population. A number of these species only breed on the outer coast, likely due to a loss of nesting habitat elsewhere (Speich and Wahl 1989). Refuge nesting seabirds include seven burrow/crevice nesters and seven surface nesters. Names, nesting habitats, and legal status of these nesting seabird species are listed in Table 3-1.

Table 3-1. Breeding seabirds and shorebirds of the Washington Islands NWRs, outer coast of Washington State.

Common Name	Scientific Name	Nesting Habitat
Fork-tailed Storm-Petrel	*Oceanodroma furcata*	Burrows, cavities, and crevices - mostly between rocks
Leach's Storm-Petrel	*Oceanodroma leucorhoa*	Burrows - in turf
Double-crested Cormorant	*Phalacrocorax auritus*	Surface - builds nest of marine debris and sticks
Brandt's Cormorant	*Phalacrocorax penicillatus*	Surface - builds nests on broad ledges
Pelagic Cormorant	*Phalacrocorax pelagicus*	Surface - builds nests on narrow ledges
Black Oystercatcher	*Haematopus bachmani*	Surface - builds pebble nest at water's edge in rocks
Glaucous-winged Gull	*Larus glaucescens*	Surface - nests on rocky ledges and grassy tops of islands
Western Gull	*Larus occidentalis*	Surface - nests on rocky ledges and grassy tops of islands
hybrid Glaucous-winged Western Gull	_____	Surface - nests on rocky ledges and grassy tops of islands
Common Murre	*Uria aalge*	Surface - high rocky ledges and non-vegetated flat top areas. Does not build nest
Pigeon Guillemot	*Cepphus columba*	Burrows, crevices, and among driftwood - rocky ledges or cliff burrows
Ancient Murrelet	*Synthliboramphus antiquus*	Burrows - tunnels or natural cavities
Cassin's Auklet	*Ptychoramphus aleutica*	Burrow - tunnels or natural cavities, generally with over opening vegetation or structure
Rhinoceros Auklet	*Cerorhinca monocerata*	Burrows- in steep hillsides and cliffs
Tufted Puffin	*Fratercula cirrhata*	Burrows - tunnels in steep grassy hillsides, cliffs, and sometimes in natural cavities

Source: Harrison 1979; WDFW 2000

The fork-tailed storm-petrel (*Oceanodroma furcata*) is a common species, whose range includes the northern Pacific Rim from Baja California, to the Gulf of Alaska (Brueggeman 1992; Speich and Wahl 1989). They are found off the coast of Washington year round, though their numbers decline in winter months (Wahl 1984). The Washington Islands NWRs hold more than 50 percent of the west coast's breeding population of fork-tailed storm petrels within the contiguous U.S. (NOAA 1993). Nesting habitat includes rocky crevices and burrows in the island soil

(Speich and Wahl 1989). Nesting habitat typically includes islands with good vegetation cover (Kaufman 1996). Known nesting islands within the Washington Islands NWRs are Carroll, Bodelteh, and Alexander Islands (Speich and Wahl 1989). Nesting population estimates for the Washington coast are around 6,700 birds (Speich and Wahl 1989). A wide ranging forager, this species has been known to travel an average of 186 miles (300 km) from their nesting sites during the night to find food (Brueggeman 1992). This species generally feeds on fish and floating debris in waters over the continental shelf and farther out to sea, and occasionally close to land (Kaufman 1996). Storm-petrels have been documented concentrating around fishing vessels to take advantage of offal (Brueggeman 1992). This seabird species is particularly sensitive to disturbances at their nesting sites, introduced rats, and oil spills (Kaufman 1996; Speich and Wahl 1989).

Leach's storm-petrel (*Oceanodroma leucorhoa)* is a refuge breeding seabird that ranges across most of the world's northern oceans (Speich and Wahl 1989). This species is known to be highly philopatric, returning to nesting colonies year after year (Huntington et al. 1996). This long-lived species lays one egg per year, which is cared for at the colony by both the male and female (Huntington et al. 1996). This species is difficult to observe as the majority of breeding activity occurs at night, and non-breeding periods are spent off-shore. Along the Washington Coast, this species nests in burrows and crevices (Speich and Wahl 1989). The Leach's storm-petrel is believed to outnumber the fork-tailed storm-petrel at a ratio of approximately 10 to 1 as a breeder in Washington (Brueggeman 1992). Nesting locations are documented on 11 islands off the Washington Coast, though as many as 25 locations may exist (Speich and Wahl 1989). Speich and Wahl (1989) speculate that more nest locations are probable in the region. The largest colony is on Jagged Island, but they are also found on Carroll Island, Petrel Rock, Alexander Island, Kohcaa (uh) Island, Cake Island, and Round Island (Speich and Wahl 1989). Population estimates for Washington State are 50,000 or more breeding birds (Speich and Wahl 1989). Storm-petrels forage on microorganisms at the sea surface and often only return to land during the breeding season (Huntington et al. 1996). Leach's storm-petrel is known to be impacted by a variety of pollutants, but most significantly by introduced predators (Huntington et al. 1996).

On the outer coast, double-crested cormorants (*Phalacrocorax auritus*) nest on islands, sea stacks, and mainlands. The birds nest as single pairs, or in colonies of a few to several hundred pairs, and often share colonies with pelagic cormorants. This species builds conspicuous stick nests on the tops of relatively flat islands, on broad, wide cliff benches, and in trees. The only tree-nesting colony on the Olympic Coast is on Tunnel Island. Other favorite nesting islands are

Willoughby Rock, Split Rock, Little Hogsback, Hoh Head, Jagged Island, Point of the Arches, and White Rock. Double-crested cormorants frequently change their colony locations, so their year-to-year occurrence is unpredictable. Brood sizes range from one to eight young, with the majority of pairs producing two or three chicks. Small young can be seen from early June, and fledging occurs until late September. Birds are present on the rocks and islands year round. El

Niño events reduce the number of breeding pairs as well as reproductive success according to their severity. During unfavorable years, double-crested cormorants suffer almost total breeding failures with very few pairs attempting to breed. The Washington outer coast breeding population has varied between 47 and 805 pairs in the last decade, with about one fourth of the population frequently breeding off-refuge on mainland headlands. Since 1978, the population has slightly increased, although numbers have declined since 1995 due to a string of El Niño years. While oil spills and fish nets certainly are a threat to the species, double-crested cormorants are also vulnerable to human and bald eagle disturbances. The Service has aerially surveyed the total number of breeding pairs annually since 1979.

In Washington, Brandt's cormorants (*Phalacrocorax penicillatus*) currently breed only on the outer coast where the species is the least abundant of the cormorants. The birds nest only on bare rock portions of islands and sea stacks, where broad ledges, rocky slopes, and ridges—frequently close to the water—are the preferred habitat. Nests are not found on precipitous cliff ledges. The nests are almost completely constructed of seaweed and surf grass. Brandt's cormorant colonies seem to attract small numbers of murres. The outer coast population is centered in Copalis NWR where the birds use Willoughby Rock, Split Rock, Destruction Island, and Middle Rock, frequently. Farther north, Carroll and Jagged Islands sometimes support a few breeding pairs. As with other cormorants, colony shifts occur frequently. Brood sizes range from one to six young, with most of the successful breeders raising two or three chicks. Small young can be seen as early as mid June, and fledging occurs as late as mid October. Birds are present on the rocks and islands year round. El Niño events reduce the number of breeding pairs as well as reproductive success according to their severity. During unfavorable years, Brandt's cormorants suffer almost total breeding failures with very few pairs attempting to breed. The Washington outer coast population has varied between 46 and 578 breeding pairs in the last decade, but has declined since 1995 due to a string of El Niño years. While oil spills and fish nets certainly are a threat to the species, Brandt's cormorants are very sensitive to human disturbance and often also suffer from bald eagle (*Haliaeetus leucocephalus*) harassment and predation. The Service has aerially surveyed the total number of breeding pairs annually since 1979 (Wilson 1991).

The pelagic cormorant (*Phalacrocorax pelagicus*) is the most abundant and widespread of the cormorants on the outer coast. Colonies are located on island cliffs, sea stacks, and the mainland. Nests of seaweed, grasses, feathers, and a variety of flotsam are built on cliff ledges, and inside cliff and sea caves. The nests are constructed more compactly than double-crested cormorant nests, which are sometimes found with pelagic cormorants nesting on the wider ledges. The pelagic cormorant can be found on any island and mainland with suitable cliff habitat, and the total known breeding locations are too numerous to list here. The largest colonies are frequently on Willoughby Rock, Tunnel Island, Hoh Head, Teahwhit Head, Crying Lady Rock, Carroll Island, Jagged Island, Point of the Arches, and Cape Flattery. Cormorants frequently shift colony sites, so their year-to-year occurrence is unpredictable. Successful breeding pairs raise two to three young per season, with broods up to seven not unusual. The breeding chronology of the species is protracted, with small young as early as mid June and

fledging as late as mid November. Birds are present on the rocks and islands year round. El Niño events reduce the number of breeding pairs as well as reproductive success according to their severity. During unfavorable years, pelagic cormorants suffer almost total breeding failures with very few pairs attempting to breed. The Washington outer coast population has varied between 834 and 2,248 breeding pairs in the last decade, with about one third of the population breeding off-refuge on mainland cliffs. Numbers have declined since 1995, due to a string of El Niño years. While oil spills and fish nets certainly are a threat to the species, pelagics are also vulnerable to human and bald eagle disturbances. The Service has aerially surveyed the total number of breeding pairs annually since 1979.

The glaucous-winged gull (*Larus glaucescens*) is one of the most wide-ranging gulls in the Pacific, with their breeding range stretching along the north Pacific Rim from northern Oregon, including the Refuge's offshore islands, to Russia (Verbeek 1993). This gull species is the most widespread and abundant in Washington (Speich and Wahl 1989). The glaucous-winged gull hybridizes widely with the western gull (Verbeek 1993). The nesting habitat is variable from rocky islands to building tops in downtown Seattle (Speich and Wahl 1989). Speich and Wahl (1989) write that "some of the largest seabird colonies in Washington are those of the glaucous-winged gull," the largest of which are located on the islands of the Washington Islands NWRs. Prey items are as variable as their nesting habitat, but on the outer Washington coast the diet includes fish offal, marine invertebrates, and eggs of oystercatchers and alcids (Speich and Wahl 1989). Gull populations in general suffer fewer human-induced threats due to their wide array of prey items and ability to take advantage of human environments (Speich and Wahl 1989). Some human activities that threaten other wildlife actually benefit gulls, such as offal disposal and open dumps (Verbeek 1993; Sherrod et al. 1976). Mainland human activities may benefit gull populations; however, human disturbance of nesting gulls can cause egg or chick mortality directly, or by exposing them to other predators such as crows.

The western gull's (*Larus occidentalis*) range is the southern counterpart to the glaucous-winged gull, with the northern extent of its range just reaching Destruction Island in Quillayute Needles NWR and the southern edge ending in Baja California (Speich and Wahl 1989). Western gulls hybridize extensively with glaucous-winged gulls in Oregon and Washington (Bell 1996). In Washington, western gulls and glaucous-winged/western gull hybrids, nest on rocky cliffs and islets, especially on islands and offshore rocks (Smith at al. 1997; Speich and Wahl 1989). The prey items of this gull overlap extensively with that of the glaucous-winged gull, and include fish, offal, seabird eggs and young, garbage, and invertebrates (Speich and Wahl 1989). The recent move by Washington State to cap dump sites may displace foraging gulls. The population threats and issues are the same as those of the glaucous-winged gull above.

In Washington, the common murre (*Uria aalge*) breeds only on the outer coast. Within the three Refuges, the major colonies are Point Grenville, Split Rock, Willoughby Island, Quillayute Needles, Carroll Island, and Jagged Island. The majority of refuge colonies are located on the tops of partially vegetated or bare rock sea stacks and flat-topped islands. Only a small portion

of refuge murres use cliffs. Generally, the birds arrive in April and may be on the colonies into September. A single egg is laid on bare rock or soil. Young leave the colonies at an age of 18 to 25 days and are cared for at sea by the male of the pair for several weeks. Although evidence of breeding exists, no detailed studies of breeding success have been conducted at refuge colonies, mainly due to their inaccessibility and difficulty in observing the tops of the islands and sea stacks where they occur. Prior to 1983, the Refuge's population was around 30,000 birds, with most of the birds using colonies in Copalis NWR. With the 1983 El Niño event, the population crashed to less than 3,000 birds. While some of the colonies in Quillayute Needles NWR eventually recovered, some even exceeding pre-1983 levels, the large southern colonies, comprising most of the pre-1983 Washington population, remain almost deserted to this date. As a result, the Refuge's murre population during favorable years is now only about one third of pre-1983 levels and is centered at the Quillayute Needles and Carroll Island colonies compared to colonies in Copalis NWR prior to 1983. El Niño events are a major factor determining murre colony attendance on outer coast refuge islands. Colonies are deserted during severe El Niños and one or two years thereafter. Even moderate El Niño events depress numbers significantly. Predation and colony disturbance by bald eagles may also be a factor in colony attendance (USFWS 2005). In addition to these natural factors, Washington murres have also been severely impacted by: U.S. Navy practice bombing activities at Sea Lion Rock in Copalis NWR; several large oil spills; and entanglement and drowning in fish nets. In what combination these factors were responsible for causing the Washington murre decline, is unknown. This species has been annually surveyed by refuge personnel using aerial photography since 1979, with multiple surveys each year since 1995 (Wilson 1991).

The pigeon guillemot (*Cepphus columba*) is a small alcid that ranges from southern California north across the North Pacific Rim (Speich and Wahl 1989). The foraging habitat for this species is the shallow reach of the nearshore zone, where they hunt for forage fish (Speich and Wahl 1989). Nesting habitat is variable, incorporating rock crevices, talus, boulder beaches, burrows in dirt cliffs, and artificial burrow sites such as pipe and wharf structures (Speich and Wahl 1989). Nesting occurs on most of Washington's marine coastline and is considered to be one of the most widespread seabirds in the State (Smith et al. 1997; Speich and Wahl 1989). Though population estimates are difficult for this species due to the fact that they nest in scattered small groups, published statewide population numbers are around 6,000 birds, and refuge population estimates are around 500 birds (Speich and Wahl 1989). More recent surveys by WDFW and the Service in the Puget Sound area indicate much higher populations in that region, therefore, the estimates for the outer coast are probably low (Evenson et al. 2002). Disturbance is not as great a threat to this seabird population due to their widespread distribution as well as inaccessibility of nest sites and low nesting densities (Speich and Wahl 1989). They are locally vulnerable to oil spills, mammalian predators, and gill netting (Ewins 1993).

The ancient murrelet (*Synthliboramphus antiquus*) is a northern Pacific breeder whose range may dip into the Washington Islands NWRs. This seabird can be found foraging in offshore waters, generally over the continental shelf and occasionally close to shore (Gaston 1994). During the breeding season, this species makes its annual pilgrimage to terrestrial habitats,

where it uses burrows for nest sites (Gaston 1994). Nests are natural and/or dug holes under tree roots, under vegetation, or in rocky crevices (Harrison 1979). Along Washington's outer coast, the presence of this species is well known for foraging, especially during winter months (Gaston 1994). Breeding evidence is limited to one documented nest in the 1920s (Hoffman 1924) and general breeding behavior observations made by refuge biologists, of small rafts of birds near Carroll and Jagged Islands. Across its range, this species is greatly diminished from historic levels due to introduced predators at colonies (Gaston 1994). This species is also known to be vulnerable to disturbance, lights, oil spills and other contaminants (Gaston 1994).

The Cassin's auklet (*Ptychoramphus aleutica*) ranges from the western Aleutians to central Baja California. This burrow nester rears chicks in self-dug burrows, in rocky crevices, or under logs and trees (Manuwal and Thoresen 1993). The majority of nesting activity is performed at night. Diet consists of crustaceans, squid, and fish, which they gather beyond the continental shelf (Manuwal and Thoresen 1993). In Washington, this species is locally abundant on rocky islands along the outer coast, where they are the most abundant breeding seabird in the State (Speich and Wahl 1989). The Washington Coast is believed to hold more than 50 percent of the west coast's breeding populations of Cassin's auklets in the contiguous U.S. (USFWS 2005). Population estimates for Washington are at least 88,000 birds with more thought to be present (Speich and Wahl 1989). The refuge area and west entrance of the Strait of Juan de Fuca are considered to be important winter areas for this species (Environment Canada 2000). Cassin's auklets are particularly vulnerable to disturbances, especially during the nesting season (Speich and Wahl 1989). Oil spills, introduced predators and mammals, pollution, and gill-net entanglement have also been documented as threats to this species (Manuwal and Thoresen 1993).

The rhinoceros auklet (*Cerorhinca monocerata*) is actually a misnamed puffin. The species' morphology and breeding biology are very similar to those of the tufted puffin. The major difference between these two puffins is that the rhinoceros auklet is smaller and nocturnal (active at night) with respect to its activities on the colonies, while the tufted puffin is larger and diurnal (active during the day). Rhinoceros auklets arrive on their colonies after dark and depart around sunrise. The birds excavate burrows on islands with sufficient soil depth. In Washington, they prefer steep, grassy slopes and grassy areas on the tops of cliffs as well as salmonberry and willow covered areas on or near steep slopes where the birds can launch themselves into flight easily. Breeding pairs produce only one chick per year. The species' prolonged incubation period and slow chick growth rate are adaptations to patchy, unpredictable marine prey resources. Chicks are fed a diet primarily of fish. On Washington's outer coast, primary prey species include rockfish, Pacific sandlance, northern anchovy, herring, and smelt. Birds arrive on the colony as early as February, and the last breeding pairs and chicks leave the colony in mid September. In contrast to common murres and cormorants, rhinoceros auklets are less affected by El Niño events, with many pairs producing chicks. With an estimated 12,000 breeding pairs, Destruction Island hosts most of the outer coast breeding population and about half of the entire Washington population. Protection Island in the Strait of Juan de Fuca hosts the other large rhinoceros auklet colony in Washington. Together these two colonies comprise over 90 percent

of the lower 48 states' population. Small numbers of breeding pairs are also thought to breed on Alexander and Carroll Islands on the outer coast. The current major threats to this species are oil spills and entanglement in fish nets. Refuge and State biologists have developed an extensive database on major breeding biology aspects of this species. The Destruction Island population needs to be estimated again in the near future (Wilson and Manuwal 1986).

Tufted puffins (*Fratercula cirrhata*) are an icon for the Washington coast and one of the better-known seabirds among the general public. Their range extends from Japan around the northern Pacific Rim south to California (Speich and Wahl 1989). The Washington Coast contains one of the two major colonies, as well as more than 50 percent of the tufted puffins found in the contiguous U.S. (NOAA 1993). Washington State population estimates are 23,300 breeding birds (Speich and Wahl 1989). The two largest colonies in Washington are on Jagged Rock and on Alexander Island, which are both within the Washington Islands NWRs boundaries (Speich and Wahl 1989). This species nests in sod burrows or rock crevices of islands (Burrell 1980). On Destruction Island, puffins have been documented to nest within 10 feet (3 m) of the "top of the steepest and least vegetated cliff faces" (Burrell 1980). The prey species for puffins include fish and marine invertebrates (Baird 1991). Gillnet fishery entrapments, coupled with ocean water temperature fluctuations are suspected to have caused population declines (Smith et al. 1997). Other threats include oil spills and nest site disturbance (Tenyo Maru Oil Spill Natural Resources Trustees 2000; Speich and Wahl 1989). In a 1991 oil spill off Cape Flattery, Washington, about 10 percent of the tufted puffins' statewide population was eliminated (Tenyo Maru Oil Spill Natural Resources Trustees 2000).

Though oceanic islands can be isolated sanctuaries for breeding seabird populations, where they can enjoy an absence of human induced changes to their populations, island bird populations are some of the most threatened in the world (Kress 1999). The threat is mostly due to the proximity of humans to the islands and their respective impacts to the island habitats and natural resources (Furness and Monaghan 1987; Kress 1999). Human threats along the Washington Coast to seabird populations include fisheries bycatch, oil pollution, boat disturbance, nest trampling, military operation disturbance, and prey decline (Speich and Wahl 1989; Wooster 1993). Because many of the breeding seabird populations breed on only a few of the islands, their populations are more at risk to impacts (Furness and Monaghan 1987).

Nonbreeding Seabirds and Waterbirds

A large number of seabird species use the area around the Washington Islands NWRs during fall and spring migration and overwinter while breeding elsewhere (USFWS 1989). During migration periods, the total count for seabirds alone can exceed one million birds (Brueggeman 1992). Quality habitat for migrating birds in which to forage and rest during their difficult, long distance passages has been shown to be extremely important to the health of migratory avian populations (Moore et al. 1995). Some waterbird species such as the western grebe (*Aechmorphorus occidentalis*), use the waters around the Refuges for wintering habitat (Speich et al. 1987).

Documented, nonbreeding seabird and waterbird presence in the area includes the red-throated loon (*Gavia stellata*), Pacific loon (*G. pacifica*), common loon (*G. immer*), western grebe, brown pelican (*Pelecanus occidentalis*), sooty shearwater (*Puffinus griseus*), white winged scoter (*Melanitta fusca*), surf scoter (*M. perspicillata*), black scoter (*M. nigra*), Caspian tern (*Sterna caspia*), common tern (*S. hirundo*), parasitic jaeger (*Stercorarius parasiticus*), Heermann's gull (*Larus heermanni*), and California gull (*Larus californicus*) (Speich et al. 1987). Loon species use the waters surrounding the Refuges for migration period foraging and resting (Speich et al. 1987). Western grebes use the waters surrounding the Refuges for both post-breeding dispersal and over-wintering habitat (Speich et al. 1987).

Brown pelicans do not breed in Washington. Birds from California and Mexico arrive at Willapa Bay, Grays Harbor, and the outer coast of the Olympic Peninsula in June. Pelican numbers peak in September, when several thousand individuals may be present on the Washington coast. By early November, most of these pelicans have migrated back south. In Washington, the highest numbers are usually encountered during El Niño years when food becomes scarce around their breeding colonies in the south and many birds fail to breed. During such years, a few individuals may even move into the Strait of Juan de Fuca. Islands and sea stacks of the outer coast refuges are used by the birds for roosting. Sand bars at the mouths of rivers and creeks are also favorite places for pelicans. During most years, numbers are highest in Copalis NWR as pelican numbers decline farther north. The most favored sites in Copalis NWR are Grenville Arch, Willoughby Rock, and Split Rock. It is common to see several hundred birds roosting on any one of these rocks. Farther north, the Quillayute Needles and Carroll Island are favorite roosts. The primary disturbance to roosting birds is low-flying aircraft. The Service has aerially surveyed pelicans in recent years when funds for flights were available.

Of the five shearwater species seen off the Washington coast, the sooty shearwater is the most abundant (Speich et al. 1987). Sooty shearwaters can be seen in Washington waters year round but are more abundant in the summer (austral winter) when numbers of these southern hemisphere breeders can reach hundreds of thousands. Scoter species are also seen year round, but fewer are observed in spring and summer when they are breeding in Canada and Alaska (Speich et al. 1987). Scoters often forage close to the rocks and islands of the Washington Islands NWRs (Speich et al. 1987). Common and Caspian terns utilize the Washington Islands NWRs area for post breeding dispersal and migration (Brueggeman 1992; Wahl 1975). Both of the nonbreeding gull species, the Heermann's and California gulls, are southern or interior breeders that use the Washington coast during post-breeding periods (Speich et al. 1987). The parasitic jaeger is common over the continental shelf from April through November in Washington (Wahl 1975).

Shorebirds

Shorebirds observed utilizing the refuge rocks and islands include black-bellied plover (*Pluvialis squatarola*), semipalmated plover (*Chardadrius semipalmatus*), surfbird (*Aphriza virgata*), black oystercatcher (*Haematopus bachmani*), wandering tattler (*Heteroscelus incanus*), whimbrel

(*Numenius phaeopus*), ruddy turnstone (*Arenaria interpres*), black turnstone (*Arenaria melanocephala*), sanderling (*Calidris alba*), least sandpiper (*Calidris minutilla*), western sandpiper (*Calidris mauri*), and rock sandpiper (*Calidris ptilocnemis*) (Paulson 1993; Speich et al. 1987). These shorebird species forage on invertebrates in rocky and sandy tidal and splash zones. In addition to using tidal areas for foraging, shorebirds are known to use the upland island habitats for roosting and protection during storm events.

The black oystercatcher inhabits the rocky shorelines of the west coast of North America (Speich and Wahl 1989). Breeding habitat is composed of offshore rocks, islands, and sometimes rocky coastal beaches (Speich and Wahl 1989). This shorebird species forages in the intertidal zone, where they primarily take mussels, limpets, and chitons (Speich and Wahl 1989). Oystercatchers are solitary nesters, and nest sites incorporate large feeding territories that are defended from other individuals. Thus, this species is fairly evenly distributed among the available nesting habitat within the Washington Islands NWRs (Speich and Wahl 1989). The breeding estimate for this species for the State is less than 400 birds (Speich and Wahl 1989). Washington population trend estimates over the past 25 years have shown that this species is remaining stable or declining slightly (Nysewander 2000). The uncertainty regarding their population status in the State is due to the estimated dispersal of birds among breeding areas (Nysewander 2000). This species is particularly vulnerable to nest site disturbance, oil spills, and intertidal zone habitat degradation (Drut and Buchanan 2000; Nysewander 2000). The black oystercatcher has been identified nationally and regionally as a species of high concern by the U.S. Shorebird Conservation Plan (Brown et al. 2000) and the Northern Pacific Coast Regional Shorebird Management Plan (Drut and Buchanan 2000). It is also on the Federal list of Birds of Conservation Concern 2002 (USFWS 2002). The black oystercatcher is the focus of a new working group, of which Refuge staff are formative members. The International Black Oystercatcher Working Group was established through regional shorebird working groups to coordinate monitoring and research activities at regional scales and develop a more focused conservation plan throughout the range of the species. This group is composed of biologists, researchers and resource managers active in black oystercatcher conservation range-wide.

The Service, in cooperation with other Federal and State agencies, NGOs and private individuals, recently developed a Northern Pacific Coast Regional Shorebird Management Plan, due to concerns over declining shorebird populations and loss of habitat, especially during migration (Drut and Buchanan 2000). Throughout the Pacific Coast, stopover sites for migrant shorebirds in the northwest will become increasing concentrated and important as habitat degradation continues. Rocky shorelines are identified as a key habitat type utilized by migrant shorebirds (Drut and Buchanan 2000). Migration monitoring and habitat utilization studies are called for in the management plan as important steps needed to promote restoration and conservation of shorebird species (Drut and Buchanan 2000). Buchanan (2003) indicated three top priority implementation activities for the North Pacific Coast plan, including (1) Effectively eliminate and otherwise control exotic species in essential shorebird habitat; (2) improve oil spill prevention strategies and spill response efficiency; and (3) restore degraded habitats.

Landbirds

In addition to seabirds, a handful of landbirds breed on the Refuges' islands and rocks. These species are generally found on the larger, more vegetated islands. These landbirds, such as raptors, songbirds, and shorebirds, utilize the islands for foraging or nesting. Raptor species that nest along Washington's outer coast and use the islands for foraging include the osprey (*Pandion haliaetus*), bald eagle (*Haliaeetus leucocephalus*), and peregrine falcon (*Falco peregrinus*) (Speich et al. 1987). Passerines (i.e., songbirds) documented to occur on upland habitats of the Washington Islands NWRs include northern rough-winged swallow (*Stelgidopteryx serripennis*), barn swallow (*Hirundo rustica*), northwestern crow (*Corvus caurinus*), common raven (*Corvus corax)*, European starling (*Sturnus vulgaris*), savannah sparrow (*Passerculus sandwichensis*), fox sparrow (*Passerella iliaca*), song sparrow (*Melospiza melodia*), American goldfinch (*Carduelis tristis*), winter wren (*Troglodytes troglodytes*), and bank swallow (*Riparia riparia*) (Speich et al. 1987; and USFWS 1985). Great blue heron (*Ardea herodias*), a disturbance sensitive species, was known to breed on some of the larger islands, and a few common mergansers (*Mergus merganser*) were observed on refuge islands (Speich et al. 1987). Brant (*B. bernicla*) and Canada geese (*Branta canadensis*) are also known to use refuge waters during migration periods (Speich et al. 1987).

Due to the limited access to refuge islands, not much is known about most landbird breeders on the islands. Information from the few existing studies or inventories is presented below. Of the raptor species, information is available for bald eagles and peregrine falcons. Bald eagles are common in saltwater areas in Washington, especially along Puget Sound, the San Juan Islands, and the Olympic Peninsula coastline (Smith et al. 1997). The Copalis Beach area holds an especially high concentration of eagles (Smith et al. 1997). The Service and the WDFW have documented approximately 40 breeding territories along the Olympic Outer Coast (USFWS 1992). They are also known to nest on at least five islands within refuge boundaries (WDFW 2000c). Bald eagle management areas established by the WDFW encompass many refuge islands (WDFW 2000c). Forage species for the bald eagle include fish, seabirds, small mammals, and carrion (Anderson et al. 1986). Bald eagles feed on seabirds, especially during the seabird nesting season (Speich et al. 1987). On refuge islands, they are often observed attacking common murres, gulls, puffins, and cormorants (Speich et al. 1987). Common murres are the most commonly taken seabird species by Olympic Peninsula eagles (Knight et al. 1990). Seabirds are a significant and historical prey for eagles on the Washington Coast (Speich et al. 1987).

In Washington, one of the major nesting areas for the peregrine falcon is the outer coast. The birds nest on ledges and grassy benches associated with many island and mainland cliffs. Breeding territories are generally in the vicinity of colonies of the smaller seabirds, which are their main prey during the breeding season. On the Washington Coast, successful breeding pairs produce between one and four young, with breeding success being lower during severe El Niño and post El Niño years. The peregrine breeding season is protracted, and it is not uncommon to have newly hatched young at some of the eyries while young of other pairs have already fledged.

Fledging occurs as early as June 2nd and as late as July 20th. After fledging, the young remain in the general area of their parent's territory for several weeks. Many of the territories are occupied year round. This marine peregrine population has undergone a significant population increase. In 1980, only three territories were known. Currently, there are at least 25 territories, with about two thirds of the nests on refuge islands. During this same time period, there has also been a significant increase in the birds' breeding success, approaching that of a reproductively healthy, stable population at Langara Island, British Columbia. These increases are thought to be due to the discontinued use of DDT and the resulting reduction in DDE levels (a metabolite of DDT) in the peregrine's prey.

Because of widespread increases in peregrines in many areas in North America, the peregrine falcon was taken off the Federal Endangered Species List in 1999. The Service will monitor peregrine falcons as part of the National Post-delisting Monitoring Plan through 2015. On the Washington coast, as in many other areas, peregrine populations are currently still increasing and have not reached their carrying capacity. Because the current and historical carrying capacity of the Washington coast is unknown, to what degree the species has recovered in this area, is also unknown. The major threat to Washington peregrines is contact with prey that has been exposed to environmental contaminants. This population has been intensively monitored by refuge and State biologists since 1980 (Wilson et al. 2000).

Passerines use the islands for both breeding, and—along with shorebird species—for migration resting areas. There is much concern over the conservation of migratory birds (Terborgh 1989). Quality habitat for migrating birds for foraging and resting during their difficult long distance passages has been shown to be extremely important to the health of migratory avian populations (Moore et al. 1995).

Non Avian Terrestrial Fauna

There are a few terrestrial fauna that can be found on the larger, vegetated islands such as Destruction, Ozette, Bodelteh, Alexander, and Carroll Islands (Aubry and West 1984). These include European rabbits (*Oryctolagus cuniculus*), river otter (*Lutra canadensis*), Townsend's vole (*Microtus townsendi*), Destruction Island shrew (*Sorex trowbridgii destructioni*), shrew-mole (*Neurotrichus gibbsi*), northwestern garter snake (*Thamnophis ordinoides*), and salamanders (Family: Plethodontidae) (Aubry and West 1984; Johnson and Cassidy 1997; Speich and Pitman 1984). Except for the rabbits and river otter, the terrestrial fauna is not well documented on the islands, and population estimates are unknown for all species.

The Destruction Island shrew was discovered in 1942 by Scheffer and Dalquest (1942). This species lives in grasses found on the island. The shrew breeds in late April or early May and averages four young per litter (Dalquest 1941). This species eats mainly insects (Dalquest 1941). In the 1942 study, researchers found relatively high densities of the shrew; however, 1983 research resulted in few shrews observed (Aubry and West 1984). The decrease in shrew abundance is blamed on habitat loss resulting from European rabbit grazing (Aubry and West 1984). This shrew is listed as a Federal Species of Concern, which are species whose

conservation standing is of concern to the Service, but status information is still needed. With only two studies existing on this species, there is a serious lack of data. More research is needed to determine the population status and outlook for this endemic small mammal.

European rabbits were introduced to Destruction Island in 1970 and have been successful in colonizing the island's grassy habitats (Aubry and West 1984). The rabbits have been documented to be degrading native small mammal habitat on the island, especially impacting native shrew and shrew-mole populations (USFWS 1990; Aubry and West 1984). It is unclear what effect rabbits have on seabird populations. Past research from other seabird nesting islands where rabbits have been introduced has shown mixed results (Aubry and West 1984; Rodway et al. 1990; Tomich et al. 1968; Warner 1963). The Service has stated, that based on Aubry and West's 1984 research, the rabbit is considered a "serious pest species" worthy of control on the Refuges, and has conducted a variety of control measures in the past with no success (USFWS 1983; USFWS 1992). More recent rabbit control measures on other seabird breeding islands have proved more successful; however, as new techniques are developed and implemented (USFWS 2005).

River otters are commonly associated with freshwater habitat but do have limited use of marine environments (NOAA 1993). They have been documented on Destruction Island and are considered to be widespread (Aubry and West 1984; Speich and Pitman 1984). River otters are known to forage on seabird eggs and chicks (Speich and Wahl 1989).

3.4.3 Species with Special Status

There are 13 species and habitats with special status which are known to occur on the Washington Islands NWRs (Table 3-2). Special status species include federally and/or State-listed endangered, threatened, candidate, and sensitive species, as well as State priority species. Biological inventories, focusing on birds and marine mammals, have been conducted annually by refuge staff as species are listed and funding allows. Other data have been gathered by a variety of sources including the WDFW, university researchers, and U.S. Navy personnel. Lists of federally endangered and threatened species can be found at http://ecos.fws.gov/tess_public/ (USFWS 2006). Washington State endangered, threatened, candidate and sensitive species can be found at http://www.wdfw.wa.gov/wlm/diversty/soc/concern.htm (WDFW 2005b).

Table 3-2. Special Status Species and Habitats That Have Been Documented on the Washington Islands NWRs.

Species/Habitat Name	Federal Status[1]	Washington State Status[2]
BIRDS		
Brown Pelican	Endangered	Endangered
Marbled Murrelet	Threatened	Threatened
Bald Eagle	Threatened	Threatened
Peregrine Falcon	None	Sensitive
Cassin's Auklet	None	Candidate
Brandt's Cormorant	None	Candidate
Common Murre	None	Candidate
Tufted Puffin	None	Candidate
MAMMALS		
Sea Otter	None	Endangered
Steller Sea Lion	Threatened	Threatened
PLANTS		
Scurvygrass	None	Sensitive
HABITATS		
Cliffs	None	Priority
Marine Shoreline	None	Priority

Sources: WDFW 2005b, USFWS 2006, WDNR 2006

[1] Federal Status- Endangered and Threatened species are protected by the Endangered Species Act. Endangered status is given to those animal or plant species in danger of extinction within the foreseeable future throughout all or a significant portion of their range. Threatened status is given to those animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

[2] State Status -The State maintains a Threatened and Endangered species protection program. Endangered status is given to any wildlife species native to the State that is seriously threatened with extinction throughout all or a significant portion of its range within the State. Threatened status is given to any native State wildlife species likely to become endangered within the foreseeable future throughout a significant portion of its range within the State without cooperative management or removal of threats.

Federally Protected Species

The Endangered Species Act of 1973 allows for protection of animals or plants from adverse effects on species populations. The purpose of the Act is to "conserve the ecosystems upon which endangered and threatened species depend and to conserve and recover listed species" (USFWS 2001). The highest level of protection given is endangered, which are species deemed to be "in danger of extinction throughout all or a significant portion of its [their] range" (ESA 1973 Section 3-6). Species listed as endangered that are found in the area of the Washington Islands NWRs are the brown pelican and a number of whale species.

Though population estimates have been showing an increase from the 1970s, the brown pelican is nonetheless considered highly imperiled in Washington, as shown by its Federal and State endangered species listing (Brueggeman 1992). The pelican, however, limits its use of the Washington Islands NWRs to post breeding foraging in the waters surrounding the islands and rocks, as well as resting on the islands and rocks. This species was listed in 1970 due to pesticide poisoning and other threats such as human disturbances at breeding colonies, fisheries-related entanglement, oil and other toxic spills, and prey availability (USFWS 1995). Human disturbances at roost sites, as represented by the Washington Islands, may affect distribution patterns and age structure of pelicans using sites during the nonbreeding season (Jaques and Anderson 1987 as cited in TNC 1995). Disturbance distances are variable in the literature for this species and range from 100 to 600 meters of a roost site (Jaques and Anderson 1987 as cited in TNC 1995; Collazo and Klaas 1985; Schreiber 1979 as cited in TNC 1995). The Nature Conservancy (TNC) reports that "In some cases (e.g., U.S. Caribbean, California), high levels of human disturbance are tolerated because there is vertical separation between birds (e.g., roosting/nesting on a cliff) and the source of disturbance" (TNC 1995). It is suggested that management efforts should be made to avoid human access to roost sites (Jaques and Anderson 1987 as cited in TNC 1995).

A number of whale species observed in the waters surrounding the Washington Islands NWRs are listed as Federal and State endangered species. These whale species include the Sei whale (*Balaenoptera borealis*), fin whale (*B. physalis*), blue whale, (*B. musculus*), humpback whale (*Megaptera novaeangliae*), northern right whale (*Eubalaena glacialis*), and sperm whale (*Physetes catodon*). The killer whale (*Orcinus orca*) is considered a federally depleted species under the Marine Mammal Protection Act (MMPA) as well as a State endangered species. None of these whale species are considered common users of the outer coastal waters.

Federally threatened species are those plants and animals that are expected to become endangered in the near future in "all or a significant portion of its [their] range" (Endangered Species Act 1973, as amended, Sec 3-19). Threatened species documented on the Washington Islands NWRs are the marbled murrelet, bald eagle, and Steller sea lion.

The marbled murrelet was listed as a State and Federal threatened species in 1992, due to concerns over nesting habitat and success (USFWS 1997). The marbled murrelet nests inland, but forages along the Washington coast, and can be observed in the area of the Washington Islands NWRs year round (Brueggeman 1992; Wahl 1975). These near shore marine waters within 1.2 miles (2 km) are considered essential to the recovery of the species (USFWS 1997). Critical marine foraging habitat includes "proximity of old-growth forests, distribution of rocky shoreline/substrate versus sandy shoreline/substrate, and abundance of kelp" (Thompson 1996 as cited in USFWS 1997). Critical resources include fish and invertebrate species, especially Pacific sand lance, Pacific herring, northern anchovy, smelts, and perhaps sardines (USFWS 1997). The current status of this species is unclear due to the difficulty in census techniques (pers. comm. Marzluff 1998). Threats identified in the Marbled Murrelet Recovery Plan, include

oil spills, prey availability, and gillnet entrapment (USFWS 1997). Management actions applicable to the Refuges include the following: implementing marine-based population monitoring; developing response and restoration plans for oil spills and other catastrophes; and promoting activities that reduce fishery-related entanglements (USFWS 1997).

The bald eagle is a Federal and State threatened species. The Service is considering delisting this species, which would remove it from protection under the Endangered Species Act. This species is currently monitored annually by the WDFW, though monitoring is likely to taper off within five years after delisting. The State's management recommendations for this species include: creating nest site buffers of around 1,000 feet (300 m); creating roost site buffers of 1,000 to 3,000 feet (300-900 m), depending on visibility; and protecting foraging areas (Rodrick and Milner 1991).

The Steller sea lion is a Federal and State threatened species that was listed in 1990, due to concerns over Alaskan breeding grounds (NOAA 1993). This species directly uses refuge islands and rocks. There are no available trends for this species in Washington (NMFS 1992). The Steller Sea Lion Recovery Plan calls for protection of habitat and prey species from human disturbance (NMFS 1992).

Birds of Conservation Concern (BCC) is a Federal designation to identify species, subspecies, and populations of migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1980 (16 USC 2901-2911), as amended. The most recent compilation of species was published in 2002 (USFWS 2002), and lists were compiled at three different geographic scales: National, USFWS Region, and Bird Conservation Region (BCR). The Washington Islands NWRs are in BCR 5: Northern Pacific Rainforest. Species listed as BCC on the 2002 list for BCR 5, that utilize the Refuges, include peregrine falcon, and several shorebird species, especially those that inhabit rocky shorelines (black oystercatcher, black turnstone, surfbird, rock sandpiper, and whimbrel).

State Protected Species

Washington's species of concern include native flora and fauna legally designated as endangered, threatened, or sensitive under the Washington State Administrative Code's Permanent Regulations of the WDFW (WAC 232-12-297). Candidate species are species that will be reviewed for future listing as endangered, threatened, and sensitive. State endangered species are those native plants and animals that are seriously threatened with extinction. The only State endangered species documented in the Washington Islands NWRs is the sea otter. The killer whale is a State endangered species found in the waters surrounding the refuge islands.

The sea otter, listed in 1981, is a State endangered species whose range is limited to the coastline region of the Refuges. Since reintroduction of sea otters in Washington, the population has been increasing toward recovery, with recovery goals specified in the sea otter recovery plan (Lance et. al. 2004). The recovery plan calls for cooperative sea otter monitoring along the outer coast;

preparation for oil spill recovery efforts; cooperative documentation of sea otter fisheries-related entrapment; prevention of oil spills; cooperative efforts to minimize take of sea otters; cooperative development of sea otter educational programs; cooperative development of ecotourism regulations to minimize disturbances; promotion of research that enhances recovery efforts for otters; and preparation for direct intervention management (Lance et al. 2004).

State threatened species are those likely to become endangered in Washington within the near future, if factors contributing to population decline or habitat degradation or loss, continue. State threatened species documented on the Washington Islands NWRs are the marbled murrelet, bald eagle, and Steller sea lion. Because they are also federally listed as threatened, they are covered under the previous section.

State sensitive species are those that are considered to be declining and will likely become endangered or threatened without protection. State sensitive species are deemed to need active management to prevent them from becoming threatened or endangered. There are two documented species with this protection level known to occur on the Washington Islands NWRs, the peregrine falcon and scurvygrass (*Cochlearia officinalis*). The peregrine falcon was removed from the Federal endangered species list in August 1999; however, it remains at the sensitive level for the State (http:wdfw.wa.gov/wlm/diversity/soc/endanger.htm). Management recommendations from WDFW include protection of nest sites from human disturbance through the establishment of breeding season buffer zones of about 0.5 mile (0.8 km) (including a 1,500-foot [457 m] aircraft buffer) (Hays and Milner 1999). Scurvygrass is known to occur on Jagged Island within the Quillayute Needles NWR (WDNR 2006).

State candidate species are those species that will be reviewed for listing as endangered, threatened, or sensitive. Four seabird species, the Cassin's auklet, Brandt's cormorant, common murre, and tufted puffin, are all State candidate species documented on the Washington Islands NWRs. There are currently no management plans for these species. Threats that need to be assessed and managed include, breeding disturbance, prey availability, and pollution.

State Priority Habitats

Two habitat types that have been identified by WDFW as priority habitats occur on the Washington Islands NWRs. These are the marine shoreline and cliffs. "Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species" (WDFW 2005). Refuge cliffs and marine shorelines provide important seabird and raptor breeding sites and haulout areas for wildlife. "Shorelines include the intertidal and subtidal zones of beaches, and may also include the backshore and adjacent components of the terrestrial landscape (e.g., cliffs, snags, mature trees, dunes, meadows) that are important to the shoreline associated fish and wildlife, and contribute to shoreline function (e.g., sand/rock/log recruitment, nutrient contribution, erosion control)" (WDFW 2005).

3.5 Cultural Resources

While the Pacific Coast of Washington was heavily utilized by Native American groups, investigation of the region's archaeological record has not been extensive. More than 100 archaeological sites have been recorded in the region, yet only 15 have been studied to any extent (Wessen 1990). Most archaeological sites examined are relatively recent, usually containing evidence of occupation within the last 1,500 years. Many of these prehistoric sites also contain historic deposits.

While it is difficult to determine what percentage of the project area has been systematically surveyed for cultural resources, the figure is certainly small. Those offshore sites that have been recorded are located on the more accessible larger islands. Seven cultural resources are located on or near the physical limits of the Washington Islands NWRs. These offshore sites include: 45CA28 on Tskawahyah Island, part of the Ozette Village site; 45CA203/207 on Tatoosh Island; 45CA229, a lighthouse on Tatoosh Island operated by the USCG; and 45JF78, the Destruction Island lighthouse. In addition, two prehistoric midden sites (45JF113 and 45JF114) have been recorded on Destruction Island. Ozette Island and the Bodelteh Islands are considered part of the Ozette site (45CA24).

3.5.1 Ethnographic Information

The Wakashan-speaking Makah are the northernmost occupants, situated in the area around Cape Flattery at the tip of the Olympic Peninsula. Five Makah villages, linked by language, kinship, and common traditions, existed in pre-contact times (Reneker and Gunther 1990).

Prehistorically and historically, Makah culture depended on the ocean, where they obtained their predominantly marine diet, which included sea mammals (whales, porpoises, sea lions, northern fur seals, harbor seals, and others), fish (halibut, salmon, lingcod, rockfish, and others), intertidal foods (crabs, clams, mussels, barnacles, limpets and others), and birds (pelicans, loons, cormorants, ducks, grebes, and others) (Swan 1870; Reneker and Gunther 1990). Land mammals such as elk, deer, and bear were occasionally eaten and provided additional raw materials such as bones, antlers, and hides (Swan 1870; Reneker and Gunther 1990). Plant foods included, among others, several kinds of seaweed, sand verbena, surf grass, fern roots, buttercup, and a variety of berries (Swan 1870; Reneker and Gunther 1990).

Similarly, the Chemakuan-speaking Quileute and Hoh subsisted primarily on fishing and hunting of marine mammals (Wesson 1990). While upland hunting of large and small game and birds supplemented the diet, and some families maintained upriver settlements, salmon from the rivers and ocean resources were considered the most important dietary staples. Archaeological investigation in the middens at La Push recovered more than 50 species of shellfish (Reagan 1917). The Quileute focused salmon and other river fishing activities along the Quillayute River and its tributaries, while the Hoh focused subsistence activities around the Hoh River watershed.

Quinault refers both to the speakers of Quinault, one of four related Southwestern Coast Salishan languages (the others being Lower Chehalis, Upper Chehalis, and Cowlitz), and also to one particular group of Quinault speakers (the other Quinault speakers were the Queets and the Copalis) (Hajda 1990). Ethnographically, Quinault speakers occupied the Pacific Coast between the north shore of Grays Harbor and to Steamboat Creek between the Hoh and Queets Rivers. The Quinault River, Queets River, and Copalis River watersheds each served as the focus of subsistence activities for its namesake group, where salmon and other fish were the dietary staple. Ocean resources such as halibut, cod, surf smelt, and herring were also taken in large quantities (Hajda 1990).

The ocean and its marine resources are still a vital part of the culture, economy, and subsistence for these four Tribes. While the proportions and types of marine resources utilized vary somewhat by Tribe, all of the Tribes exercise their treaty rights to fish in their usual and accustomed areas along the Olympic Coast.

3.5.2 Archaeology

In addition to ethnographic sources, archaeological sites provide information about coastal cultures. Archaeological sites along the coast fall into two basic categories: "wet" sites occur when archaeological deposits occur in sediments that are consistently wet and exposed to limited oxygen; and "dry" deposits are subject to alternate wetting and drying and have moderate oxygen exposure (Wessen 1990). Organic materials perish under the dry conditions but survive quite well when wet. While most sites in the region are considered dry, it is the wet sites that have proved the richest source of information regarding Washington Coast's prehistoric cultures.

Dry sites are characterized primarily by shell middens (numerous inland lithic scatters have also been documented). The majority of dry sites identified in the northern coastal region are late prehistoric shell midden deposits, similar to each other and to other Northwest Coast shell middens (Wessen 1990). They are primarily found on the first beach terraces above the ocean. One example of this type of site is at Sand Point (45CA201), where radiocarbon dates occupation to ca. 320 BC to AD 350 (Wessen 1984). This site is unique in that it includes an assemblage of chipped stone in addition to the food refuse (shells) and ash layers that typically comprise a shell midden deposit.

Of the sites with "wet" components identified on the Washington coast, by far the best documented are the Hoko River site (45CA213) and the Ozette Village site (45CA24). Enormous quantities of wood and plant fiber artifacts were recovered from these sites, shedding light on such cultural issues as fishing and sea mammal hunting technologies, woodworking technologies, house construction, and food procurement and processing procedures (Croes and Blinman 1980).

A number of the sites along the coast are petroglyphs, many of them on beach boulders. More than 43 were recorded at the Wedding Rocks site (45CA31) south of Ozette (Ellison 1977). The possible relationship between these onshore archaeological features and offshore rocks and islands merits further investigation.

Portions of both the Flattery Rocks and Quillayute Needles NWRs are included within the Olympic National Park(ONP) Archaeological District (45DT36A), a rectangular strip of land and water stretching from south of Cape Alava to Toleak Point. While a nomination form for the district was prepared in 1973, it has never been listed on the National Register of Historic Places (NRHP) (pers. comm. Bowechop 2001).

The Ozette Village site is listed on the NRHP as an historic property. The Makah Tribe has nominated the site to National Landmark status (pers. comm. Bowechop 2001). Such a listing would include Ozette Island, Tskawahyah (or Cannonball/Indian) Island, and the Bodelteh Islands which are within the physical limits of the Flattery Rocks NWR and its wilderness designation.

Based on the ethnographic and archaeological information available, there exists the potential for the presence of additional prehistoric and historic archaeological sites and traditional cultural properties (TCPs) associated with offshore islands and rocks. The characteristics of the offshore topography–both the small size of many features and the dearth of flat surfaces–may limit the presence of tangible archaeological remains, though such restrictions do not affect the potential for TCPs.

3.5.3 History

In the winter of 1854-1855 Washington Territory Governor Isaac I. Stevens began a series of treaty negotiations among the Tribes and Bands of western Washington (Marino 1990). The focus of these treaties was large-scale relocation of Tribes to reservations. The Makah (including the Ozette), Quileute, Hoh, and Quinault (Queets, Quinault, and Copalis) were all signatories of treaties which resulted in the establishment of reservations. Today, each of these reservations has a border along the Pacific Ocean adjacent to one or more of the Washington Islands NWRs. The Makah signed the Treaty of Neah Bay in 1855. This land centered around Neah Bay in the northwest corner of their traditional territory. While they insisted that they maintain the right to fish in their traditional places, in the report by Renker and Gunther it states that “instead of capitalizing on the Makah’s knowledge and expertise regarding marine hunting and navigation, as well as fishing, the Indian Service emphasized agriculture in an area unsuited to cultivation” (Renker and Gunther 1990). The Makah nevertheless managed to sustain their seafaring culture, and fishing remains an important economic endeavor for the Tribe today. The Ozette group of Makah was also a signatory to the Treaty of Neah Bay, but their reservation, located around the historic Ozette Village, was eventually abandoned as residents moved to allotments on other reservations (Ruby and Brown 1992). The Ozette Reservation is held in trust for the Makah Tribe.

In 1855, the Quinault Tribe, along with the Chinook, Lower Chehalis, Queets, Satsop, Upper Chehalis, and Cowlitz Tribes, all came together on the Chehalis River at the request of Governor Isaac I. Stephens (Swan 1992 [first published in 1857]). The government proposed a single reservation for all the Tribes at a location between Gray's Harbor and Cape Flattery (Swan 1992 [1857]). This was not acceptable to several of the Tribes, as each wanted a place within their own lands to live, and negotiations were consequently called off (Swan 1992). Later in 1855, the Quinault, Queets, Hoh, and Quiluete Tribes met with Indian Agent M. T. Simmons, representing Governor Stevens, and agreed to a separate treaty, the Quinault River Treaty, on July 1, 1855, on the Quinault River. This treaty was later formalized and signed by Governor Stevens and several tribal chiefs on January 25, 1856, in the territorial capital of Olympia, and became known as the Treaty of Olympia, which was ratified in 1859 (Ruby and Brown 1992).

Under the provisions of the Treaty of Olympia, a reservation was established for all the signing Tribes, but only the Quinaults and Queets settled there. According to Powell (1990), even though the Quileute signed the Treaty of Olympia (1856), a misunderstanding regarding the treaty provisions, left the Quileutes still "unremoved" in 1889. That year, a one-square-mile reservation was established at La Push for the 252 inhabitants. The 71 inhabitants at Hoh River were provided with a reservation four years later.

3.6 Recreation/Public Use

Because the Washington Islands NWRs are closed to the public, there is no official public use of this area. Some research activities do occur, as discussed below. Due to the outstanding visual resources of the islands and associated wildlife species, a limited amount of public use is induced by the islands themselves. These public uses occur on the mainland outside the Refuges and comprise the only recreation related to the Refuges. These activities include sightseeing by boat, car, or aircraft; kayaking; hiking; backpacking; picnicking; visiting interpretative facilities; recreational fishing; diving; and photography. Other public uses such as commercial fishing also occur in the vicinity and are also discussed below.

Because refuge areas are closed to the public to protect wildlife resources, the only Service-authorized access to the islands occurs as part of either research or official USCG activities. The USCG visits Destruction Island on a quarterly basis to service and maintain the lighthouse and other buildings on the island. The NPS and U.S. Navy have also landed on Destruction Island in the past to service electronic equipment located in the lighthouse. The other uses occurring on refuge islands are wildlife studies or surveys conducted by researchers or agency personnel under a special use permit. However, even this permitted use is limited to a small number of islands due to their extreme topography and inaccessibility.

Four Native American Tribes have treaty rights to fish in their usual and accustomed grounds along the Olympic Coast. There may be some access to refuge islands in association with exercising their treaty rights to fish.

The primary Washington Islands NWR recreational use involves viewing the islands from the mainland beaches of the Olympic Peninsula. Since many refuge islands are within 2 miles (3.2 km) of the coastline, they are a prominent visual resource for visitors. ONP encompasses nearly 60 miles (97 km) of coastline adjacent to the Refuge, much of which is a federally protected wilderness area. Day and overnight hiking along these beaches is an activity that is increasing in popularity among visitors as it is a regional and national resource in terms of its scenery and lack of development. A recent estimate of use indicates that there were 20,507 overnight visitors in 1997, accounting for 43,426 user-nights (pers. comm. Scott 2000). In nearly all sections of this wilderness coastline, hikers are within view of one or more of the refuge islands, rocks, or reefs. Several of the islands and rocks that are close to the shoreline have the potential to be accessed from land during low tide. Although no formal record of trespass onto these areas has been documented by the NPS, it is assumed that some trespass does occur, particularly during extreme low tide events. Informal reports suggest that some of the islands near Cape Alava are accessed during low-tide events by wilderness visitors (pers. comm. Scott 2000).

A series of coastal highways and roads also provide vehicular access to areas where individuals can view the islands and rocks. From north to south, these include Mora Road (Rialto Beach), State Route 110 (First Beach), Highway 101 (parallels the coast for 15 miles [24 km] near Kalaloch), and State Route 109 (Taholah to Copalis Beach). These routes provide access to or parallel the coastline, as well as provide access to various day use areas and beaches within ONP. However, these roads only provide access to small portions of the coastline, and much of the Refuges can only be directly viewed from land by wilderness hikers.

Aside from providing access to the coastline, these routes also provide public access to several interpretive panels and facilities managed by the NPS. These interpretive panels were originally designed and funded by the Service. Five of these facilities interpret the natural history and wildlife and specifically address the Washington Islands NWRs. Interpretive panels at Lake Ozette, Rialto Beach, and Ruby Beach interpret the offshore islands, the Refuges, and the wildlife that frequent these areas, while the interpretive panel at Second Beach focuses on puffins. At Kalaloch, there are three identical panels in different areas, each dealing with the general ecology and geology of the area (pers. comm. Gurling 2000). Although use figures are no longer calculated, it was estimated that visitors spent 2,500 activity hours at these interpretive panels in 1986 (USFWS 1986). It can be assumed that this figure has increased, perhaps dramatically, in the ensuing years.

While the primary public uses of the areas in the vicinity of the Washington Islands NWRs are land-based, other recreational activities take place on the surrounding waters and in the air above the Refuges. Recreational charter and private watercraft frequent the waters near the islands and rocks. These watercraft are primarily either on fishing or sightseeing trips to the area, while a few charter operations do offer scuba diving opportunities as well. Sea kayaking is an activity that is gaining popularity in this area and is an increasingly common way for visitors to enjoy the visual resources of the coastline, including the area's islands and rocks. Landing a watercraft on any of the Washington Islands NWR features is illegal; however, most of the islands are

inaccessible anyway due to their steep cliffs and lack of feasible landing sites. Several larger islands such as Ozette Island contain potential landing sites, and it is assumed that some unauthorized landings by recreational users may occur. Aside from water-based recreational use, there are also a small number of private and commercial aircraft that fly over the Refuges to sightsee and observe wildlife. All aircraft are requested to remain above 2,000 feet (610 m) when flying over any rock, island, or reef. It is anticipated that some wildlife have been disturbed by watercraft or aircraft that venture too close to the islands. Low overflights are documented each year by the NPS; however, it is extremely difficult to obtain the information necessary to contact these individuals (NPS 1981).

Commercial uses, primarily in the form of commercial fishing operations, occur in the waters adjacent to the Washington Islands NWRs.

3.7 Environmental Justice

In February 1994, Executive Order 12898 was signed requiring all Federal agencies to seek to achieve environmental justice by "identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations" (Executive Order 12898).

As a Federal agency, the Service must address the effects of its programs and policies related to the Washington Islands NWRs. No public use has historically, or is currently allowed on the Washington Islands NWRs. Therefore, no segment of the general public has been, or is currently being unfairly affected by management of the Washington Islands NWRs. The Quinault, Hoh, Quileute, and Makah Tribes rely on fishing as an important component of their economies. Current public use restrictions and management practices of the Service do not interfere with the Tribes exercising their treaty rights to harvest fish. Therefore, none of the Tribes are being unfairly affected by current management of the Washington Islands NWRs.

3.8 Visual Resources

The Washington Island NWRs are an important statewide visual resource. The various sea stacks, pillars, and islands are strong visual features that represent the remote and rugged character of the Olympic Peninsula's coastline. Many visitors from around the nation are drawn to this area by the scenic beauty of these offshore islands. The majority of these islands are also part of the Washington Islands Wilderness Area, a designation that preserves these areas in their natural, undisturbed character. The importance of the scenic character of wilderness is specifically addressed in the Wilderness Act of 1964, as a defining feature of a wilderness. Thus, the continued protection of these islands is based upon the preservation of the unique visual resources of the area.

The primary visual resource use associated with the Refuges is a result of public viewing of the islands, rocks, and seastacks from the mainland or from private or commercial watercraft and airplanes. The dominant visual resource in the vicinity of the Refuges is the coastline of the Pacific Ocean. The open beaches of the Olympic Peninsula provide a visual resource that allows visitors to view offshore islands and rocks that comprise the Washington Islands NWRs. These features appear in varying distances from the shoreline and can be seen in the fore-, middle-, and background from many areas. The islands mostly appear as rock pillars and tables that rise directly out of the ocean in varying shapes and forms. Many of the islands have vegetation such as small trees and dense stands of salmonberry and salal, particularly the larger islands such as Destruction Island and Ozette Island. Other smaller islands have extensive steep grassy slopes or vegetated ledges. Views from the water are similar to those from the mainland, particularly the beaches. The islands often appear in the foreground as flat-topped cliffs rising out of the water, and in the background as clusters of fog-shrouded stacks.

Several key viewpoints provide sweeping views of the coastline and the offshore islands. The longest continuous area of shoreline where road access is available occurs in the Kalaloch-Destruction Island area. A series of pullouts and beaches along Highway 101 provide striking views of the coastline and clusters of offshore islands, including Destruction Island. Other areas along the coastline that have vehicular access to views of the islands include First Beach and Rialto Beach. Aside from these areas, ONP provides over 60 miles (97 km) of wilderness coastline from which views of the Refuges can be found.

3.9 Socioeconomics

This section provides an overview of the local economy near the Washington Islands NWRs, including population figures and other economic indicators. Much of the mainland adjacent to the Refuges consists of either sparsely populated areas or land under Federal or county management. Four Indian Reservations are situated along the coastline adjacent to the Washington Islands NWR. These are the Quinault, Hoh, Quileute, and Makah Reservations. Most of the areas not contained within one of these reservations are managed by the NPS, Forest Service, or WDNR. Remaining areas not under Federal or State ownership are mostly public use areas administered by Clallam, Jefferson, or Grays Harbor Counties.

Mainland areas adjacent to the Refuges are sparsely populated with few large population centers. The largest town in the area is Forks, in Clallam County. Several smaller, unincorporated communities dot the coastline near the Refuges. From north to south, these communities include Neah Bay, La Push, Hoh, Kalaloch, Queets, and Taholah. Population figures for the counties adjacent to the Refuges are shown in Table 3-3. Information on population density provided in this table indicates that the counties adjacent to the Refuges are sparsely populated when compared to the State as a whole. A higher-than-average proportion of the population consists of Native Americans.

Table 3-3. Population and Density Information for Selected Areas

Area	Population (1999)	Density (persons/square mile)
Clallam County	64,525	36.9
Jefferson County	25,953	14.5
Grays Harbor County	67,194	35.1
Washington State	5,894,121	88.6

Source: US Bureau of the Census, Census 2000

The area economy is primarily resource-based in nature, with industries focusing on commercial fishing, timber, and tourism. All four coastal Tribes exercise treaty rights to fish including subsistence fishing and a commercial fishery in finned fish and shellfish. Fishing serves as a mainstay of their economies, especially for the Hoh and Quileute Tribes. Of the four coastal Tribes, only the Makah and Quinault rely to a significant extent on timber for their economy (pers. comm. Woodruff 2001). Hoh and Quileute tribal members still own allotments on the Quinault Indian Reservation and are entitled to some of the timber revenue.

While timber has been decreasing in economic importance to the area, tourism is growing in importance, particularly nature-based tourism, such as recreational fishing. The emergence of ONP as a major regional tourist attraction brings thousands of visitors to the coastline directly adjacent to the Washington Islands NWRs every year. Lodging facilities, restaurants, and charter fishing or sightseeing guide services are becoming more numerous. The regional hub for these visitor service facilities is the town of Forks (Clallam County).

With a population estimated at 3,500 (1998), Forks has many lodging facilities and charter tour companies that include whale and bird watching, sea kayaking, scuba diving trips, and fishing charters (Forks Chamber of Commerce 2000). Visitor services including lodging, restaurants, and charter opportunities also exist on most tribal reservations. Aside from the service industry, the State and Federal government are also major employers with the Olympic Corrections Center (Washington State) in Forks and ONP. Socioeconomic variables for this area indicate that the median household income (see Table 3-4) is below the statewide median income.

Table 3-4. Median Household Income for Selected Areas.

Area	Median Household Income
Washington State	$45,776
Clallam County	$36,449
--Port Angeles	$33,130
--Forks	$34,280
Jefferson County	$37,869
Grays Harbor County	$34,160

Source: U.S. Bureau of the Census, Census 2000

3.10 Public Health and Safety

Continued research efforts on the islands related to wildlife studies have the potential to create health and safety issues for researchers. Severe topography in the form of cliffs and crags, coupled with the frequency of extreme weather conditions, have the potential to create unsafe or dangerous working conditions. The Service will advise researchers of the adverse conditions and the need for appropriate training and equipment.

The Washington Islands NWR islands are closed to the public. While most of the islands are inaccessible due to topography and the lack of landing sites, some unauthorized public use is possible on a few of the larger islands. Due to the dangerous nature of access to these islands, any attempts to trespass could result in health and safety issues.

3.11 Wilderness Resources

Wilderness is defined in Section 2(c) of the Wilderness Act of 1964 as an area "where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain" and "(1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological or other features of scientific, educational, scenic, or historical value."

With the exception of Destruction Island, the Washington Islands Wilderness includes all of the islands, rocks, and reefs within the Flattery Rocks, Quillayute Needles, and Copalis NWRs. The wilderness encompasses approximately 451 acres and more than 600 islands. Although the majority of the islands generally appear to be affected by the forces of nature and untrammeled by man, human impacts on natural values include ordnance and contaminants associated with the U.S. Navy's historic bombing activities and marine debris such as plastic litter, fishing gear, and gillnets.

As described in Section 3.4, the Washington Islands Wilderness contains significant ecological resources. The islands are closed to public access to protect wildlife values. Although the islands are remote and difficult to access, boating and fishing activities on surrounding waters, and aircraft overflights, pose disturbance threats for the area's wildlife. Other resource values associated with the Washington Islands Wilderness include scenic values associated with the area's geology (Sections 3.3 and 3.8) and cultural resources (Section 3.5).

Chapter 4 Environmental Consequences

4.1 Introduction

This chapter identifies the effects of the two alternatives presented in Chapter 2. Effects are the outcomes expected to occur as a result of the management objectives and strategies described in Chapter 2. Specific objectives and associated strategies are referred to in this chapter, for further details regarding these topics refer to Chapter 2. Chapter 4 is organized by resource area. The depth of analysis corresponds to the scope and magnitude of potential environmental effects. Both the direct and indirect effects likely to occur over the 15-year period of the CCP and beyond its life span are discussed. Resource areas assessed in this chapter include: climate and ocean conditions, geology and soils, biological resources, cultural resources, wilderness resources, and environmental justice. Recreation and public uses, visual resources, socioeconomics, and public health and safety, are not discussed because an initial assessment determined that there would be no impacts to these resources. Refuge access by Tribes in accordance with approved agreements between the Service and individual Tribes would strive to minimize impacts to all resources.

In describing the expected effects of particular management actions, the terms “positive,” “negative,” and “neutral” are used frequently. A “positive” effect means that the action would be favorable to the resources under discussion. A “negative” effect means that the management action would be harmful to the resources under consideration. A “neutral” effect means that the action would have either no obvious effects or equal positive and negative effects. No change in management practices (as in Alternative A), does not necessarily imply neutral effects over time.

4.2 Climate and Ocean Conditions

Effects to climate and ocean conditions are challenging to quantify. The scale of the CCP strategies is much smaller than climatic level conditions. The most dramatic impacts the proposed CCP actions could have on the physical qualities of the site would be through oil spill prevention and preparation. Other impacts are best examined from a cumulative perspective, such as the long-term results of regulating recreational boating activity in the area.

The greatest threat to ocean conditions comes from pollution, especially oil pollution. The inaccessibility of the area in combination with the cooperative programs already in place does provide some protection. While no preparation measures can fully guard against oil spill impacts, they may lessen the effect on ocean ecosystems. Under the No Action Alternative (Alternative A), the current level of ocean protection would continue. While the size and degree of any potential impacts would be determined by the pollution event; Alternative A provides less oil spill preparation and readiness than Alternative B, therefore, it would increase the likelihood of oceanic pollution. Boat operations and passengers trespassing on the Refuges also lead to

small amounts of oil and debris in the surrounding water. The Service's limited capabilities to reduce trespassing, increases the risk of this source of pollution under Alternative A. In addition to potential oil spill pollution impacts, the current level of waste and debris accumulating on Destruction Island would have a small and local negative effect on ocean water quality around the island, if cleanup actions do not occur.

Under Alternative B, benefits to ocean resources would be enhanced over Alternative A due to oil spill and pollution control actions in objectives WH2, WH3, WP1, and CP4. Cooperative oil spill preparation programs, outlined in WH2, would have a positive effect on ocean conditions by providing a current plan, organizing labor, and obtaining clean-up equipment. The scale and degree of this positive effect would depend on the size and type of pollution spill events. Creating GIS layers of refuge resource data, as proposed in objective WH5, would allow for potential pollution clean-up efforts to be concentrated on sensitive areas surrounding the refuge islands. Under Alternative B, clean-up actions not related to oil pollution (i.e., WP1 and CP4), such as cooperative programs with the U.S. Navy and USCG, would positively affect ocean conditions by preventing materials from entering ocean waters. In addition, cooperation with neighboring agencies and Tribes (CP objectives), would minimize pollution by reducing trespassing on the Refuges.

4.3 Geology and Soils

Under Alternative A, protection from boat and foot traffic trespassing is limited. Currently, the Refuges are closed, and there is an MOU between the Service and the NPS for law enforcement on the Refuges that includes trespassing. Shoreline patrols are infrequent, however, and trespassing does occur especially during low tides. Boat landings and foot traffic can induce soil erosion impacts along shorelines and cliffs. These forms of trespass, which would remain unaddressed under the No Action Alternative, could negatively impact the soils of the Refuges on a small and local scale.

Pollution that would remain unaddressed under the No Action Alternative on Destruction Island and other refuge islands may negatively impact the island soils in terms of composition and content. Size and influence of this impact would depend on the type of debris left on the islands.

Under Alternative B, the reduction of island trespassing (WH1) and the clean-up of Destruction Island (WH3) and other refuge islands (WP1) would positively affect the geology and soils of the Refuges. Size and influence of this positive effect would depend on the type of debris left on the islands. However, clean-up on Destruction Island, as well as refuge-wide invasive species control (WH4) as called for under this alternative, may slightly increase erosion during the clean-up period, but if sites are properly replanted they would stabilize.

4.4 Biological Resources

4.4.1 Effects to Vegetation

Under Alternative A, the public closure policy would continue to benefit refuge vegetation in terms of decreasing direct human disturbance. However, there are occasional trespassing events that would not be addressed under Alternative A. These trespassing events can have negative effects on vegetation from trampling and harvest impacts. Another vegetation risk associated with trespassing is the introduction of invasive plant species onto the islands. This can have negative effects through a decrease in native vegetation diversity. Currently, there is little information on invasive plant species on the islands, and Alternative A does little to curtail this potential threat to island vegetative health.

The threat with the potential to cause the most damage to island marine vegetation is an oil spill, as well as chronic oil pollution. Under Alternative A, current oil spill measures would continue for the Service. Alternative A would not enhance oil spill prevention and preparation actions. This could harm island vegetation. Pollution in other forms, such as debris left by USCG and U.S. Navy activities, would also not be addressed under Alternative A. These pollutants could negatively harm both terrestrial and marine vegetation. The size and extent of this impact would depend on the nature of the pollution, which is currently unknown.

Alternative B would provide vegetation greater protection from human disturbance. Trespassing on the islands would be discouraged through cooperative boundary enforcement programs with Tribes, and Federal, State, and local agencies; and boating and aircraft educational programs and general public education (WH1, WH6, WH7, and CP objectives).

Enhanced oil spill strategies in WH2 would lessen the effects of oil spills on refuge marine vegetation, by reducing the potential for spilled oil to wash up on shorelines. It should be noted that oil spill prevention and preparation cannot remove all potential oil spill impacts because many of the factors, such as oil tanker travel and shipping regulations, are outside the control of the Service. However, enhanced spill preparation and planning could lessen the severity of impacts from oil spills. In addition, other pollution threats would be addressed through refuge island clean-up (WH3, WP1).

The invasive species management strategies (WH4) under Alternative B would benefit native vegetation through the identification of threats and control of invasive vegetation and wildlife. This alternative also proposes to conduct an environmental assessment on methods for controlling European rabbits which negatively impact native vegetation on Destruction Island.

The development of a new refuge headquarters (WH8), under Alternative B, would aid in creating a centralized office for data collection, storage, and management. This organization would have positive effects on refuge-wide vegetation due to the ready access to information.

Information management carried out under the library and spatial data organization actions (WH5, RA5) of Alternative B, would increase opportunities for the identification of vulnerable vegetation areas and effective management methods. Scurvygrass, kelp beds, and turf algae areas are all known sensitive plant species adjacent to the Refuges. However, information is currently lacking regarding these species. Database management, in the form of vegetation mapping for the islands based on current and future data sets, would be particularly useful when identifying sensitive plant species locations and management options.

4.4.2 Effects to Wildlife

Fish

Alternative A would be expected to have a value neutral impact to fish in the event of an oil spill. Though current measures and procedures for oil spill protection and clean-up would provide some protection from such an event, it could be fortified and more proactive.

Under Alternative B, efforts to improve oil spill management strategies (WH2) would benefit fish in waters surrounding refuge islands by reducing the negative impacts of oil spills. This would be especially true in the event of a large spill. No degree of oil spill preparation however, can guard against all oil spill impacts.

Under Alternative B, cooperative program strategies (CP objectives) would be implemented to benefit fish populations in the Refuge area. Enhanced cooperative intertidal zone management development, as described in the action strategies under objective CP3, would be a positive action for fish because intertidal zone habitat is critical for a number of fish species and influences the deeper waters beyond. Clean-up efforts with the Department of Defense (WP1, CP8) would positively affect fish and any areas where debris is impacting the marine environment.

Marine Mammals

Under Alternative A, disturbances caused by planes, boaters, and foot traffic not conducting authorized business would continue unchecked, and may have negative effects on the breeding and resting grounds for marine mammal species. This type of disturbance is likely to increase as population and tourism increase on the Washington Coast. In addition, pollution issues would remain a threat to marine mammal populations using the Washington Islands Refuges. Current oil spill preparation measures would offer minimal protection to marine mammals. Debris currently on a few islands, including Destruction Island, could pose a threat to marine mammals, which are known to be vulnerable to debris entanglement and pollution.

The absence of cooperative intertidal management could cause long-term negative impacts on marine mammals. Currently there are overlapping management responsibilities in intertidal areas, however guidance for multi-agency cooperation is lacking. This could lead to confusion over resource status and management.

Under Alternative B, in the Wildlife and Habitat Protection and Management Goal, the Service proposes to renew efforts to protect native wildlife and associated habitats. Under this goal, restricted public access (WH1), enforcement of trespassing policies (WH1, CP objectives), and promotion of buffer zones (WH6, WH7), would have a direct, positive impact on the reduction of human disturbance to marine mammals on sensitive haul-out sites.

Refuge monitoring activities do cause some disturbance to marine mammals; however, surveys will be scheduled and conducted in a manner that will cause the least amount of disturbance for the quantity and quality of data collected. The Service on average conducts five survey flights per year and circumnavigates refuge islands by small boat approximately 30 days per year.

Enhanced pollution control, for both oil (WH2) and debris (WH3, WP1), would be addressed under Alternative B. The Washington Islands Refuges support for efforts to reduce oil spills, as called for under Alternative B, would have positive effects on marine mammals. Under Alternative B, the debris clean-up strategy would positively impact marine mammals by providing terrestrial habitats that are free from entanglement and pollution impacts.

Under Alternative B, cooperative programs (CP objectives) would alleviate many potential problems for marine mammals using the Washington Islands Refuges, intertidal zone and haul out habitat Improvements to cooperative intertidal management (CP3), would reduce threats to these habitats. In addition, enhanced cooperation between the Sanctuary and the Service (CP6) would improve resource protection where management responsibilities overlap. For example, sea lions are managed by NOAA Fisheries, but the species use refuge habitats for hauling out and breeding.

Marine Invertebrates

Under Alternative A, wildlife and habitat protection measures carried out by the Service offer minimum protection for marine invertebrates. Marine invertebrates would also be at risk of occasional disturbances due to the lack of enhanced efforts made to promote a boat-free buffer around the islands. Pollution, in the form of oil spills and debris, could negatively affect marine invertebrates. Under Alternative A, oil spill impacts represent the greatest threat to marine invertebrates in the refuge area. Oil spill prevention measures would not be enhanced and up to date. While no spill prevention and recovery plans can guarantee protection, higher levels of planning would boost current efforts. Under Alternative A, island debris could negatively impact these invertebrate species due to habitat degradation. The extent and degree of this impact depend on the movement of island debris into the intertidal zone. It is currently unknown if any debris is located in the intertidal areas of the islands.

Marine invertebrate conservation and protection on refuge islands are functions of intertidal zone management. Under Alternative A, there is a lack of clear cooperative management goals and responsibility for this habitat, which exists in an area where management responsibilities overlap. The lack of cooperative management of this zone could, over the long term, lead to negative impacts on these species.

Under Alternative B, the additional reduction in occasional trespassing combined with the enhanced control of island buffer zones (WH1, WH6, and WH7) would have a direct, positive impact on marine invertebrates through decreasing direct trampling, harvesting, and pollution impacts on these sensitive species.

Pollution reduction efforts as described in objectives WH2 and WH3, and proposed in Alternative B, would have positive effects on marine invertebrates. Enhanced island debris clean-up efforts would positively impact invertebrate species, due to habitat improvement. The extent and degree of this effect would depend on the movement of island debris, and potentially spilled oil, into the intertidal zone. It is currently unknown if any debris is located in the intertidal areas of the islands.

Marine invertebrate conservation and protection on refuge islands relies on a healthy intertidal zone. Intertidal focused cooperative actions proposed under Alternative B, would aid in defining clear management roles on an interagency level (CP3). Unified and defined management goals and actions taken in the intertidal zones around refuge islands, would have a positive impact on marine invertebrates.

Birds

Under the No Action Alternative, disturbances caused by planes, boaters, and foot traffic not conducting authorized business would continue unchecked, and may have negative effects on birds, especially species known to be particularly sensitive, such as breeding seabirds. These disturbances, though infrequent, can have large impacts depending on the time of year and day in which they occur. The lack of enhanced efforts to decrease trespassing events could have negative impacts on breeding colonies over the long-run. This type of disturbance is likely to increase as population and tourism increase on the Washington Coast.

The largest potential threat to island birds is oil spills, as well as chronic oil pollution. Current oil spill measures exist for the Service and other agencies, but they could be more proactive and efficient with Service participation. Alternative A does not enhance oil spill prevention and preparation actions. Considering the concentration and importance of the region to many seabird species, this is a serious potential negative effect of Alternative A.

The current Destruction Island environment has many areas of debris and unused structures that may be hazardous to birds. Under Action Alternative A, this debris would not be removed. The degree of impact these structures and materials are having on bird habitats is unclear. There are few large vegetated islands like Destruction Island among the Washington Islands Refuges. This habitat type is very important for certain species, such as puffins, that need soils found on vegetated islands to build burrow nests.

Invasive species are currently poorly understood in terms of the impact they are having on refuge bird populations. Under Alternative A, efforts to identify and assess impacts from invasive species would not occur, which could negatively impact bird species.

There are currently a number of avian species using the Washington Islands Refuges that are State or federally listed. These include the brown pelican, marbled murrelet, bald eagle, and black oystercatcher. Federally listed species are all currently managed by the Service according to guidelines in recovery plans or other management plans. Alternative A would have neutral effects on federally listed avian species. In addition, the lack of resources to protect State-listed birds under Alternative A, may negatively impact these species.

Under Alternative A, the lack of organized, cooperative intertidal zone management among Federal and State agencies with overlapping management responsibilities, would continue, and could have long-term negative impacts on certain birds. This is especially true for oystercatchers and other shorebirds that depend on intertidal zones for forage. Shorebird species are currently thought to be in general decline, and the breeding and foraging habitats on the Washington Islands Refuges are becoming increasingly important to the conservation of these species.

There are growing concerns regarding the decline of seabird species along the entire west coast of North America. Washington's seabird populations are dynamic and use the entire west coast. It is important for seabird researchers to share information throughout the entire range of these species, to enhance seabird conservation and protection. Under Alternative A, the lack of an annual report on the Washington Islands Refuges creates a gap in facilitating the communication of seabird information.

Under Alternative A, refuge avian research focuses on seabird and raptor biology. This work consists of population estimates and breeding location mapping that would continue to be beneficial for seabird and raptor species. Long-term avian databases are rare. The Service's ongoing efforts would provide valuable data for understanding seabird and raptor biology in the region. However, there are a few areas that the Washington Islands Refuges' research efforts do not currently address, which leads to data gaps when management actions are needed in response to conservation issues and problems. Applied and comparable research would continue to be lacking and limit the usefulness of avian data collection. Spatial databases would also be lacking, and this creates a weakness in the Service's ability to use the best available science in the overall management of the area. Under Alternative A, monitoring programs focusing on seabirds and raptors, would continue to provide information only on high priority species. Thus, basic information would be lacking on many other bird species. In addition, the lack of an organized refuge library would also limit the ability of the Service to quickly identify refuge management options. Overall, current refuge research actions would have positive short-term effects on selected high priority species.

Under Alternative B, decreasing trespassing and disturbance events (WH1, WH6, and WH7) would positively impact bird species, especially species known to be particularly sensitive, such as breeding seabirds. These disturbances, though infrequent, can have large impacts depending on the time of year and day in which they occur. Enhanced efforts to decrease trespass events could have important positive impacts on breeding colonies over the long-term.

The largest potential threat to avian species is oil spills, as well as chronic oil pollution. The size, location, and timing of an oil spill would determine the effect of a spill event on the birds of the Washington Islands Refuges. Oil spill actions, established under objective WH2 in Alternative B, would provide more cooperative and developed measures, which would have positive impacts on birds. Oil spills impact every biological aspect of these marine dependent species. Considering the concentration and regional importance of many seabird species, efforts to reduce the threat and impacts of such spills would have positive effects on refuge birds.

The clean-up actions for Destruction Island that would be addressed under the objective CP4, strategies in Alternative B, would be established in a new MOU between the Service and the USCG. The MOU would outline plans and responsibilities for the removal of debris and unused structures that may be hazardous to birds. Many seabird species have been shown to experience negative effects during foraging and breeding due to debris and human generated alterations of island habitats. The degree of positive impacts, from the removal of these materials, is unclear.

The invasive species action in objective WH4 under Alternative B, proposes to identify and assess the impacts of invasive species. This action may positively impact bird species by providing the data needed to make informed management decisions regarding enhancing native flora and fauna to maintain the natural systems under which seabirds evolved.

Enhanced cooperative intertidal management, as proposed under objective CP3, is a much-needed effort that would be addressed under Alternative B, and could have a long-term positive impact on certain birds. This is especially true for oystercatchers and other shorebirds that depend on intertidal zones for forage. Many shorebird species are currently thought to be declining; thus, these areas of breeding and migration foraging importance will become increasingly important to the conservation of these species.

The generation of an annual Washington Islands Refuges report (CP10), as well as the promotion of research publications (RA3) under Alternative B would contribute to seabird data compilation and review on an annual basis. An annual report would create a positive impact on seabird species by providing refuge management staff updated data, assessment, and problem identification. The distribution of an annual report would improve communication between the Service and interested agencies, tribes, academic institutions, and conservation groups. Increased communication is an important step toward a holistic and regional approach to better understanding avian populations and developing protection actions.

Under Alternative B, continued and enhanced long-term monitoring and sustained applied scientific research is proposed. These activities do cause some disturbance to birds; however, surveys would be scheduled and conducted in a manner that would cause the least amount of disturbance for the quantity and quality of data collected. The Service on average conducts five survey flights per year and circumnavigates refuge islands by small boat approximately 30 days per year. The enhanced research management actions outlined in strategies RA1 through RA5 would improve current refuge research activities and contribute to positive impacts on seabird

species. Improvements would be made in the promotion of applied avian studies, spatial databases, regional data communication, and comparative studies with seabird and raptor studies outside of the Refuges. These changes would aid biologists and resource managers in positively affecting avian diversity on refuge islands, through the use of quality refuge and regional bird data. Integration of refuge monitoring with seabird monitoring efforts in California, Oregon, and Washington through development and implementation of the California Current System Seabird Monitoring Manual (see objective RA2) would provide a much larger regional context and valuable information.

Public educational efforts as outlined in objectives PE1, PE2, PE3, and PE4 under Alternative B, would enhance education. A visitor contact station, website, and educational displays would educate the public on the importance of refuge islands to marine birds. The remote nature of the islands makes the community and tourism connection with these islands a difficult endeavor. The educational actions in Alternative B, would promote public understanding and support for the Refuges, which would in turn positively impact avian species.

Non-Avian Terrestrial Fauna

Under Alternative A, risks to terrestrial species would continue to exist from pollution. The absence of enhanced oil spill cooperative programs could cause terrestrial areas to become polluted, harming fauna and poisoning marine prey species. River otters would be at high risk for oil-induced impacts. The lack of cooperative debris clean-up efforts could also harm terrestrial species. The Destruction Island shrew could be negatively impacted by the remaining USCG debris. Not much is known about this endemic subspecies of shrew, but Aubry and West (1984) did suggest that the species is declining. A known threat to this shrew species is the presence of European rabbits on Destruction Island. Under the No Action Alternative, the lack of control or eradication of European rabbits could be a serious negative impact on this shrew.

Under Alternative B, pollution prevention and clean-up actions are proposed and could positively affect terrestrial species. Strategies, as described under objective WH2, such as participating in an oil spill risk reduction planning effort; supporting the Sanctuary's "Area To Be Avoided"; supporting the tug boat station at Neah Bay; and participating in staff training, would positively affect terrestrial species, especially river otters. Positive affects would be due to increased forage health, as many terrestrial species on these islands rely on intertidal and coastal zone forage. In addition, cooperatively designed clean-up of the remaining USCG debris (WH3) could positively affect the Destruction Island shrew. The other known threat to this shrew species is the presence of European rabbits on Destruction Island. Under Alternative B, the impacts and control of these rabbits would be examined and could lead to positive impacts on the shrew.

4.4.3 Effects to Species with Special Status

Federally Protected Species

Federally protected species documented in the Washington Islands Refuges area include the brown pelican, marbled murrelet, Steller sea lion, and bald eagle. Management actions with regard to these species are unique due to the guidelines in the recovery plans for each listed species. The Service and NOAA Fisheries are the agencies responsible for carrying out the Endangered Species Act, and recovery of listed species. Refuge management is an important recovery tool for species that utilize refuge habitats. Under Alternative A, management would be dictated by recovery plans alone. Under Alternative B, management would go beyond what is required in recovery plans and would enhance species recovery efforts positively. Because the Refuges are under the primary Federal agency responsible for conserving, protecting, and enhancing wildlife and plants, refuge staff members are committed to these responsibilities. Under Alternative B, objective SS1 states that the Service would "continue coordination with others to identify, monitor, protect, and contribute to the recovery of plants and animals that are federally listed as threatened and endangered; proposed or candidates for Federal listing."

Under both alternatives there would be some disturbance to federally protected species caused by refuge and other authorized personnel conducting research and monitoring of refuge wildlife from the air, by boat and occasionally on land. This impact is minimal because surveys are scheduled to collect the greatest amount of data while causing the least amount of disturbance. Under Alternative B, disturbance from future research and monitoring is expected to be less disruptive than it has been for approximately the last 20 years due to improvements in monitoring techniques.

Under the No Action Alternative, disturbances caused by planes, boaters, and foot traffic not conducting authorized business would continue unchecked and may have negative effects on federally protected species. Pelican and sea lion species are particularly sensitive to disturbances; thus, trespassing and disturbance reduction actions (WH1, WH6, and WH7) under Alternative B would aid the recovery of these species. In addition, island pollution prevention and clean-up (WH2, WH3, WP1) would be enhanced. Bald eagles would benefit from pollution prevention directly and indirectly through prey habitat improvements. All threatened and endangered species (TES) would benefit from enhanced oil spill protection and recovery efforts. The establishment of a Washington Islands Refuges GIS database would have positive effects for TES by enabling refuge personnel to track distributions and abundance of these species. Under Alternative B, enhanced cooperative programs (CP objectives) that lead to intertidal zone protection, reductions in disturbance events, enhanced research cooperation, and compatibility, would have positive effects on TES. Finally, public educational efforts (PE objectives) would be enhanced under Alternative B. A visitor contact station, website, and educational displays would educate the public on the importance of refuge islands for TES. The remote nature of the islands makes the community and tourism connection with these islands a difficult endeavor. The educational actions in Alternative B, would promote public understanding and support for the Refuges, thus positively impacting TES.

State Protected Species

State-listed species documented on the Refuges include the marbled murrelet, Steller sea lion, bald eagle, peregrine falcon, brown pelican, and sea otter. Management of the Refuges' State-listed species that are also federally listed species is in compliance with recovery plan guidelines for each species. Under Alternative A, management plans for TES lead to positive impacts. The peregrine falcon, a State-sensitive species, and sea otter, a State-endangered species, do not have Federal status under the Endangered Species Act. Under Alternative A, the Refuges would not have the resources to commit to protection and recovery of State-listed species. Potential impacts to these species are described below.

Under Alternative A, refuge wildlife and habitat protection measures are positively affecting the falcon and otter populations through the closure policy of island habitats. However, there are still occasional trespassing events that could have negative effects on these two species, depending on timing and extent. Overflight disruptions could negatively impact falcons, especially during breeding and foraging activities. Boating disruptions in the intertidal areas around islands could disturb foraging otters. Under Alternative A, risks to otter and falcon species would also exist from the absence of enhanced oil spill preparation. Under Alternative A, cooperative programs with WDFW would have positive impacts on State-listed species. State and Federal biologists would continue current monitoring programs of State-listed species. The State's recovery plans for these species would be followed by the Refuges.

Under objective SS1 in Alternative B, the Service proposes to recommit its resources to the continued "coordination with others to identify, monitor, protect, and contribute to the recovery of plants and animals that are...state-listed as threatened, endangered, or sensitive; proposed or candidates for State listing; or State priority species." Furthermore, other objectives of Alternative B would benefit State sensitive species. Trespassing and disturbance reduction actions (WH1, WH6, and WH7), would aid in the recovery of otter and falcon species, which are particularly sensitive to disturbance. Under Alternative B, all State-listed species would benefit from enhanced oil spill protection and recovery efforts (WH1). Under Alternative B, enhanced cooperative programs (CP objectives) that lead to island clean-up, intertidal zone protection, reductions in disturbance events, oil spill prevention and recovery, enhanced research cooperation, and compatibility, would have positive effects on State-listed species.

Due to the remote nature of the islands, the cooperation of all interested parties is the best method to gather information and use it to develop consistent, adaptive, and scientifically based management for the region. The enhanced cooperation between the State, Tribes and the Service under Alternative B (CP1, CP2) would have positive effects on future joint efforts regarding these species. Developing GIS and a refuge library (WH5, RA5) would also benefit State-listed species through the compilation and organization of information. Public educational efforts (PE objectives) would be enhanced under Alternative B. A visitor contact station, website, and educational displays would educate the public on the importance of refuge islands to State-listed species. The remote nature of the islands makes the community and tourism connection with these islands a difficult endeavor. Educational actions in Alternative B would promote public

understanding and support for the Refuges, which would in turn, positively impact State-listed species.

State Priority Habitats

State priority habitats on the Washington Islands Refuges are marine shoreline and cliffs. Some of the marine shoreline habitat falls within the intertidal zone. The intertidal zone has multiple overlapping state, federal, and tribal management responsibilities.

Under Alternative A, the current level of protection would continue. Although the cliff and shoreline habitat above mean high tide would be protected, the wildlife and habitat protection measures carried out by the Service would offer little direct protection for the intertidal zone. Oil spills are the greatest threat to these habitats. Under Alternative A, the Service would continue spill prevention and recovery plans at the current level. Priority habitat conservation and protection on refuge islands rely on intertidal zone management. Under Alternative A, a lack of clear cooperative management roles and goals for this habitat could, over the long term, lead to negative impacts on the species that occur in these habitats.

Under Alternative B, oil spill risk reduction (WH2) would have a positive effect on the shoreline habitat. State priority habitat conservation and protection on refuge islands relies heavily on intertidal zone management. Cooperative actions (CP3) proposed under Alternative B, would aid in defining clear cooperative management goals and roles on an interagency level. Unified and defined management goals and actions taken in the intertidal zones around refuge islands would have a positive impact on these priority habitats. In addition, under Alternative B, public educational efforts (PE objectives) would be enhanced. A visitor contact station, website, and educational displays would educate the public on the importance of refuge islands for State priority habitats. The remote nature of the islands makes the community and tourism connection with these islands a difficult endeavor. The educational actions under Alternative B would promote public understanding and support for the Refuges, which would in turn positively impact State priority habitats.

4.5 Cultural Resources

The inaccessibility of the Washington Islands NWRs has limited formal cultural resource surveys to the larger islands that have experienced human use during the recent past. The presence of archaeological sites and traditional cultural properties in proximity to the Refuges, suggest that cultural resources may exist on unsurveyed islands. Protection of both known and unknown archaeological and historical resources within the boundaries of the Refuges is mandated by the National Historic Preservation Act of 1966 (NHPA). Any ground-disturbing activities or modifications to historic structures are subject to compliance with the NHPA.

Under Alternative A, the current level of protection would continue. The greatest benefit to cultural resources lies in the fact that the islands are closed to the public, reducing the potential for vandalism, and also the fact that ground-disturbing activities are not a common element of

refuge management. Limited access to islands for research purposes and unauthorized entry to islands does have the potential to impact cultural resources.

Under Alternative B, the benefits to cultural resources afforded under Alternative A would continue. Some activities outlined in Alternative B, however, have the potential to affect cultural resources. Objectives WH3, WP1, and CP8, for example, would involve the removal of human-generated debris and/or structures from islands. In these situations, evaluation of the resource to determine its historical significance would be conducted prior to removal. On-the-ground research projects, such as those put forward in objectives CP2, RA1, RA2, and RA4, could increase human presence on the islands, therefore, increasing possible threats to cultural resources. However, because all research activities would be conducted under the control of the Service, and researchers would be briefed on the pertinent laws protecting cultural resources, the potential for damage would be minimized

All other objectives involve developing partnerships, agreements, research projects, and education programs that would either have no effect or a positive effect on cultural resources. Notable positive effects facilitated under Alternative B could include: the development of a secure GIS layer with cultural resources and traditional cultural properties (WH5); establishment of a 200-yard (183 m), boat-free zone around islands (WH7); development of a new headquarters facility where the area's cultural history could be interpreted (WH8, PE1); development of tribal and other partnerships (CP1, PE2); and increased law enforcement and public education (CP5, PE4).

4.6 Recreational/Public Use

Under Alternative A, continued existing management of the Refuges would have no effect on recreation and public use in the area. Currently, no public access is allowed on any refuge lands, a practice which would continue under Alternative A. In addition, the supply of existing interpretive and educational facilities would remain at current levels which are declining in their quality. This would result in a negative impact on recreation/public use. Low-overflights and the close approach by boats to refuge islands, would continue to be discouraged under Alternative A.

Under Alternative B, there would be continued restrictions on public access (WH1), which would have a neutral impact on recreation. A positive effect would result from the provision of an annual refuge report (CP9) by providing information on educational program activities. Measures to reduce or restrict low overflights (WH6) and close approach by boats (WH7) to refuge islands could have a negative effect on recreation and tourism-related activities.

4.7 Wilderness Resources

Under Alternative A, impacts to wilderness would be similar to the current situation, with some increases in human generated debris and wildlife disturbance over time as the population and number of visitors to the Olympic coast increases. Implementation of the objectives and strategies under Alternative B would provide more benefits to wilderness values than Alternative A. Alternative B would preserve and enhance the natural wilderness character of the area by removing human generated debris, reducing the risk of oil spills, monitoring and controlling invasive species, and reducing overflight and boating disturbances.

4.8 Environmental Justice

Under Alternative A, the continuation of current management practices related to the Washington Islands NWRs would have no adverse effects to environmental justice; to either the public or Tribes. Under Alternative B, public access to the Refuges would continue to be prohibited (WH1), and the Service is willing to enter into MOUs with the affected Tribes to address tribal access to the Refuges (WH1 and CP1). Any potential changes under the MOUs to the way Tribes exercise reserved treaty rights within their usual and accustomed locations, would be by agreement. Therefore, we anticipate negligible effects related to environmental justice.

4.9 Unavoidable Adverse Impacts

The selection of any alternative would have no unavoidable, adverse, direct or indirect impact on the environmental parameters evaluated in this chapter, including biological resources. Adverse effects identified in this chapter have been reduced with mitigation measures to the maximum extent possible.

4.10 Irreversible and Irretrievable Commitments of Resources

Most management actions identified in this document would require a commitment of funds that would then be unavailable for use on other Service projects. At some point, commitment of funds to these projects would be irreversible, and once used, these funds would be irretrievable. Non-renewable or non-recyclable resources committed to projects identified in this CCP, such as fuel for refuge vehicles or supplies used in management or maintenance activities (e.g. signs), would also represent irreversible and irretrievable commitments of resources.

4.11 Short-Term Uses vs. Long-Term Productivity

An important goal of the National Wildlife Refuge System is to maintain the long-term ecological productivity and integrity of the biological resources on national wildlife refuges. This system-wide goal is the foundation for the goals presented in this CCP. Compared to

Alternative A, Alternative B favors long-term productivity over short-term uses by reducing trespassing violations in favor of biological resource protection and conservation.

4.12 Cumulative Effects

Cumulatively, Alternative B would provide more environmental benefits than Alternative A however neither alternative will have significant impacts on the physical or biological resources of the refuges and the refuges will remain closed to public use. There are no anticipated impacts to air quality under either alternative. Water quality is expected to be best under Alternative B from increased coordination and preparedness related to prevention and control of oil spills and by removing marine debris that accumulates around refuge islands. Soil erosion may increase slightly from clean-up operations on Destruction Island and elsewhere but this would be temporary and these operations are expected to reduce soil contaminants.

Alternative B would maintain native vegetation better than Alternative A due to increased monitoring and control of invasive species and oil spill prevention and preparedness measures. Wildlife species including fish, marine mammals, marine invertebrates, and birds would have moderately better habitat conditions under Alternative B for the same reasons and though reduction of wildlife disturbance and removal of marine debris. Increased coordination with other natural resource agencies and the development of GIS capabilities on the Refuges are expected to result in wildlife management efficiencies. Federally listed species and other wildlife would continue to experience minimal disturbance from wildlife monitoring and research activities under both alternatives, however these disturbances are of short duration and would be minimized through conservation measures.

Wilderness values of the refuges would be maintained or slightly improved under Alternative B by reducing wildlife disturbance, controlling invasive species, and removing marine debris from islands. While the refuge islands would remain closed, increased off-refuge public education and interpretation under Alternative B is expected to reduce human disturbance to wildlife and increase awareness of the refuges and appreciation for natural resources of the area.

Although implementing the Alternative B would be beneficial for fish and wildlife, in the context of continuing coastal habitat loss and degradation, the increasing human activity occurring in the area and in comparison to environmental effects associated with current refuge management, the benefits of implementing this CCP do not represent a significant impact to the human environment.

Appendix A: Glossary of Terms

Acronyms and Abbreviations

ATBA	Area to be avoided
BCC	Birds of Conservation Concern
BCR	Bird Conservation Region
CCP	Comprehensive Conservation Plan
CFR	Code of Federal Regulations
DDT	Dichlorodiphenyltrichloroethane
DOD	Department of Defense
EA	Environmental Assessment
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
GIS	Geographic information system
Improvement Act	National Wildlife Refuge System Improvement Act of 1997
MBTA	Migratory Bird Treaty Act
MMPA	Marine Mammal Protection Act
MOU	Memorandum of Understanding
MRA	Minimum Requirement Analysis
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NGO	Non-Governmental Organization
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NMML	National Marine Mammal Laboratory
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRDA	Natural Resource Damage Assessment
NRHP	National Register of Historic Places
NWR	National Wildlife Refuge
NWRS	National Wildlife Refuge System
OCNMS	Olympic Coast National Marine Sanctuary
OFM	Washington Office of Financial Management
ONP	Olympic National Park
PL	Public Law
RONS	Refuge Operational Needs System
Sanctuary	Olympic Coast National Marine Sanctuary
Service	U.S. Fish and Wildlife Service (also, FWS)

SHPO	State Historic Preservation Office
TCP	Traditional Cultural Property
TES	Threatened and Endangered Species
TNC	The Nature Conservancy
USC	United States Code
USCG	U.S. Coast Guard
USGS	U.S. Geological Survey
U&A	Usual and Accustomed Grounds and Stations
VTS	Vessel Traffic Service
WAC	Washington Administrative Code
WDOE	Washington Department of Ecology
WDFW	Washington Department of Fish and Wildlife
WDNR	Washington Department of Natural Resources

Glossary of Terms

Achievement Strategy. See Strategy.

Alcid. A family of seabirds that includes tufted puffin, rhinoceros auklet, Cassin's auklet, common murre, ancient and marbled murrelet, and pigeon guillemot. They are colonial nesters, fish eaters, long-lived, and have low reproductive output.

Alternative. 1. A reasonable way to fix the identified problem or satisfy the stated need (40 CFR 1500.2). 2. Alternatives are different means of accomplishing refuge purposes and goals and contributing to the System mission (Service Manual 602 FW 1.6).

Adaptive Management. Refers to a process in which policy decisions are implemented within a framework of scientifically driven experiments to test predictions and assumptions inherent in a management plan. Analysis of results help managers determine whether current management should continue as is or whether it should be modified to achieve desired conditions.

Biological Diversity. The variety of life and its processes, including the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur (Service Manual 052 FW 1.12B). The System's focus is on indigenous species, biotic communities, and ecological processes. Also referred to as Biodiversity.

Bycatch. Marine organisms that are incidentally caught, along with the target fish species, by commercial and recreational fishing operations. Common bycatch species include seabirds, marine mammals, and fish species.

Carrying Capacity. The maximum population of a species able to be supported by a habitat or area.

Categorical Exclusion. A category of actions that do not individually or cumulatively have a significant effect on the human environment and have been found to have no such effect in procedures adopted by a federal agency pursuant to the National Environmental Policy Act (40 CFR 1508.4).

Compatible Use. A proposed or existing wildlife-dependent recreational use or any other use of a national wildlife refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of the national wildlife refuge (Service Manual 603 FW 2.6). A compatibility determination supports the selection of compatible uses and identifies stipulations or limits necessary to ensure compatibility.

Comprehensive Conservation Plan (CCP). A document that describes the desired future conditions of a refuge or planning unit and provides long-range guidance and management direction to achieve the purposes of the refuge; helps fulfill the mission of the Refuge System; maintains and, where appropriate, restores the ecological integrity of each refuge and the Refuge System; helps achieve the goals of the National Wilderness Preservation System; and meets other mandates. (Service Manual 602 FW 1.6).

Concern. See definition of "Issue."

Cover Type. The present vegetation of an area.

Cultural Resources. The remains of sites, structures, or objects used by people in the past.

Cultural Resource Inventory. A professionally conducted study designed to locate and evaluate evidence of cultural resources present within a defined geographic area. Inventories may involve various levels, including a background literature search, a comprehensive field examination to identify all exposed physical manifestations of cultural resources, or a sample inventory to project site distribution and density over a larger area. Evaluation of identified cultural resources to determine eligibility for the National Register follows the criteria found in 36 CFR 60.4 (Service Manual 614 FW 1.7).

Disturbance. Significant alteration of wildlife behavior or habitat structure and composition. May be natural (e.g., fire) or human-caused events (e.g., aircraft overflight).

Ecosystem. A dynamic and interrelating complex of plant and animal communities and their associated non-living environment.

Ecosystem Management. Management of natural resources using system-wide concepts to ensure that all plants and animals in ecosystems are maintained at viable levels in native habitats and basic ecosystem processes are perpetuated indefinitely.

Endangered Species (Federal). A plant or animal species listed under the Endangered Species Act that is in danger of extinction throughout all or a significant portion of its range.

Endangered Species (State). A plant or animal species in danger of becoming extinct or extirpated in Washington within the near future if factors contributing to its decline continue. Populations of these species are at critically low levels or their habitats have been degraded or depleted to a significant degree.

Environmental Assessment (EA). A concise public document, prepared in compliance with the National Environmental Policy Act, that briefly discusses the purpose and need for an action, alternatives to such action, and provides sufficient evidence and analysis of impacts to determine whether to prepare an environmental impact statement or finding of no significant impact (40 CFR 1508.9).

Environmental Impact Statement (EIS). A detailed written statement required by section 102(2)(C) of the National Environmental Policy Act, analyzing the environmental impacts of a proposed action, adverse effects of the project that cannot be avoided, alternative courses of action, short-term uses of the environment versus the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitment of resources (40 CFR 1508.11).

Finding of No Significant Impact (FONSI). A document prepared in compliance with the National Environmental Policy Act, supported by an environmental assessment, that briefly presents why a federal action will have no significant effect on the human environment and for which an environmental impact statement, therefore, will not be prepared (40 CFR 1508.13).

Forb. A broad-leaved, herbaceous plant; for example, a columbine.

Gillnet. A fishing net stretched between a weighted leadline on the bottom and a floatline on the top to support it vertically in the water column. A pelagic drift gillnet may be attached to free floating buoys at one end and a vessel at the other end. The species of fish targeted determines the size of the mesh in a gillnet. The fish can get its head through the net, but when it tries to back out, the fish is caught on the net by its gills.

Goal. A descriptive, open-ended, and often broad statement of desired future conditions that conveys a purpose, but does not define measurable units (Service Manual 602 FW 1.6).

Habitat. Suite of existing environmental conditions required by an organism for survival and reproduction. The place where an organism typically lives.

Habitat Type. See Vegetation Type.

Habitat Restoration. Management emphasis designed to move ecosystems to desired conditions and processes, and/or to healthy ecosystems.

Invasive Species. A nonnative species whose introduction causes or is likely to cause economic or environmental harm.

Issue. Any unsettled matter that requires a management decision (e.g., a Service initiative, opportunity, resource management problem, a threat to the resources of the unit, conflict in uses, public concern, or the presence of an undesirable resource condition) (Service Manual 602 FW 1.6).

Landbird. A category of birds that nests and obtains its food in primarily terrestrial habitats.

Management Alternative. See Alternative.

Migration. The seasonal movement from one area to another and back.

Mission Statement. Succinct statement of a unit's purpose and reason for being.

Monitoring. The process of collecting information to track changes of selected parameters over time.

National Environmental Policy Act of 1969 (NEPA). Requires all agencies, including the Service, to examine the environmental impacts of their actions, incorporate environmental information, and use public participation in the planning and implementation of all actions. Federal agencies must integrate NEPA with other planning requirements, and prepare appropriate NEPA documents to facilitate better environmental decision making (40 CFR 1500).

National Wildlife Refuge. A designated area of land, water, or an interest in land or water within the National Wildlife Refuge System.

National Wildlife Refuge System. All lands and waters and interests therein administered by the Service as wildlife refuges, wildlife ranges, wildlife management areas, waterfowl production areas, and other areas for the protection and conservation of fish and wildlife, including those that are threatened with extinction.

National Wildlife Refuge System Mission. The mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Native Species. Species that normally live and thrive in a particular ecosystem.

Objective. An objective is a concise target statement of what will be achieved, how much will be achieved, when and where it will be achieved, and who is responsible for the work. Objectives are derived from goals and provide the basis for determining management strategies. Objectives should be attainable and time-specific and should be stated quantitatively to the extent possible. If objectives cannot be stated quantitatively, they may be stated qualitatively (Service Manual 602 FW 1.6).

Obligate Species. Species that require a specific habitat type or plant species for their existence.

Passerines. See songbirds.

Pinniped. A suborder of carnivores that are marine mammals, have flippers, and eat mostly fish and marine invertebrates (e.g., sea lions, seals).

Plant Association. A classification of plant communities based on the similarity in dominants of all layers of vascular species in a climax community.

Plant Community. An assemblage of plant species unique in its composition; occurs in particular locations under particular influences; a reflection or integration of the environmental influences on the site such as soils, temperature, elevation, solar radiation, slope, aspect, and rainfall; denotes a general kind of climax plant community (e.g., Sitka spruce).

Preferred Alternative. This is the alternative determined (by the decision maker) to best: achieve a refuge's purpose(s), vision, and goals; contributes to the Refuge System mission; addresses the significant issues; and is consistent with principles of sound fish and wildlife management.

Priority Species. Fish and wildlife species that the Washington Department of Fish and Wildlife believe require protective measures and/or management guidelines to ensure their perpetuation. Priority species include the following: (1) state listed and candidate species; (2) species or groups of animals susceptible to significant population declines within a specific area or statewide by virtue of their inclination to aggregate (e.g., seabird colonies); and (3) species of recreational, commercial, and/or Tribal importance.

Public. Individuals, organizations, and groups; officials of Federal, state, and local government agencies; Indian tribes; and foreign nations. It may include anyone outside the core planning team. It includes those who may or may not have indicated an interest in Service issues and those who do or do not realize that Service decisions may affect them.

Purpose(s) of the Refuge. The purpose of a refuge is specified in or derived from the law, proclamation, executive order, agreement, public land order, donation document, or

administrative memorandum establishing, authorizing, or expanding a refuge, refuge unit, or refuge subunit (Service Manual 602 FW 1.6).

Raptor. A category of carnivorous birds, most of which have heavy, sharp beaks, strong talons, and take live prey (e.g., peregrine falcon, bald eagle).

Refuge Goal. See Goal.

Refuge Purposes. See Purposes of the Refuge.

Seabird. A group of birds that obtain at least some food from the ocean by traveling some distance over its surface. They also typically breed on islands and along coastal areas. Seabirds include: gulls, alcids, penguins, albatrosses, storm-petrels, and cormorants, among others.

Songbirds. (Also Passerines) A category of birds that are medium to small, perching landbirds. Most are territorial singers and migratory.

Step-down Management Plans. Step-down management plans provide the details necessary to implement management strategies identified in the Comprehensive Conservation Plan (Service Manual 602 FW 1.6).

Strategy. A specific action, tool, or technique or combination of actions, tools, and techniques used to meet unit objectives (Service Manual 602 FW 1.6).

Threatened Species (Federal). Species listed under the Endangered Species Act that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

Threatened Species (State). A plant or animal species likely to become endangered in Washington within the near future if factors contributing to population decline or habitat degradation or loss continue.

Traditional Cultural Properties. The term used to define a historic property whose eligibility for inclusion to the National Register of Historic Places is derived from its significant role in the traditional but often continuing lifeways of a community.

Tribal Access. The Service will provide Native Americans reasonable access to Service managed or controlled lands and waters for exercising ceremonial, medicinal, and traditional activities recognized by the Service and by Native American governments. The Service will permit these uses if the activities are consistent with treaties, judicial mandates, or Federal and tribal law and are compatible with the purpose for which the lands are managed. (The Native American Policy of the U.S. Fish and Wildlife Service, June 1994)

U.S. Fish and Wildlife Service Mission. The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the American people.

Usual and Accustomed Grounds and Stations. Arising by way of treaties with the United States, Tribes reserved the right to take fish and shellfish at all usual and accustomed places in common with the citizens of the territory. The extent to which the Tribes may exercise this right is not limited to tribal reservation lands or ceded territory; nor is the exercise of this right diminished due to private or federal property ownership except in instances involving the taking of shellfish on staked or cultivated beds owned by private citizens. (Based on Cohen's Handbook of Federal Indian Law - 2005 Edition by Felix S. Cohen)

Vegetation Type, Habitat Type, Forest Cover Type. A land classification system based upon the concept of distinct plant associations.

Vision Statement. A concise statement of the desired future condition of the planning unit, based primarily upon the System mission, specific refuge purposes, and other relevant mandates (Service Manual 602 FW 1.6).

Appendix B: References

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Appendix C: Legal Materials Pertinent to Washington Islands National Wildlife Refuges

Laws and Executive Orders Potentially Applicable to the CCP and EA for Washington Islands National Wildlife Refuges.

Law or Executive Order	Description
Land and Water Use	
Coastal Zone Management Act of 1972 (16 USC 1451-1464)	Protects environmental quality of coastal areas.
The National Wildlife Refuge System Administration Act of 1966 (16 USC 668dd-668ee), as amended by National Wildlife Refuge System Improvement Act of 1997 (PL 105-57)	Administration and management of National Wildlife Refuges. Requires development of CCPs for all refuges outside of Alaska.
Executive Order 12996, Management and General Public Use of the National Wildlife Refuge System (NWRS)	Recognizes compatible wildlife-dependent recreation uses, such as hunting, fishing, wildlife observation, and photography, and environmental education and interpretation as priority uses of the NWRS.
The Refuge Recreation Act of 1962, as amended	Provides for recreation use that is compatible with the primary purpose of a refuge.
Outer Continental Shelf Lands Act of 1953 (14 USC 1331 et seq.)	Designates authority for outer continental shelf mineral resources to Mineral Management Services.
The Clean Water Act of 1972, Section 404 (33 USC 1344 et seq.), as amended	Provides for protection of water quality.
The National Marine Sanctuary Act of (16 USC 1431 et seq.), as amended	Provides for the establishment and management of National Marine Sanctuaries.
Biological Resources	
Endangered Species Act of 1973 (16 USC 1531 et seq.), as amended (ESA)	Provides for protection of plants, fish, and wildlife that have a designation as threatened or endangered.
Fish and Wildlife Conservation Act of 1980 (16 USC 2901-2911), as amended.	Requires the Service to monitor assess migratory nongame birds, identify species of management concern, and implement conservation measures to preclude the need for listing under ESA.
The Bald and Golden Eagle Protection Act of 1940 (16 USC 668 et seq.)	Provides protection for bald and golden eagles.
Migratory Bird Treaty Act of 1918, as amended (MBTA) (16 USC 703-718)	Provides protection for bird species that migrate across international boundaries.

Laws and Executive Orders Potentially Applicable to the CCP and EA for Washington Islands National Wildlife Refuges.

Law or Executive Order	Description
Biological Resources	
Marine Mammal Protection Act of 1972 (16 USC 1361 et seq.), as amended (MMPA)	Provides protection to marine mammals
Magnuson-Stevens Fishery Conservation and Management Act of 1996 as amended (16 USC 1801 et seq.)	Provides for the regulation of fishery resources between 3 and 200 nautical miles (nm) (5.6-370km) offshore.
Fish and Wildlife Act of 1956 (16 USC 742a-743j)	Provides Secretary of Interior with authority to protect and manage fish and wildlife resources.
Tribal Treaties and Cultural Resources	
Treaty of Neah Bay (1855)	Recognizes Makah Tribe's fishing, whaling, and sealing rights within their "usual and accustomed" areas as well as hunting and gathering rights on "open and unclaimed lands".
Treaty of Olympia (1856)	Recognizes Quinault, Quileute, and Hoh Tribes' fishing rights within their "usual and accustomed" areas as well as hunting and gathering rights on "open and unclaimed lands".
Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, 6 November 2000	Provides a mechanism for establishing regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, thereby strengthening the United States government-to-government relationships with Indian tribes, and reducing the imposition of unfunded mandates upon Indian tribes.
Native American Graves Protection and Repatriation Act of 1990 (PL 101-601; 25 USC 3001 et seq.) (NAGPRA)	Regulations for the treatment of Native American graves, human remains, funeral objects, sacred objects, and other objects of cultural patrimony. Requires consultation with Native American Tribes during federal project planning.
Archaeological Resources Protection Act of 1979 (PL 96-95; 93 STAT 722; 16 USC 470aa-47011), as amended (ARPA)	Protects archaeological resources on public lands.
Executive Order 13007, Indian Sacred Sites. 24 May, 1996	Provides for access to, and ceremonial use of, Indian sacred sites on federal lands used by Indian religious practitioners and direction to avoid adversely affecting the physical integrity of such sites.
American Indian Religious Freedom Act 1978 (PL 95-341; 92 STAT 469; 42 USC 1996)	Provides for freedom of Native Americans to believe, express, and exercise their traditional religion, including access to important sites.

Laws and Executive Orders Potentially Applicable to the CCP and EA for Washington Islands National Wildlife Refuges.

Law or Executive Order	Description
Archaeological and Historic Preservation Act of 1974 (PL 93-291; 88 STAT 174; 16 USC 469)	Provides for the preservation of historical buildings, sites, and objects of national significance.
National Natural Landmarks Program (PL 74-292; 36 CFR 62)	Sets forth process for establishment of National Natural Landmarks.
National Historic Preservation Act of 1966 (PL 89-665; 50 STAT 915; 16 USC 470 et seq.; 36 CFR 800), as amended (NHPA)	Requires federal agencies to consider the effects of any actions or programs on historical properties.
Wilderness Resources	
Wilderness Act of 1964 (PL 88-577)	Established the Wilderness Preservation System. Identifies purposes of wilderness and directs agencies to administer areas for the other purposes for which they were established in a manner that preserves wilderness character.
Public Law 91-504 (1970), An Act to designate certain lands as wilderness.	Designated lands comprising the Copalis, Flattery Rocks, and Quillayute Needles NWRs as Washington Islands Wilderness to be managed in accordance with provisions of the Wilderness Act.
Human Rights	
Executive Order 12898, Environmental Justice. February 11, 1994	Requires federal agencies to consider the effects of their projects and policies on minority and lower income population.
Americans with Disabilities Act of 1990	Provides for access to federal facilities for the disabled.
Hazardous Materials	
Oil Pollution Act of 1990 (PL 101-380; 33 USC 2701, et seq.)	Provides oil pollution policies and protections.
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (PL 96-510; 42 USC 9601, et seq.) (CERCLA)	Provides mechanism for hazardous waste clean up.
Ports and Waterways Safety Act of 1972 (33 USC 1221 et seq.), as amended	Promotes pollution controls for ships.
Ocean Dumping Act (PL 92-532; 33 USC 2701, et seq.) (Also known as Marine Protection, Research, and Sanctuaries Act of 1972)	Regulates the dumping of materials in ocean waters.
Airspace	
Federal Aviation Act of 1958 (49 USC 1347)	Regulates airspace navigation, including the designation of sensitive areas.

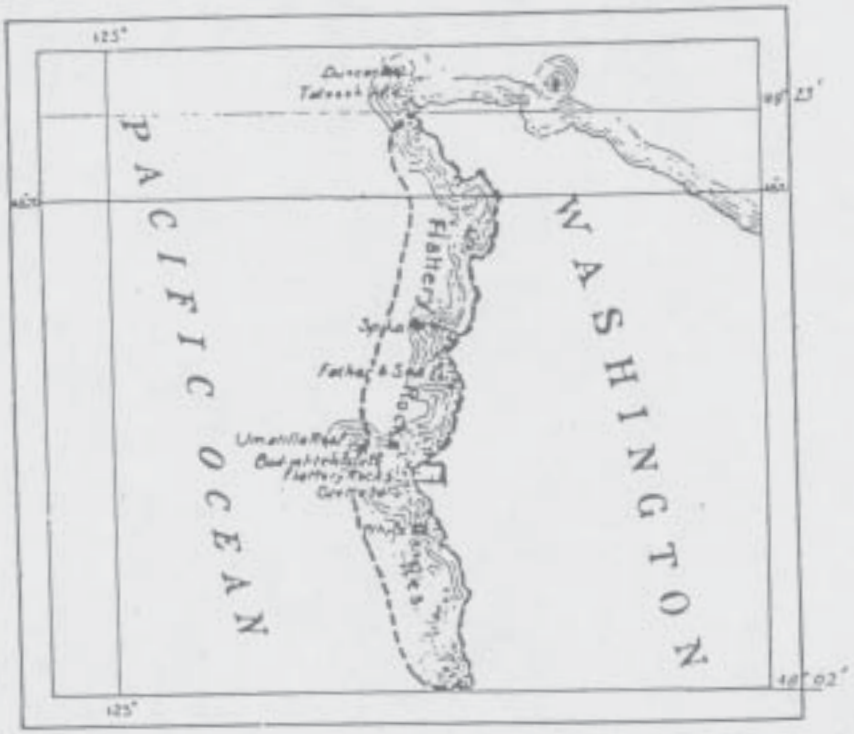
FLATTERY ROCKS RESERVATION

For Protection of Native Birds

WASHINGTON—Embracing all small islands off the Washington coast segregated by broken line and designated "Flattery Rocks Reservation"

Department of the Interior, General Land Office. Richard A. Ballinger, Commissioner

Diagram attached to and made a part of the Executive Order dated October 23, 1907



Executive Order

It is hereby ordered that all small, unsurveyed and unreserved islands lying off the coast of the State of Washington in the Pacific Ocean, between latitudes 48° 02′ North and 48° 23′ North, among which are those named and commonly known as Spike Rock, Father and Son, Bodiel-teh Islets, Flattery Rocks, Ozette Island and White Rock, as the same are shown upon coast survey chart No. 6400, or upon the General Land Office map of the State of Washington, dated 1887, and located within the area segregated by a broken line and shown upon the diagram hereto attached and made a part of this order, are hereby reserved and set aside for the use of the Department of Agriculture, as a preserve and breeding ground for native birds and animals. This reservation to be known as Flattery Rocks Reservation.

THEODORE ROOSEVELT

THE WHITE HOUSE,
October 23, 1907

Executive Order.

It is hereby ordered that all small, unsurveyed islands lying off the coast of the State of Washington in the Pacific Ocean, between latitudes 47° 8' North, and 47° 29' North, among which are those named and commonly known as Arch Island, Sea Lion Rock, Willoughby Rock, Split Rocks, Sonora Reef, Greenville Arch and Copalis Rock, as the same are shown upon coast survey chart No. 6400, or upon the General Land Office map of the State of Washington, dated 1887, and located within the area segregated by a broken line and shown upon the diagram hereto attached and made a part of this order, are hereby reserved and set aside for the use of the Department of Agriculture as a preserve and breeding ground for native birds and animals. This reservation to be known as Copalis Rock Reservation.

THEODORE ROOSEVELT

THE WHITE HOUSE,
October 23, 1907.

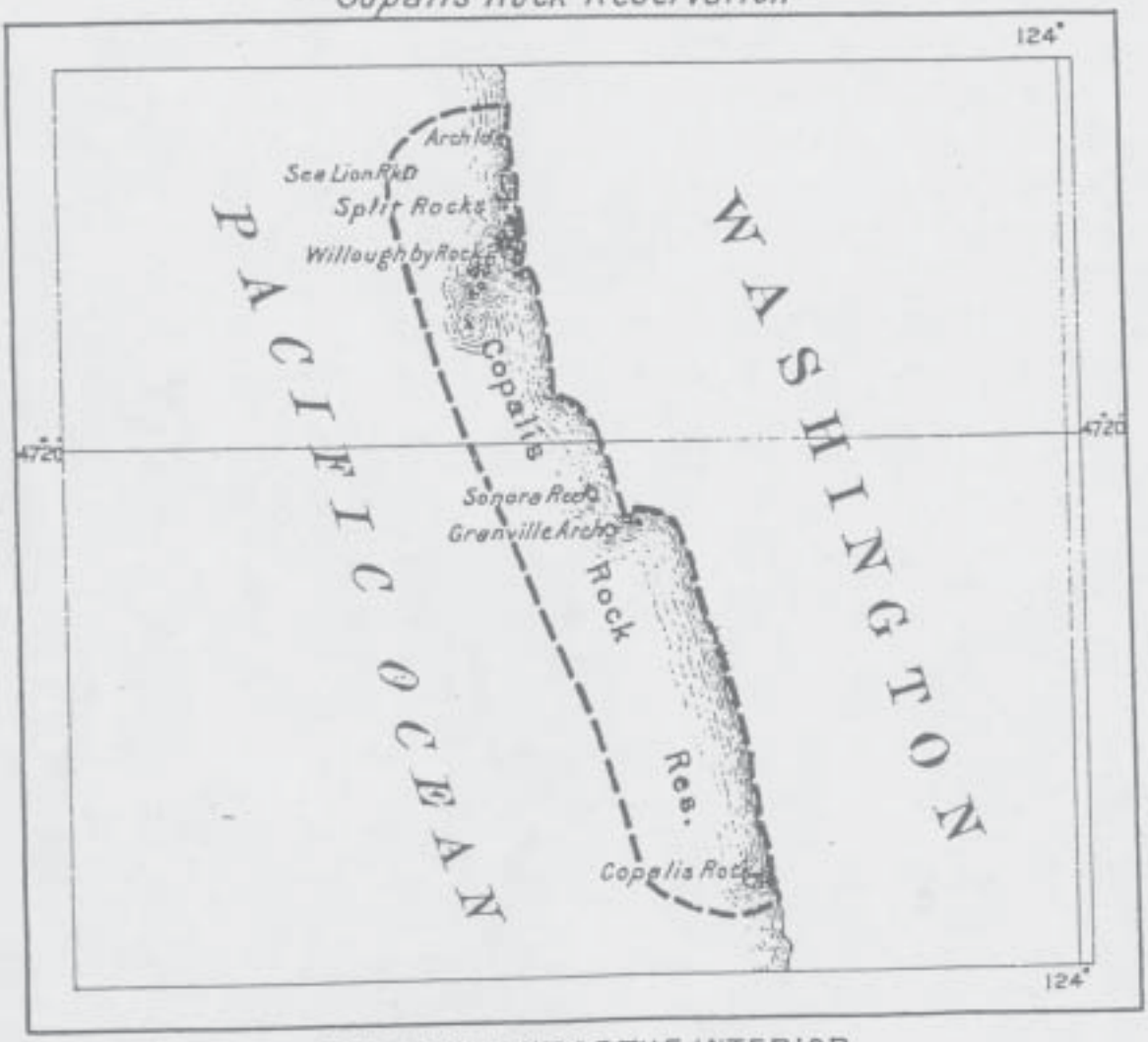
[704]

COPALIS ROCK RESERVATION

For Protection of Native Birds

WASHINGTON

Embracing all small Islands off the Washington coast segregated by broken line and designated "Copalis Rock Reservation"



DEPARTMENT OF THE INTERIOR
GENERAL LAND OFFICE
Richard A. Ballinger, Commissioner

[DIAGRAM ATTACHED TO AND MADE A PART OF THE EXECUTIVE ORDER DATED OCTOBER 23, 1907.]

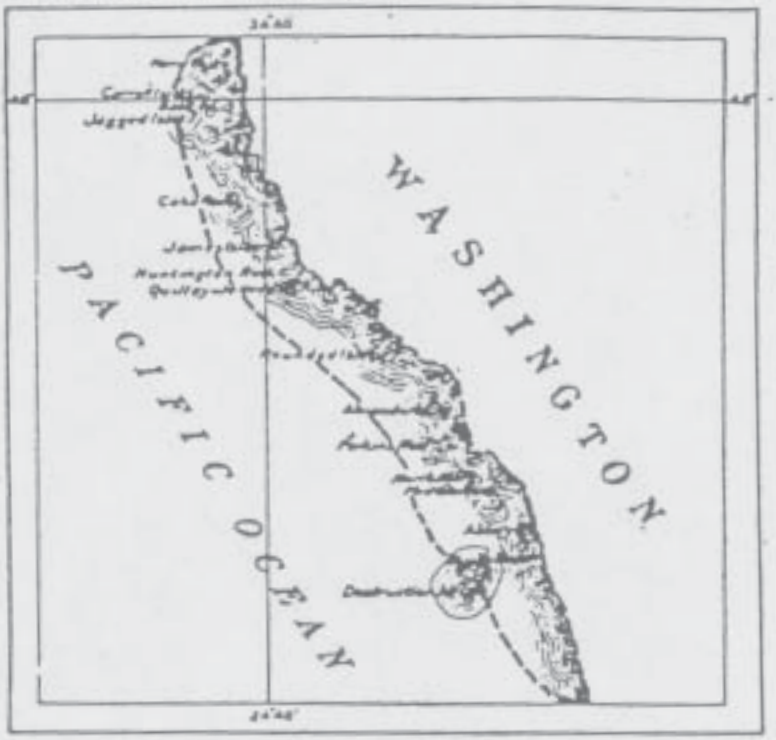
QUILLAYUTE NEEDLES RESERVATION

For Protection of Native Birds

WASHINGTON—Embracing all small islands off the Washington coast segregated by broken line and designated "Quillayute Needles Reservation"

Department of the Interior, General Land Office, Richard A. Ballinger, Commissioner

Diagram attached to and made a part of the Executive Order dated October 23, 1907



Executive Order

It is hereby ordered that all small, unsurveyed and unreserved islands lying off the coast of the State of Washington in the Pacific Ocean, between latitude 47° 38′ North, and 48° 02′ North, among which are those named and commonly known as Hand Rock, Carroll Islets, Bald Island, Jagged Islet, Cake Rock, James Island, Huntington Rock, Quillayute Needles, Rounded Islet, Alexander Island, Perkins Reef, North Rock, Middle Rock, Abbey Island and South Rock, as the same are shown upon coast survey chart No. 6400, or upon the General Land Office map of the State of Washington, dated 1887, and located within the area segregated by a broken line and shown upon the diagram hereto attached and made a part of this order, are hereby reserved and set aside for the use of the Department of Agriculture as a preserve and breeding ground for native birds and animals. This reservation to be known as Quillayute Needles Reservation.

THEODORE ROOSEVELT

THE WHITE HOUSE,
October 23, 1907

[Public Land Order 4003]

[Montana 073085]

MONTANA

Withdrawal for National Forest Administrative Site

By virtue of the authority vested in the President and pursuant to Executive Order No. 10355 of May 26, 1952 (17 F.R. 4831), it is ordered as follows:

1. Subject to valid existing rights, the following described national forest lands are hereby withdrawn from appropriation under the mining laws (30 U.S.C., Ch. 2), but not from leasing under the mineral leasing laws, for an administrative site for the Department of Agriculture:

LOLO NATIONAL FOREST

MONTANA PRINCIPAL MERIDIAN

St. Regis Ranger Station

T. 18 N., R. 28 W.,
Sec. 24, SE¼NW¼, and E½SW¼.

The areas described aggregate 120 acres in Mineral County.

2. The withdrawal made by this order does not alter the applicability of those public land laws governing the use of the national forest lands under lease, license, or permit, or governing the disposal of their mineral or vegetative resources other than under the mining laws.

HARRY R. ANDERSON,
Assistant Secretary of the Interior.

SEPTEMBER 19, 1966.

[F.R. Doc. 66-10468; Filed, Sept. 21, 1966; 8:46 a.m.]

[Public Land Order 4004]

[Montana 073084]

MONTANA

Withdrawal for National Forest Administrative Sites

By virtue of the authority vested in the President and pursuant to Executive Order No. 10355 of May 26, 1952 (17 F.R. 4831), it is ordered as follows:

1. Subject to valid existing rights, the following described national forest lands are hereby withdrawn from appropriation under the mining laws (30 U.S.C., Ch. 2), but not from leasing under the mineral leasing laws, for administrative sites of the Department of Agriculture:

FLATHEAD NATIONAL FOREST

PRINCIPAL MERIDIAN

Jim Creek Lookout Administrative Site

T. 21 N., R. 17 W.,
Sec. 6 (beginning at a point which is the northwest corner of SE¼NW¼ and the corner common to lots 3, 4, and 5, thence true east 3½ chains; thence true north 10 chains; thence true west 10 chains; thence true south 10 chains; thence true east 7½ chains to the point of beginning).

Clooney Lookout Administrative Site

T. 20 N., R. 16 W.,
Sec. 4, E½W½NE¼SE¼NW¼, E½NE¼SE¼NW¼, W½W½NW¼SW¼NE¼.

Elbow Lookout Administrative Site

T. 19 N., R. 17 W.,
Sec. 22, N½NW¼NE¼NE¼, NW¼NE¼NE¼NE¼.

Baptiste Lookout Administrative Site

Unsurveyed, but which probably will be when surveyed:
T. 27 N., R. 16 W.,
Sec. 5, SE¼SW¼SW¼ (adjacent to Baptiste Lookout).

Firefighter Lookout Administrative Site

Unsurveyed, but which probably will be when surveyed:
T. 30 N., R. 16 W.,
Sec. 27, E½NE¼NW¼SE¼, W½NW¼NE¼SE¼ (adjacent to Firefighter Lookout).

Desert Mountain Lookout Administrative Site

Unsurveyed but which probably will be when surveyed:
T. 31 N., R. 19 W.,
Sec. 25, E½E½SW¼NW¼NE¼, W½SE¼NW¼NE¼, W½E½SE¼NW¼NE¼.

Gary Lookout Administrative Site

T. 31 N., R. 17 W.,
Sec. 28 (beginning at a point common to the southeast corner of lot 7 and the southwest corner of lot 8, thence North 00°02' East 10 chains, thence North 89°59' East 10 chains; thence South 00°03' West 10 chains; thence South 89°59' West 10 chains to the point of beginning).

Mission Lookout Administrative Site

T. 25 N., R. 18 W.,
Sec. 27, SW¼NE¼SW¼SW¼, SE¼NW¼SW¼SW¼, NE¼SW¼SW¼SW¼, NW¼SE¼SW¼SW¼.

Condon Range Station Administrative Site and Landing Field

T. 21 N., R. 17 W.,
Sec. 36, E½NW¼, W½NE¼, NW¼SE¼, NE¼SW¼, W½W½SE¼NE¼.

The areas described aggregate 327.5 acres in Missoula, Flathead, and Lake Counties.

2. The withdrawal made by this order does not alter the applicability of those public land laws governing the use of the national forest lands under lease, license, or permit, or governing the disposal of their mineral or vegetative resources other than under the mining laws.

HARRY R. ANDERSON,
Assistant Secretary of the Interior.

SEPTEMBER 19, 1966.

[F.R. Doc. 66-10467; Filed, Sept. 21, 1966; 8:46 a.m.]

[Public Land Order 4005]

[Oregon 94]

WASHINGTON

Partial Revocation of Wildlife Refuge

By virtue of the authority vested in the President and pursuant to Executive Order No. 10355 of May 26, 1952 (17 F.R. 4831), it is ordered as follows:

The Executive order of October 22, 1907, establishing the Quillayute Needles Reservation as a preserve and breeding ground for native birds and animals, the name of which was changed to the Quillayute Needles National Wildlife Refuge by Proclamation No. 2416 of July 25, 1940, is hereby revoked so far as it affects the following described land:

WILLAMETTE MERIDIAN

JAMES ISLAND

T. 28 N., R. 15 W.,
Sec. 28, lot 8 (formerly lot 3).

The area described contains 18.25 acres. The land is in the Quileute Indian Reservation.

HARRY R. ANDERSON,
Assistant Secretary of the Interior.

SEPTEMBER 19, 1966.

[F.R. Doc. 66-10469; Filed, Sept. 23, 1966; 8:46 a.m.]

Title 50—WILDLIFE AND FISHERIES

Chapter I—Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, Department of the Interior

PART 32—HUNTING

Noxubee National Wildlife Refuge, Miss.

The following special regulation is issued and is effective on date of publication in the FEDERAL REGISTER.

§ 32.22 Special regulations; upland game; for individual wildlife refuge areas.

MISSISSIPPI

NOXUBEE NATIONAL WILDLIFE REFUGE

Public hunting of squirrels and rabbits on the Noxubee National Wildlife Refuge, Miss., is permitted only on the area designated by signs as open to hunting. This open area, comprising 42,595 acres, is delineated on a map available at the refuge headquarters, Route 1, Brooksville, Miss., and from the Regional Director, Bureau of Sport Fisheries and Wildlife, 809 Peachtree-Seventh Building, Atlanta, Ga. 30323. Hunting shall be in accordance with all applicable State regulations covering the hunting of squirrels and rabbits subject to the following conditions:

(1) The open season extends from October 8 through October 22, 1966, excluding Sundays.

(2) The use of dogs is not permitted.

The provisions of this special regulation supplement the regulations which govern hunting on wildlife refuge areas generally which are set forth in Title 50, Code of Federal Regulations, Part 32, and are effective through October 22, 1966.

W. L. TOWNS,
Acting Regional Director, Bureau of Sport Fisheries and Wildlife.

SEPTEMBER 16, 1966.

[F.R. Doc. 66-10478; Filed, Sept. 23, 1966; 8:47 a.m.]

Public Law 91-504

AN ACT

October 23, 1970
[S. 3014]

To designate certain lands as wilderness.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Wilderness areas.
Designation.

DESIGNATION OF WILDERNESS AREAS WITHIN NATIONAL WILDLIFE REFUGES

SECTION 1. In accordance with section 3(c) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132(c)), the following lands are hereby designated as wilderness:

Bering Sea.
Bogoslof.
Tuxedni.
Saint Lazaria.
Hazy Islands.
Forrester Island.

(a) certain lands in the (1) Bering Sea, Bogoslof, and Tuxedni National Wildlife Refuges, Alaska, which comprise about forty-one thousand one hundred and thirteen acres, three hundred and ninety acres, and six thousand four hundred and two acres, respectively, and which are depicted on maps entitled "Bering Sea Wilderness—Proposed", and "Bogoslof Wilderness—Proposed", and "Tuxedni Wilderness—Proposed", dated August 1967, and (2) the lands comprising the Saint Lazaria, Hazy Island, and Forrester Island National Wildlife Refuges, Alaska, which comprise about sixty-two acres, forty-two acres, and two thousand six hundred and thirty acres, respectively, and which are depicted on maps entitled "Southeastern Alaska Proposed Wilderness Areas", dated August 1967, which shall be known as the "Bering Sea Wilderness", "Bogoslof Wilderness", "Tuxedni Wilderness", "Saint Lazaria Wilderness", "Hazy Islands Wilderness", and "Forrester Island Wilderness", respectively;

Three Arch Rocks.
Oregon Islands.
Washington Islands.

(b) certain lands in the (1) Three Arch Rocks and Oregon Islands National Wildlife Refuges, Oregon, which comprise about seventeen acres and twenty-one acres, respectively, and which are depicted on maps entitled "Three Arch Rocks Wilderness—Proposed", and "Oregon Islands Wilderness—Proposed", dated July 1967, and (2) the lands comprising the Copalis, Flattery Rocks, and Quillayute Needles National Wildlife Refuges, Washington, which comprise about five acres, one hundred and twenty-five acres, and forty-nine acres, respectively, and which are depicted on a map entitled "Washington Islands Wilderness—Proposed", dated August 1967, as revised January 1969, which shall be known as "Three Arch Rocks Wilderness", "Oregon Islands Wilderness", and "Washington Islands Wilderness", respectively;

Salt Creek.

(c) certain lands in the Bitter Lake National Wildlife Refuge, New Mexico, which comprise about eight thousand five hundred

acres and which are depicted on a map entitled "Salt Creek Wilderness—Proposed", and dated August 1967, which shall be known as the "Salt Creek Wilderness";

Island Bay. Passage Key. Wichita Mountains.

(d) certain lands in (1) the Island Bay and Passage Key National Wildlife Refuges, Florida, which comprise about twenty acres each and which are depicted on maps entitled "Island Bay Wilderness—Proposed" and "Passage Key Wilderness—Proposed", dated August 1967, and (2) the Wichita Mountains National Wildlife Refuge, Oklahoma, which comprise about eight thousand nine hundred acres and which are depicted on a map entitled "Wichita Mountains Wilderness—Proposed", dated October 1967, which shall be known as "Island Bay Wilderness", "Passage Key Wilderness", and "Wichita Mountains Wilderness", respectively;

Seney. Huron Islands. Michigan Islands. Wisconsin Islands. Moosehorn.

(e) certain lands in (1) the Seney, Huron Islands, and Michigan Islands National Wildlife Refuges, Michigan, which comprise about twenty-five thousand one hundred and fifty acres, one hundred and forty-seven acres, and twelve acres, respectively, and which are depicted on maps entitled "Seney Wilderness—Proposed", "Huron Islands Wilderness—Proposed", and "Michigan Islands Wilderness—Proposed", (2) the Gravel Island and Green Bay National Wilderness Refuges, Wisconsin, which comprise about twenty-seven acres and two acres, respectively, and which are depicted on a map entitled "Wisconsin Islands Wilderness—Proposed", and (3) the Moosehorn National Wildlife Refuge, Maine, which comprise about two thousand seven hundred and eighty-two acres and which are depicted on a map entitled "Edmunds Wilderness and Birch Islands Wilderness—Proposed", all said maps being dated August 1967, which shall be known as "Seney Wilderness", "Huron Islands Wilderness", "Michigan Islands Wilderness", "Wisconsin Islands Wilderness", and "Moosehorn Wilderness", respectively;

Pelican Island.

(f) certain lands in the Pelican Island National Wildlife Refuge, Florida, which comprise about three acres and which are depicted on a map entitled "Pelican Island Wilderness—Proposed" and dated August 1970, which shall be known as the "Pelican Island Wilderness"; and

Monomoy.

(g) certain lands in the Monomoy National Wildlife Refuge, Massachusetts, which comprise about two thousand six hundred acres but excepting and excluding therefrom two tracts of land containing approximately ninety and one hundred and seventy acres, respectively and which are depicted on a map entitled "Monomoy Wilderness—Proposed" and dated August 1970, which shall be known as the "Monomoy Wilderness".

DESIGNATION OF WILDERNESS AREAS WITHIN NATIONAL PARKS AND MONUMENTS

SEC. 2. In accordance with section 3(c) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132(c)), the following lands are hereby designated as wilderness:

Craters of the Moon.

(a) certain lands in the Craters of the Moon National Monument, which comprise about forty-three thousand two hundred and forty-three acres and which are depicted on a map entitled

"Wilderness Plan, Craters of the Moon National Monument, Idaho", numbered 131–91,000 and dated March 1970, which shall be known as the "Craters of the Moon National Wilderness Area";

Petrified Forest.

(b) certain lands in the Petrified Forest National Park, which comprise about fifty thousand two hundred and sixty acres and which are depicted on a map entitled "Recommended Wilderness, Petrified Forest National Park, Arizona", numbered NP–PF–3320–O and dated November 1967, which shall be known as the "Petrified Forest National Wilderness Area".

DESIGNATION OF WILDERNESS AREAS WITHIN NATIONAL FORESTS

Mount Baldy.

SEC. 3. In accordance with section 3(b) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132(b)), the following lands are hereby designated as wilderness: the area classified as the Mount Baldy Primitive Area with the proposed additions thereto and deletions therefrom, as generally depicted on a map entitled "Proposed Mount Baldy Wilderness", dated April 1, 1966, comprising an area of approximately seven thousand acres, within and as a part of the Apache National Forest, in the State of Arizona.

Maps and descriptions, filing with congressional committees.

SEC. 4. As soon as practicable after this Act takes effect, a map and a legal description of each wilderness area shall be filed with the Interior and Insular Affairs Committees of the United States Senate and the House of Representatives, and such description shall have the same force and effect as if included in this Act: *Provided, however,* That correction of clerical and typographical errors in such legal description and map may be made.

Administration.

78 Stat. 890. 16 USC 1131 note.

SEC. 5. Wilderness areas designated by or pursuant to this Act shall be administered in accordance with the provisions of the Wilderness Act governing areas designated by that Act as wilderness areas, except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act, and any reference to the Secretary of Agriculture shall be deemed to be a reference to the Secretary who has administrative jurisdiction over the area.

Approved October 23, 1970.

Public Law 99-635
99th Congress

An Act

To revise the boundaries of Olympic National Park and Olympic National Forest in the State of Washington, and for other purposes.

Nov. 7, 1986
[S. 2351]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

National Forest System.
National parks, monuments, etc.
National Wilderness Preservation System.
16 USC 251n.

SECTION 1. (a) The boundary of Olympic National Park, Washington, is hereby revised to include within the park—

(1) all submerged lands and waters of Lake Ozette, Washington, and the Ozette River, Washington;

(2) all surveyed and unsurveyed islands lying off the coast of the State of Washington in the Pacific Ocean between latitudes 48 degrees 23 minutes north and 47 degrees 38 minutes north;

Indians.
Fish and fishing.

(3) those lands between mean high tide and the lowest low tide beginning in section 22, township 24 north, range 13 west Willamette meridian, at the common boundary between the Olympic National Park and the Quinault Indian Reservation, to section 18, township 32 north, range 15 west Willamette meridian, at the common boundary between the Olympic National Park and the Makah Indian Reservation, except those lands directly adjacent to and west of the Hoh, Ozette, and Quillayute Indian Reservations: *Provided*, That such lands as are identified in this paragraph shall continue to be open to fishing and to the taking of shellfish in conformity with the laws and regulations of the State of Washington; and

Public information.

(4) approximately nine thousand six hundred and thirty-eight acres, and to exclude from the park approximately three thousand three hundred and fifty-two acres, as generally depicted on the maps entitled "Boundary Modifications, Olympic National Forest and Olympic National Park", numbered 149/60,030A, sheets 1 through 9, and dated September 1986, which shall be on file and available for public inspection in the office of the National Park Service, United States Department of the Interior.

Public information.
16 USC 251n note.

(b) The boundary of Olympic National Forest, Washington, is hereby revised to include in the national forest approximately three thousand three hundred and fifty-two acres and to exclude from the national forest approximately nine thousand three hundred and twenty-four acres, as generally depicted on the maps entitled "Boundary Modifications, Olympic National Forest and Olympic National Park", numbered 149/60,030A, sheets 1 through 10, and dated September 1986, which shall be on file and available for public inspection in the office of the Forest Service, United States Department of Agriculture.

98 Stat. 299.

(c) Section 3 of the Washington State Wilderness Act of 1984 (Public Law 98-339, Act of July 3, 1984, 98 Stat. 301) is amended—

(1) by striking subsection (2) and inserting in lieu thereof the following new subsection:

"(2) certain lands in the Olympic National Forest, Washington, which comprise approximately forty-four thousand four hundred and seventy-four acres, as generally depicted on a map entitled 'Buckhorn Wilderness—Revised', numbered 98-339-3(2), sheets 1 and 2, and dated September 1986, and which shall be known as the Buckhorn Wilderness;";

(2) by striking subsection (13) and inserting in lieu thereof the following new subsection:

"(13) certain lands in the Olympic National Forest, Washington, which comprise approximately thirteen thousand and fifteen acres, as generally depicted on a map entitled 'Mount Skokomish Wilderness—Revised', numbered 98-339-3(13) and dated September 1986, and which shall be known as the 'Mount Skokomish Wilderness—Revised', dated September 1986, and which shall be known as the Mount Skokomish Wilderness;"; and

(3) by striking subsection (19) and inserting in lieu thereof the following new subsection:

"(19) certain lands in the Olympic National Forest, Washington, which comprise approximately sixteen thousand six hundred and eighty-two acres, as generally depicted on a map entitled 'The Brothers Wilderness—Revised', numbered 98-339-3(19) and dated September 1986, and which shall be known as 'The Brothers Wilderness;'.".

Public lands. Water. 16 USC 251n note.

SEC. 2. (a) Federal lands, waters, and interests therein formerly within the boundary of Olympic National Forest which are included within the boundary of Olympic National Park pursuant to section 1 of this Act are, subject to valid existing rights, hereby transferred to the administrative jurisdiction of the Secretary of the Interior for administration as part of the park, and shall be subject to all the laws and regulations applicable to the park: *Provided further,* That within section 15, township 15 north, range 9 west Willamette meridian, and within an area extending not more than one mile north of such section, nothing herein shall be construed to limit or otherwise modify the authority of the Secretary of Agriculture to design and construct a forest logging road east of the park boundary: *Provided, however,* That the Secretary of Agriculture shall not construct the road as close as practically possible to the park boundary but not more than five hundred feet east of the divide. Following construction, the Secretary of the Interior is hereby authorized and directed to redescribe and relocate the boundary of the park along the eastern clearing limits of the road.

(b) Federal lands, waters, and interests therein formerly within the boundary of Olympic National Park which are excluded therefrom pursuant to section 1 of this Act are, subject to valid existing rights, hereby transferred to the administrative jurisdiction of the Secretary of Agriculture for administration as part of Olympic National Forest, and shall be subject to all the laws and regulations applicable to the National Forest System: *Provided,* That any lands deleted from the park and included within the Buckhorn Wilderness, Mount Skokomish Wilderness, or The Brothers Wilderness pursuant to this Act shall be managed in accordance with the provisions of the Washington State Wilderness Act of 1984 (Public Law 98-339, Act of July 3, 1984, 98 Stat. 301).

98 Stat. 299.

Gifts and property. Real property. Water. 16 USC 251n note.

SEC. 3. (a) The Secretary of the Interior is authorized to acquire by donation, purchase with donated or appropriated funds, exchange, bequest or otherwise any non-Federal lands, waters, and interests

therein included within the boundary of Olympic National Park pursuant to section 1 of this Act: *Provided:* That any lands, waters, or interests therein owned by the State of Washington or any political subdivision thereof may be acquired only by donation or exchange.

(b) For the purpose of section 7 of the Land and Water Conservation Fund Act of 1965 (78 Stat. 903, as amended; 16 U.S.C. 460*l*-9), the boundary of the Olympic National Forest, as modified pursuant to section 1 of this Act, shall be treated as if it was the boundary of that national forest on January 1, 1965.

SEC. 4. There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this Act, except that the total amounts authorized to be appropriated for the purpose of acquisition of lands, waters, and interests therein pursuant to this Act shall not exceed $1,000,000.

Appropriation authorization.
Real property.
Water.
16 USC 251n note.

Approved November 7, 1986.

LEGISLATIVE HISTORY—S. 2351:

SENATE REPORTS: No. 99-510 (Comm. on Energy and Natural Resources).
CONGRESSIONAL RECORD, Vol. 132 (1986):
Oct. 10, considered and passed Senate.
Oct. 15, considered and passed House.

Public Law 100-226
100th Congress

An Act

Dec. 31, 1987
[H.R. 2583]

To authorize additional appropriations for the San Francisco Bay National Wildlife Refuge.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. AUTHORIZATION OF APPROPRIATIONS.

Section 5 of the Act entitled "An Act to provide for the establishment of the San Francisco Bay National Wildlife Refuge", approved June 30, 1972 (86 Stat. 399), is amended to read as follows:

"SEC. 5. There is authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act.".

SEC. 2. EFFECTIVE DATE.

The amendment made by section 1 shall take effect on October 1, 1987.

SEC. 3. QUILLAYUTE NEEDLES AND FLATTERY ROCKS NATIONAL WILDLIFE REFUGES.

16 USC 668dd note.

(a) Notwithstanding any other provision of Public Law 99-635, land and waters in the Quillayute Needles National Wildlife Refuge and Flattery Rocks National Wildlife Refuge established as preserves for native birds and animals by Executive orders dated October 23, 1907, as amended, which are within the boundaries of Olympic National Park, shall be administered by the United States Fish and Wildlife Service for refuge purposes under laws and regulations applicable to the national wildlife refuge system, including administration in accordance with the provisions of the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee). Nothing in this Act shall affect, amend or modify the application of the provisions of the Wilderness Act (16 U.S.C. 1131-1139) to the Quillayute Needles National Wildlife Refuge or Flattery Rocks National Wildlife Refuge.

Law enforcement and crime.

(b) Within ninety days of the enactment of this Act, the United States Fish and Wildlife Service shall, by memorandum of understanding or other means, seek law enforcement assistance from the National Park Service for purposes of enhancing the protection of the ecological resources of the Quillayute Needles and Flattery Rocks National Wildlife Refuges.

SEC. 4. COOPERATIVE LAW ENFORCEMENT AGREEMENTS.

Subsection 4(f) of the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd(f)), is amended by adding after the last sentence of that subsection the following: "The Director of the United States Fish and Wildlife Service is authorized to utilize by agreement, with or without reimbursement, the personnel and services of any other Federal or State agency for purposes of enhancing the enforcement of this Act.".

Approved December 31, 1987.

MEMORANDUM OF UNDERSTANDING
Between the
NATIONAL PARK SERVICE
And the
U.S. FISH AND WILDLIFE SERVICE

PURPOSE

This Memorandum of Understanding is made and entered into between the U.S. Fish and Wildlife Service (hereinafter FWS) and the National Park Service (hereinafter NPS), both are executive agencies of the United States Department of the Interior. The purpose of this memorandum is to coordinate management of the Flattery Rocks National Wildlife Refuge, the Quillayute Needles National Wildlife Refuge, and a portion of the coastal strip of Olympic National Park, to enhance the protection and understanding of natural resources shared within these three units of Federal land.

RECITALS

WHEREAS, Flattery Rocks and Quillayute Needles Migratory Bird Sanctuaries were established by Executive Order 703 of President Theodore Roosevelt on October 23, 1907, (redesignated as National Wildlife Refuges on July 30, 1940) as sanctuaries for nesting seabirds and marine mammals; and

WHEREAS, these same National Wildlife Refuges were included (with Copalis National Wildlife Refuge) within the Washington Islands Wilderness established by Public Law 91-504 on October 23, 1970; and

WHEREAS, these refuges lie immediately offshore from the coastal strip of Olympic National Park and so share certain resources and each of the three areas can be influenced by occurrences in or near the others; and

WHEREAS, Public Law 99-635 was amended by Public Law 100-226 clarifying that these two refuges remain as units of the Wildlife Refuge System administered by the FWS even though they are also within the exterior boundaries of Olympic National Park; and

WHEREAS, Public Law 100-226, Sec 3(b), mandates that the FWS seek the assistance of the NPS for the purpose of enhancing the protection of the ecological resources; and

WHEREAS, Pubic law 100-226, Sec. 4, amends Subsection 4(f) of the National Wildlife Refuge System Administration Act of 1966 (16 USC 668 dd (f)) to allow, by agreement, the use of any Federal or State agency for the purpose of enhancing the enforcement of the Act; and

WHEREAS, both the FWS and NPS have a responsibility and commitment to protect and preserve the wilderness character of the refuges and park.

NOW, THEREFORE, in consideration of the benefit to be derived by each party:

AGREEMENT

IT IS HEREBY AGREED as follows:

I. OBJECTIVE: The Objective of this Memorandum of Understanding is to enhance protection and interpretation of the wildlife, natural, and scenic resources of Quillayute Needles and Flattery Rocks National Wildlife Refuges.

II. TERM OF AGREEMENT: This Memorandum of Understanding shall become effective upon execution by both parties. It shall remain in force for five years, unless legislatively rescinded, and shall be revised only if both parties agree. At the end of five years, the agreement shall be reviewed, and reaffirmed or rewritten, as appropriate.

III. MUTUAL COOPERATION: To accomplish the purpose and objectives of the Memorandum of Understanding, each party agrees to cooperate with the other in fulfilling its obligation as herein provided.

A. The basic premises of all actions under the agreement are:

1. The primary objectives of the refuges can only be met if human impacts are minimized.
2. For both refuge and park purposes, it is important to maintain the wilderness character of the area.
3. It is important for the public to understand and appreciate the values of the refuges, however, all interpretive efforts will be accomplished at off-refuge locations to insure the preservation of the resources.
4. Research is an important element in providing understanding about the resources of the refuges. All research will be conducted in a manner that is consistent with wilderness preservation and management.

B. Obligations Shared by Both Parties:

1. In general, funding and staffing needs for routine operations will be handled by the individual agencies through their normal administrative processes. Should special situations arise or programs exist that are outside of the normal daily operations, the NPS and FWS will endeavor to reach mutual agreement concerning the appropriate administrative action to take (e.g., transfer of funds, formal loan of personnel, etc.).

2. The FWS and NPS shall cooperate in the design and implementation of research programs to be carried out on the refuges. The agencies will share wildlife and other ecological data and provide copies of research reports and findings to each other. The FWS will permit NPS researchers to investigate refuge resources under mutually agreed on study plans as outlined in the Refuge Manual (4 RM 6).

3. The FWS and NPS recognize that Destruction Island is managed under less restrictive management policies, as it is the only part of the two refuges that is not designated as wilderness. Furthermore, it has been affected by the presence of man on the island, for example the presence of a lighthouse operated by the U.S. Coast Guard. The two agencies specifically agree to the following concerning Destruction Island:

a. The FWS agrees to support the continued location, operation, and maintenance of an NPS radio repeater on the island.

b. The agencies will cooperate in research and the implementation of the resource management plan for the island.

c. The agencies agree that the island will remain closed to all persons not engaged in activities related to U.S. Coast Guard operations or the implementation of this agreement.

IV. SPECIFIC OBLIGATIONS OF THE PARTIES:

A. U.S. Fish and Wildlife Service

1. FWS will maintain enforcement jurisdiction over the refuges, and will be responsible for their proper administration and management.

2. FWS will continue to regulate all uses of the refuges, reviewing applications for entry and, where appropriate, issue Special Use Permits as done throughout the National Wildlife Refuge System. FWS shall keep the NPS informed of authorized uses of the refuges.

3. FWS will have responsibility for monitoring the wildlife resources of the refuges as outlined in the refuge wildlife inventory plan, and for doing or permitting other specific research on the wildlife resources.

4. The FWS shall notify the NPS, in advance, when FWS staff or other FWS authorized persons plan to visit the refuge, in order for NPS staff to know which uses and activities are authorized by FWS, and to provide an opportunity to cooperate in joint programs.

5. The FWS shall provide information to NPS personnel in order that the NPS may properly and appropriately interpret and enforce rules and regulations, including 50 CFR, Subchapter C, Parts 25 through 38, that apply to units of the National Wildlife Refuge System.

B. NATIONAL PARK SERVICE

1. NPS will integrate information of the refuges into ongoing interpretation/informational programs, and will work with FWS to develop refuge-specific programs or exhibits.

2. NPS will include a FWS law enforcement policy section into the annual in-service training. Both agencies will cooperate in development of this training and provide the Refuge Officers the option to attend training with Olympic National Park rangers.

3. Pursuant to the Department of Interior Law Enforcement Memorandum of Agreement and the authority granted by that agreement, the NPS is authorized to enforce 50 CFR, Subchapter C, Parts 25 through 28, and all other appropriate

laws of the United States and the State of Washington on FWS lands within Quillayute Needles and Flattery Rocks National Wildlife Refuges. NPS will notify FWS of any violations of law and enforcement action taken within the Wildlife Refuges on an annual basis.

4. The NPS supports the FWS policy of restricting public and agency use of the wilderness portions of the refuges. Except in emergencies and in carrying out its law enforcement responsibilities, i.e. contacting person illegally on the islands, the NPS agrees to obtain appropriate FWS approval before any NPS personnel access the wilderness portions of the refuge. The NPS shall continue to have access to Destruction Island in order to maintain the park's radio system. To maintain the wilderness integrity of the refuge and the protection of the seabird colonies routine aerial patrols will not be used.

5. NPS will conduct or participate in refuge research or management activities as mutually agreed to with the FWS.

V. PROJECT OFFICERS

Service Project Officer shall be:
Refuge Manager
Nisqually National Wildlife Refuge
100 Brown Farm Road
Olympia, WA 98516
Phone (206) 753-9467

Park Service Project Officer shall be:
Superintendent
Olympic National Park
500 East Park Avenue
Port Angeles, WA 98362
Phone (206) 452-4501

VI. COORDINATION

FWS and NPS will meet annually near the end of each fiscal year to discuss activities under this Memorandum of Understanding and to plan activities for the following fiscal year. Other meetings and communications will take place as requested by either cooperator.

VII. AMENDMENTS

Amendments to this Memorandum of Understanding may be proposed by either cooperating agency and be adopted by written agreement of both.

Approval:

U.S. FISH AND WILDLIFE SERVICE

By: _____ Date: 9/1/93
Assistant Regional Director - Refuges & Wildlife

NATIONAL PARK SERVICE

By: _____ Date: 6/30/93
Superintendent, Olympic National Park

MEMORANDUM OF UNDERSTANDING

between

United States Fish and Wildlife Service

and

United States Coast Guard

for

Operation of Lighthouses and Aids To Navigation on Destruction Island, Smith Island and islands within San Juan Island National Wildlife Refuge

Purpose

The United States Coast Guard (USCG) has the responsibility for the operation and maintenance of lighthouses and aids to navigation located on two National Wildlife Refuges that are administered by the. U.S. Fish and Wildlife Service (Service): Quillayute Needles and San Juan Islands National Wildlife Refuges.

The lands identified in this agreement are part of the National Wildlife Refuge System, and will be managed by the Service under the authority of the National Wildlife Refuge System Administration Act of 1966, as amended, and Title 50 of the Code of Federal Regulations. Management guidelines will include considerations relative to the development of the Comprehensive Conservation Plan for Quillayute Needles National Wildlife Refuge. The Service has the responsibility for protection and, management of the natural habitat and wildlife on these islands, which include major seabird nesting and roosting sites. In addition, the Federally listed threatened bald eagle uses these areas, which are also important as haulout and pupping areas for marine mammals, including the Federally listed threatened Steller Sea Lion. This Memorandum of Understanding will ensure that the natural resources on these Refuges are protected, while permitting them to be used for lighthouse and aids to navigation purposes.

The following elements of responsibilities for each party of this Memorandum of Understanding shall provide for the protection of these natural resources. Appendix A contains a current list of USCG and Service contact names, addresses, and phone numbers.

Coast Guard Responsibilities:

1. The USCG will ensure that all non-USCG personnel and contractors using the facilities are made aware of the restrictions and cautions contained in this MOU.

2. All non-emergency work, including routine maintenance, will be scheduled annually between November 1 and March 1 in order to minimize disturbance during the critical breeding season.

3. The Office of Aids to Navigation will submit a proposed yearly operations plan to the Refuge Manager. The plan will list the scheduled servicing of aids to navigation for Destruction Island, Smith Island and the islands in the San Juan Islands NWR having aids to navigation on them. As identified in Appendices B & C, it will include dates, and necessary equipment and personnel. The Refuge Manager will identify sensitive Refuge resources, and recommend reasonable and prudent alternatives to maximize protection of Refuge resources. The plan will also include a summary of any previous year's activities that deviated from that year's schedule.

4. Except as required for search and rescue, law enforcement and emergency, activities will be restricted to developed areas and travel routes.
5. In the event of any expansion of currently developed USCG facilities, input from the Service will be considered as part of the USCG planning process.
6. Except as required for search and rescue, law enforcement and emergency, helicopter activity will be limited to the developed areas. The following are sites that are especially sensitive to overflights and should be avoided. Suggested approach routes are outlined on maps in Appendices D & E.

   Smith Island: The west slopes and the southern half of the Island.

   Destruction Island: The western rocks and entire eastern half of the Island.

7. The USCG will inform the Service of any requests by agencies or persons for non-official use of these areas. All requests for use will be reviewed, and permits for approved uses will be issued by the Service.

Service Responsibilities:

1. The Service will obtain approval from the USCG of any activities that may affect the operation of lighthouses and/or aids to navigation.
2. The Service will obtain prior approval from the USCG to use the bunk house on Destruction Island. All facilities will be clean and secured at the end of each field trip.
3. The Service will caution all employees and permittees that use these areas to be careful with the USCG facilities and to immediately report any problems noticed. This includes any fire hazards, unsafe conditions, or any condition(s) indicating or leading to structural damage.

The Service will work with USCG planners to reduce potential wildlife conflicts if changes need to be made in the facilities in these areas.

Provide briefings and training for USCG personnel on Refuge regulations and resources on an annual basis, or as requested.

Provide information, site assessments, and staff expertise in identifying sensitive Refuge resources and preferred remediation techniques in the event of an emergency situation that threatens Refuge resources.

Provide the USCG with relevant information regarding Refuge resources to support development of plans and alternatives for routine operations, e.g., timing and location of sensitive seabird nesting sites and marine mammal haulouts, preferred egress and ingress routes for Aids to Navigation missions, and other measures to minimize the impact to Refuge resources in the routine conduct of USCG operations.

Both parties agree to the elements of responsibilities as stated above.

This Memorandum of Understanding will remain in effect until canceled by either party or until it is no longer needed.

Amendments may be added to the Memorandum of Understanding by mutual agreement.

This Memorandum of Understanding is executed as of the date last signed below.

Date: 31 October 2003

By:
United States Coast Guard Thirteenth Coast Guard District

Date: 12 November 2003

By:
U.S. Fish and Wildlife Service
Washington Maritime National Wildlife Refuge Complex

Date: NOV 19, 2003

By:
ACTING Regional Chief, NWRS
Region 1
U.S. Fish and Wildlife Service

APPENDIX A

Agency Contacts

U.S. Fish and Wildlife Service

Washington Maritime National Wildlife Refuge Complex
33 South Barr Road
Port Angeles, WA 98362
(360) 457-8451
FAX: (360) 457-9778

Refuge Manager: Kevin Ryan
Deputy Refuge Manager: Annette De Knijf

San Juan Islands NWR
Dungeness NWR
Protection Island NWR
Copalis NWR
Flattery Rocks NWR
Quillayute Needles NWR

U.S. Coast Guard District

Commander
13th Coast Guard District
915 Second Avenue
Seattle, WA 98174-5000

District Planning Officer, Phone (206) 220-7130
District Operations, Phone (206) 220-7255
Group Port Angeles, Phone (360) 417-5805
District Aids to Navigation, Phone (206) 220-7270
Civil Engineering Unit Oakland, Phone
2000 Embarcadero, Suite 200
Oakland, CA 94606-5337

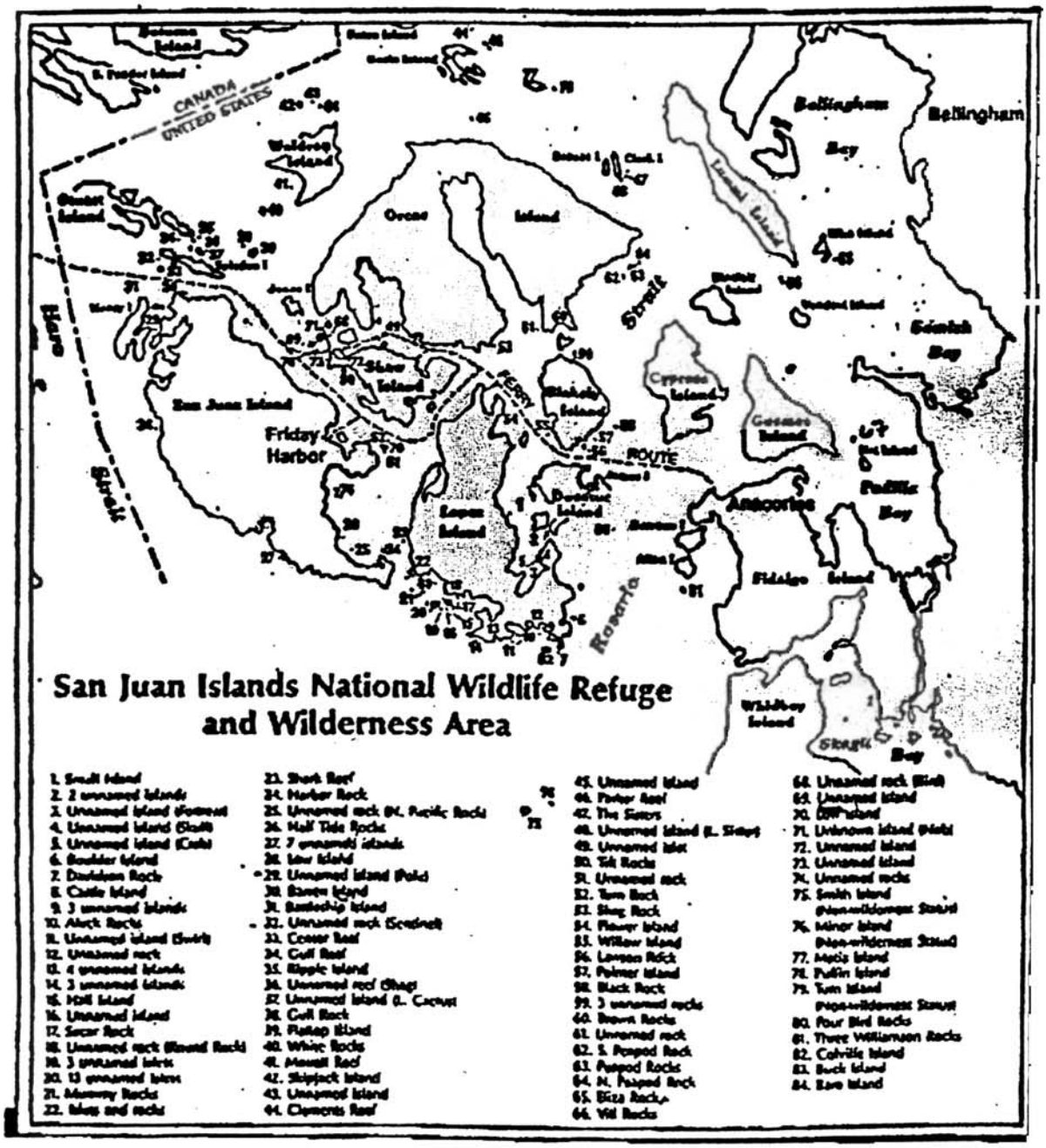
APPENDIX B

Refuge Islands in San Juan Islands NWR with Aids to Navigation

Island Name	**Island Number**	**Aids**
Smith Island	75	PM
Davidson Rock	7	PM*
North Pacific Rock	25	--
Skipjack Island	42	PM
Clements Reef	44	FF**
Parker Reef	46	PM
The Sisters	47	PM
Unnamed Islet	49	PM
Turn Rock	52	PM
Lawson Rock	56	FF
Black Rock	58	PM
Unnamed Rocks (Spindle Rock)	59	PM
North Peapod Rocks	64	PM
Eliza Rocks	65	PM
Viti Rocks	66	PM
Unnamed Rock (Bird)	68	PM
Puffin Island	78	PM
Center Reef	33	FF

* Permanently Mounted
** Fixed Floating

APPENDIX C


CANADA
UNITED STATES
Bellingham
Bellingham Bay
Lummi Island
Orcas Island
Obstruction Island
Strait
San Juan Island
Friday Harbor
Haro Strait
Shaw Island
Blakely Island
Cypress Island
Guemes Island
ROUTE
Lopez Island
Decatur Island
Anacortes
Fidalgo Island
Pacific Bay
Rosario
Strait
Samish Bay
Whidbey Island
San Juan Islands National Wildlife Refuge and Wilderness Area
1. Small Island
2. 2 unnamed islands
3. Unnamed island (Fairmont
4. Unnamed island (Sault)
5. Unnamed island (Castle)
6. Boulder Island
7. Davidson Rock
8. Castle Island
9. 3 unnamed islands
10. Alack Rocks
11. Unnamed island (Switz)
12. Unnamed rock
13. 4 unnamed islands
14. 3 unnamed islands
15. Hall Island
16. Unnamed island
17. Saxon Rock
18. Unnamed rock (Round Rock)
19. 3 unnamed islets
20. 13 unnamed islets
21. Mummy Rocks
22. Islets and rocks
23. Shark Reef
24. Harbor Rock
25. Unnamed rock (N. Pacific Rock)
26. Half Tide Rocks
27. 7 unnamed islands
28. Low Island
29. Unnamed island (Pole)
30. Steep Island
31. Battleship Island
32. Unnamed rock (Sentinel)
33. Center Reef
34. Cull Reef
35. Ripple Island
36. Unnamed reef (Shag)
37. Unnamed island (L. Cayou)
38. Cull Rock
39. Flattop Island
40. White Rocks
41. Mouat Reef
42. Skipjack Island
43. Unnamed island
44. Clements Reef
45. Unnamed island
46. Porter Reef
47. The Sisters
48. Unnamed island (L. Sister)
49. Unnamed islet
50. Tidi Rocks
51. Unnamed rock
52. Tern Rock
53. Shag Rock
54. Flower Island
55. Willow Island
56. Lawson Rock
57. Palmer Island
58. Black Rock
59. 3 unnamed rocks
60. Brown Rocks
61. Unnamed rock
62. S. Pinpod Rock
63. Pinpod Rocks
64. N. Pinpod Rock
65. Bliss Rock
66. Vid Rocks
67. Unnamed rock (Bird)
68. Unnamed island
69. Cliff Island
70. Unknown island (Mole)
71. Unnamed island
72. Unnamed island
73. Unnamed rocks
74. Smith Island (Non-wilderness Status)
75. Minor Island (Non-wilderness Status)
76. Matia Island
77. Puffin Island
78. Tern Island (Non-wilderness Status)
79. Four Bird Rocks
80. Three Williamson Rocks
81. Colville Island
82. Buck Island
83. Eave Island

6

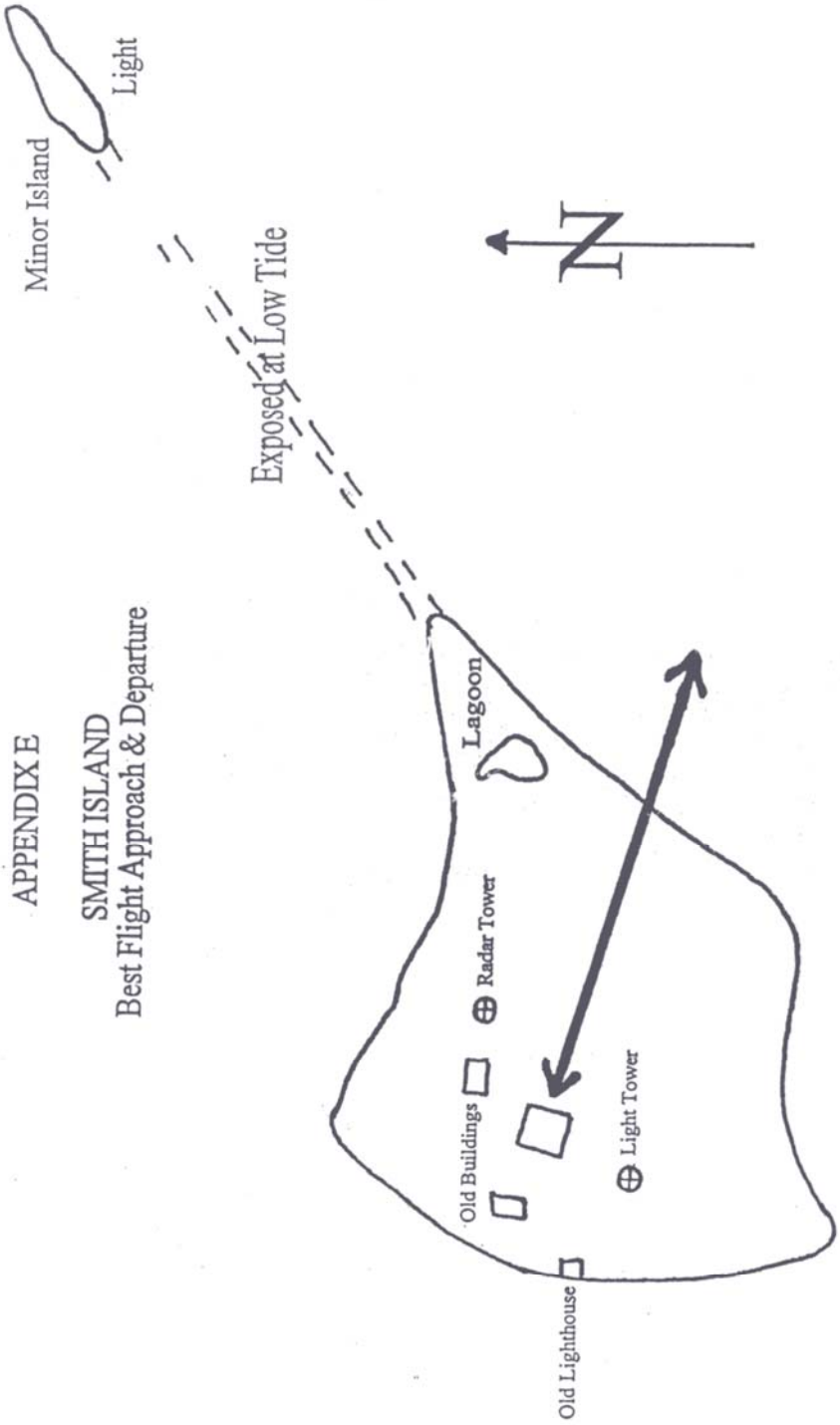
APPENDIX D

DESTRUCTION ISLAND
Best Flight Approach & Departure



OK

N


APPENDIX E
SMITH ISLAND
Best Flight Approach & Departure
Minor Island
Light
Exposed at Low Tide
N
Lagoon
Radar Tower
Old Buildings
Light Tower
Old Lighthouse

Appendix D: List of Preparers

Name	Position/Contributions	Degree(s)	Years of Experience
United States Fish and Wildlife Service			
Mike Marxen	Region 1 - Planning Team Leader	BLA, Landscape Architecture	25
Kevin Ryan	Project Leader	BS, Wildlife Science	32
Annette de Knijf	Deputy Project Leader	BS, Wildlife Mgmt.	4
Ulrich Wilson	Refuge Biologist	MS, Wildlife Science BA, Biological Oceanography	30
Pam Sanguinetti	Refuge Biological Technician	MA, Envir. Studies BS, Environmental Science	11
Jane Bardolf	Conservation Planner	MS, Wildlife Mgmt. BS, Envir. Conser.	18
Virginia Parks	Region 1 - Archeologist Primary Author - Cultural Resources	MAT, Museum Education BA, Archaeology	15
EDAW, Inc.			
Kevin Butterbaugh	Project Manager and Principal Planner Primary Author - Chapters 1 and 2	MLA, Landscape Architecture BS, Agricultural and Resource Economics	16
Jennifer Seavey	Primary Author - Biological Resources	MS, Wildlife Sciences BS, Biology	14
Jason Dedrick	Primary Author - Social Resources	MS, Forestry BS, Forest Recreation Resources	9
Peter Carr	Editor	BS, Journalism	14
Liza MacKinnon	Word Processor/Graphics	BA, Geography	15

Appendix E: Minimum Requirement Analysis and Compatibility Determination

Minimum Requirement Analysis

Background: The following Minimum Requirement Analysis (MRA) is being prepared consistent with the spirit and intent of the Wilderness Act of 1964 (16 U.S.C. 1131-1136). We authorize an activity only if we demonstrate that it is necessary to meet the minimum requirement for administering the area as wilderness and necessary to accomplish the purposes of the refuge, including Wilderness Act purposes. The MRA clarifies the need for and impacts of a proposed action.

Refuge Management Activity: Research and Monitoring

Refuges: Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges (Refuges), along the Pacific Coast of Washington State. They are part of the Washington Maritime National Wildlife Refuge Complex.

Wilderness Designation: In 1967 (USFWS) a Wilderness Study Report was prepared and in 1970 all units, except for Destruction Island, of the three refuges named above became the Washington Islands Wilderness Area (Public Law 91-504).

Refuge Purposes:
The 1907 establishing purpose for all three refuges is "a preserve and breeding ground for native birds and animals" (Executive Orders 703, 704, and 705).

Purposes of the Wilderness Act of 1964, as amended (16 U.S.C. 1131-1136) became additional purposes of the refuges with passage of Public Law 91-504 and establishment of the Washington Islands Wilderness. The purposes of the Wilderness Act are:

- To secure an enduring resource of wilderness;
- To protect and preserve the wilderness character of areas within the National Wilderness Preservation System (NWPS); and
- To administer the NWPS for the use and enjoyment of the American people in a way that will leave these areas unimpaired for future use and enjoyment as wilderness.

National Wildlife Refuge System Mission:
The mission of the National Wildlife Refuge System is "to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of

present and future generations of Americans" (National Wildlife Refuge System Administration Act of 1966, as amended [16 U.S.C. 668dd-668ee]).

MRA Step 1: Determine if it is necessary to take action

These three Refuges contain the majority of the seabird nesting colonies and marine mammal haulout sites in Washington State. Research and monitoring conducted by Service employees and their agents, including NOAA Fisheries and Washington Department of Fish and Wildlife (WDFW), contributes to regional and national conservation efforts for these species. While much of the research and monitoring activity does occur physically outside of wilderness as described below, the subjects of that monitoring are within wilderness. Opportunities to research or monitor these species elsewhere are almost non-existent because the majority of the nesting colonies and haulout sites are within wilderness. If research and monitoring are not conducted, then unobserved impacts to refuge wildlife could go unchecked for long periods of time leading to population declines that may have been preventable if they were detected sooner. Preventing population declines will both benefit wilderness wildlife values, and opportunities for people to observe island wildlife from boats and the mainland.

Step 1 Decision: *Is it necessary to take action?*

Yes _X_ No ____ Not Applicable ____

Explain: Research and monitoring of the most vulnerable refuge wildlife is necessary in order to continue to fulfill the purposes of these refuges as "a preserve and breeding ground for native birds and animals"; maintain the wilderness wildlife values on the Refuges; and help to fulfill the mission of the National Wildlife Refuge System.

MRA Step 2: Determine the minimum tool.

Description of Option #1

Research

Currently refuge staff are not actively conducting research, however it is anticipated that in the next 15 years there would be additional seabird research related to the recently completed Pacific Region Seabird Conservation Plan (USFWS 2005). Other species of concern and controlling invasive species could also be the focus of future research projects. The Service currently authorizes NOAA Fisheries, via a special use permit, to enter the Refuges including the wilderness area and collect scat a few times a year for marine mammal research. Below is a set of criteria which will be used for species conservation and refuge management-related research.

Research Criteria:

- Research that focuses on conservation of species of concern (seabirds, marine mammals) or control of invasive plants and animals.

- Research would be carried out by Service employees or their agents.
- "Generally prohibited tools" would not be used in wilderness.
- Disturbance to wildlife would not increase significantly. The refuge manager occasionally receives requests from universities and others to conduct additional research on the Refuges. Each of these situations is considered on a case-by-case basis regarding value of the research, and impacts to wildlife and wilderness. This type of research is covered under a compatibility determination (see Appendix E-2) and prospective non-Service researchers will be required to prepare a separate MRA for proposed activities within wilderness. The wilderness act does not allow outside researchers and others who are not direct agents of the Service to use "generally prohibited tools" in wilderness portions of the Refuges.

Monitoring

Monitoring is conducted by refuge staff in order to determine seabird and marine mammal population status and trends; document wildlife disturbances; and control invasive species. Most monitoring occurs off-refuge and outside of the wilderness area. This is done to minimize disturbance to wildlife and to the wilderness area. Seabird and marine mammal surveys from aircraft at approximately 500 feet in elevation are conducted up to 5 times a year. Other monitoring is conducted using a spotting scope or binoculars with the observer on the mainland or in a motorized boat in the water surrounding the refuge units up to 30 days a year. On rare instances refuge staff will anchor a boat in the intertidal zone outside the wilderness area and walk onto the Refuge/wilderness area to obtain seabird colony information and/or look for invasive species. At no time is motorized equipment used in the wilderness.

Effects

Research and monitoring is mostly conducted with the researchers or observers situated outside of the wilderness area. During the few times when the wilderness area is entered, it is not altered and no permanent markers/structures are left. Therefore there are no direct physical impacts to the natural conditions in wilderness.

There is some wildlife disturbance associated with overflight surveys, motor boats passing near the islands, and occasional foot entry into the wilderness. The distance to wildlife, timing, and frequency of efforts are all carefully considered to minimize impacts to wildlife while maximizing the information obtained. The Washington Department of Fish and Wildlife (WDFW), Native American Tribes, and NOAA Fisheries also conduct marine mammal aerial surveys over the wilderness area. Since their coordinated aerial surveys combined with ours represent only a few days out of the year, the impacts to wilderness values are negligible.

These Refuges are not open to the public however they are important to the recreational experience of shoreline viewers and to the few people who observe them from boats. Since the duration and frequency of research and monitoring efforts is limited, there are many rocks and

islands (up to 600) in the Washington Islands wilderness, and all of the Refuges and associated wilderness areas are closed to public use, the impacts to solitude are negligible.

Description of Option #2

Research and Monitoring
While no "generally prohibited uses" occur within designated wilderness under Option #1, Option #2 would involve the elimination of aerial surveys over wilderness and motorized boat surveys adjacent to wilderness. Only the islands closest to shore could be researched and monitored using spotting scopes and binoculars from the mainland or possibly from a non-motorized boat. Research and monitoring opportunities from the mainland are limited and non-motorized boats can only safely access the closest islands.

Effects
Wildlife Disturbance from Service activities would be less than in Option #1 however the research and monitoring information that could be gathered would be almost worthless. The most important seabird colonies and marine mammal areas are on islands farther from the mainland where disturbance from humans and predators is less. Consequently the most important wildlife units of the refuges would not be monitored if staff did not use aircraft and motorized boats leading to the same possible negative consequences of not monitoring at all. Potential wildlife population declines would negatively impact the wildlife and other values of the wilderness area.

Step 2 Decision: *What is the Minimum Tool?*

The selected option is #1

Explain: Occasionally accessing the wilderness area on foot; using binoculars and spotting scopes from shore and from the water in a motorized boats outside of the wilderness; and infrequent aerial surveys above the wilderness; are all needed to conduct research and monitoring of the most important wildlife sites on the Refuges. The small amount of wildlife disturbance caused by research and monitoring is minimal compared to the importance of collecting data that contributes to species conservation. These are therefore considered the minimum tools needed to accomplish refuge purposes including wilderness values. They preserve wilderness character and only minimally impact human solitude while benefiting the wildlife values of the wilderness.

No Wilderness Act section 4(c) "generally prohibited uses" are authorized. If the need for them should arise, an additional MRA will be prepared.

NEPA Compliance and Public Review: This MRA is being prepared in association with the Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges Draft Comprehensive Conservation Plan and Environmental Assessment (CCP/EA). It will be available for public review and comment at the same time as the Draft CCP/EA.

References

USFWS (United States Fish and Wildlife Service). 1967. Washington Islands Wilderness Study Areas- Wilderness Study Report. U. S. Department of the Interior, Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife.

USFWS. 2005. Regional Seabird Conservation Plan, Pacific Region. U.S. Fish and Wildlife Service, Migratory Birds and Habitat Programs, Pacific Region, Portland, Oregon.

Signatures

Approved by: _____ 6 Sept. 2006
Kevin Ryan, Refuge Manager (Date)
Washington Maritime NWRC

Concur: _____ 9/13/06
for Linda Watters, Refuge Supervisor (Date)

COMPATIBILITY DETERMINATION

Use: Research

Refuge Name: Flattery Rocks, Quillayute Needles, and Copalis, National Wildlife Refuges

Establishing Authority: These three Refuges, located off Washington State's Pacific coastline in Grays Harbor, Jefferson and Clallam Counties were established by Executive Orders 704, 705 and 703 by President Theodore Roosevelt on October 23, 1907.

Refuge Purposes:
The 1907 establishing purpose for all three refuges is "a preserve and breeding ground for native birds and animals" (Executive Orders 703, 704, and 705).

Purposes of the Wilderness Act of 1964, as amended (16 U.S.C. 1131-1136) became additional purposes of the refuges, except for Destruction Island, with passage of Public Law 91-504 and establishment of the Washington Islands Wilderness. The purposes of the Wilderness Act are:

- To secure an enduring resource of wilderness;
- To protect and preserve the wilderness character of areas within the National Wilderness Preservation System (NWPS); and
- To administer the NWPS for the use and enjoyment of the American people in a way that will leave these areas unimpaired for future use and enjoyment as wilderness.

National Wildlife Refuge System Mission: "To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans." (16 U.S.C. 668dd et seq.)

Description of Use: The Refuge receives periodic requests (less than one per year) to conduct scientific research. Priority would be given to studies that support refuge purposes, goals and objectives. This would include, for example, studies that contribute to the enhancement, protection, use, preservation, and management of native Refuge wildlife populations and their habitats, including the wilderness resource. Research applicants must submit a proposal that would outline: 1) objectives of the study; 2) justification for the study; 3) detailed methodology and schedule; 4) potential impacts on Refuge wildlife and/or habitat, including disturbance (short and long term), injury, or mortality; 5) potential impacts to wilderness; 6) personnel required; 7) costs to Refuge, if any; and 8) end products (i.e. reports, publications). Research proposals would be reviewed by Refuge staff, Regional Office Branch of Refuge Biology, and others as appropriate. Evaluation criteria will include, but not be limited to, the following:
1) Research that will contribute to management will have higher priority than other requests.
2) Research that will conflict with higher priority research, monitoring or management programs may not be granted.

3) Research projects that can be done elsewhere off-Refuge, and outside wilderness, are less likely to be approved.
4) Research which causes undue disturbance or is intrusive, will likely not be granted. Level and type of disturbance will be carefully weighed when evaluating a request. All requests will be carefully considered because many seabird and marine mammal species are very sensitive to disturbance. Also, habitats, particularly soils that support burrowing seabirds are prone to compaction by foot traffic, and burrows are easily crushed.
5) Research evaluation will determine if any effort has been made to minimize disturbance through study design, including considering adjusting location, timing, scope, number of permittees, study methods, number of study sites, etc.
6) If staffing or logistics make it impossible for the Refuge to monitor researcher activity in a sensitive area, this may be reason to deny the request.
7) The length of the project will be considered and agreed upon before approval. Projects will not be open-ended, and at a minimum, will be reviewed annually.

Availability of resources: Direct costs to administer research activities are primarily in the form of staff time, transportation, and equipment acquisition and maintenance. It is estimated that the following level of involvement by Refuge staff will be required annually to adequately manage and monitor research activities over the long term.

Position & GS/WG Level	Involvement	FTE	Cost
Refuge Manager/Deputy Refuge Manager-GS 11/12	Oversight-review proposals Prepare SUP	0.04	$2,493
Wildlife Biologist-GS-11	Review proposals, biological monitoring to ensure compatibility, report review	0.15	$8,448
Admin. Support Asst-GS-06	Provide general administrative support including fund tracking	0.02	$ 614
Maintenance Worker-WG-8	Maintain refuge boats & equipment used; monitor research activities	0.05	$2,145
	Total FTE and Costs	**0.26**	**$13,700**

Additionally, $2,500 would be required to obtain and/or replace materials/equipment (gas, video and still cameras, overflights, etc**)** needed to conduct biological monitoring to ensure compatibility of research projects. A minimal annual operating budget of $16,200 is required.

Anticipated Impacts of Use: Consistent with the stipulations itemized below, minimal impact to Refuge wildlife and habitats will be expected with research studies. Some level of disturbance is expected with all research activities since most researchers will be entering areas that are normally closed to the public and may be collecting samples or handling wildlife. Special Use Permit conditions will include special conditions to ensure that impacts to wildlife and habitats are kept to a minimum.

Public Review and Comment: This Compatibility Determination was distributed for public review and comment as an appendix to the draft Comprehensive Conservation Plan/ Environmental Assessment for Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges.

Determination:

____Use is not Compatible

__X__Use is Compatible with the Following Stipulations

Stipulations necessary to ensure compatibility: If the proposed research methods would impact or potentially impact refuge resources (habitat or wildlife), it must be demonstrated that the research is essential (i.e., critical to survival of a species; refuge islands provide only or critical habitat for a species; or assessment and/or restoration after cataclysmic events), and the researcher must identify the issues in advance of the impact. Highly intrusive or manipulative research is generally not permitted in order to protect native bird and marine mammal populations.

Potential researchers must submit a written study proposal with their request.

Anyone requesting to conduct research in wilderness (all islands except Destruction Island) must prepare a minimum requirement analysis consistent with FWS Policy and adhere to the requirements of the Wilderness Act of 1964 (16 U.S.C. 1131-1136).

Researchers are responsible for acquiring and/or renewing any necessary State and Federal permits prior to beginning or continuing their project.

Research that doesn't involve birds will be conducted outside of the breeding season of avian species using the refuge.

Research will adhere to current species protocols for data collection.

Approved research projects will be conducted under a refuge-issued special use permit which will have additional project-specific stipulations.

Special use permits will be valid for one year only. Renewals will be subject to refuge manager review of research data, status reports, compliance with compatibility determination and permit stipulations, and permits.

Refuge Manager can suspend/modify conditions/terminate on-refuge research that is already permitted and in progress, should unacceptable impacts or issues arise or be noted.

Justification:

Research projects will contribute to the enhancement, protection, use, preservation, and management of native Refuge wildlife populations and their habitats. In view of the potential impacts research activities can have on the U.S. Fish and Wildlife Service's ability to achieve Refuge purposes, sufficient restrictions would be placed on the researcher to ensure that disturbance is kept to a minimum. This program as described is determined to be compatible.

Mandatory Re-Evaluation Date :

_____ Mandatory 15-year Re-Evaluation Date (for priority public uses)

__X___ Mandatory 10-year Re-Evaluation Date (for all uses other than priority public uses)

NEPA Compliance for Refuge Use Decision:

____ Categorical Exclusion without Environmental Action Statement

____ Categorical Exclusion and Environmental Action Statement

_X__ Environmental Assessment and Finding of No Significant Impact (FONSI)

____ Environmental Impact Statement and Record of Decision

Refuge Determination

Refuge Manager Approval: _____ (Signature) 4 Sept 2006 (Date)

Concurrence

Refuge Supervisor: _____ (Signature) 9/13/06 (Date)

Regional Chief, National Wildlife Refuge System: _____ (Signature) 9/14/06 (Date)

Appendix F: Summary of Washington Islands NWRs Wildland Fire Management Plan

Introduction
The Washington Islands National Wildlife Refuges (NWRs) Fire Management Plan (FMP) is written as an operational guide for managing the Refuges' wildland fire program. It defines levels of protection needed to provide for safety, protect facilities and resources, and restore and perpetuate natural processes, given current understanding of the complex relationships in natural ecosystems. The plan is written to comply with a service-wide requirement that refuges with burnable vegetation develop a fire management plan (620 DM 1).

The FMP outlines a program of full suppression of all wildland fires. There will be no prescribed fires or pile burning on any of the refuges, and managing wildland fires for resource benefit (wildland fire use) is not an option at this time.

The mission of the National Wildlife Refuge System (NWRS) is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. The FMP furthers the mission of the NWRS by providing for the protection of firefighters, the general public, structures and facilities, natural and cultural resources, and habitats.

Compliance with Environmental Policy
The Fire Management Plan is a step-down plan of the Washington Islands National Wildlife Refuges Comprehensive Conservation Plan (CCP). The plan complies with the National Environmental Policy Act (NEPA) under the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) completed for the CCP. No additional NEPA compliance is required unless proposed actions exceed the scope of the CCP. The FMP takes appropriate action to identify and protect from adverse effects any rare, threatened, or endangered species. A Biological Evaluation with a "may affect, but not likely to adversely affect" determination was prepared for Washington Maritime NWRC and submitted to the Western Washington Field Office to meet Endangered Species Act (ESA) Section 7 compliance. Compliance with the National Historic Preservation Act (NHPA) will be conducted as needed on a case-by-case basis through submission of a Request for Cultural Resource Compliance form to the Regional Archaeologist in Portland.

Fire Management Objectives
Fire management goals must be consistent with the general management goals and objectives for the Washington Islands Refuges. The overall objective for fire management on the Washington Maritime National Wildlife Refuge Complex is to promote a program that provides for firefighter and public safety, reduces the occurrence of human-caused fires, and ensures appropriate suppression response capability to meet expected wildland fire complexity. Specific fire management objectives are to:

- Promote a fire management program and control all wildland fires.

- Provide for the protection of life, property, and resources from wildland fires at costs commensurate with resource values at risk. This includes all administrative facilities, residences, buildings, equipment storage areas, and refuge signs.

- Use appropriate suppression tactics and strategies that minimize long-term impacts of suppression actions. Promote the use of Minimum Impact Suppression Tactics (MIST).

Historic Role of Fire

Pre-settlement Fires
Wildland fire probably did not have an ecologically significant role on any of the Washington Islands NWRs. It is unlikely that lightning-caused fires were common on any of the smaller islands due to their small size, relative lack of burnable fuels, and generally wet conditions throughout much of the year. If fires did occur, they probably burned with low intensity and were restricted to individual islands. On the larger islands dominated by Douglas-fir, the natural fire regime was probably similar to that described by Agee (1993) in coastal Douglas-fir forests.

Post-settlement Fire History
The region around Washington Maritime NWRC was settled by Euro-Americans in the mid-1800s. Fire exclusion likely began around this period. Active fire suppression limited the spread of fires, and extensive grazing by sheep in some areas removed the fine fuels that normally carried fires. Currently, the Washington DNR defines the typical fire season in the area as running from June to September. A majority of fires in the region are human-caused and start during the dry summer months.

Prescribed Fire History
No prescribed fires have occurred on any of the refuges. At this time, no prescribed fire program is being planned at any of the refuges.

Responsibilities
Washington Maritime NWRC does not have a dedicated fire management organization. The Refuge Manager is responsible for planning and implementing the fire management program on the Complex. The Zone Fire Management Officer (FMO), located at Baskett Slough NWR, is responsible for fire management program oversight. The Refuge Manager will assign fire management responsibilities as collateral duties to appropriate staff who possess appropriate training, experience, and incident qualifications. Prevention planning and work is accomplished by Refuge staff in accordance with national and regional fire management direction under guidance from the Zone FMO. Emergency fire management actions will be handled by Refuge staff according to training and incident qualifications. The Zone FMO will be immediately notified of all emergency actions. Additional information and direction is included in the Fire Dispatch Plan.

Interagency Operations
All fire suppression responses in northwest Washington are coordinated through the Puget Sound Interagency Coordination Center (PSICC). The Center has established a Federal Interagency Agreement for Fire Management with the U.S. Fish and Wildlife Service (Washington Maritime NWRC), Bureau of Indian Affairs (Olympic Peninsula and Puget Sound Agencies), National Park Service (Mount Rainier and Olympic National Parks, North Cascades National Park Service Complex, and San Juan National Historic Park), and the U.S. Forest Service (Olympic and Mt. Baker-Snoqualmie National Forests). The Northwest Washington Fire Protection Service Operating Plan, a step-down from the Master Cooperative Fire Protection Agreement, adds Washington Department of Natural Resources (Northwest, Olympic, and South Puget Sound regions), Bureau of Land Management (Spokane District lands within San Juan County), and the U.S. Army (Fort Lewis). This plan was designed to facilitate fire management services and provide for the efficient and cost-saving utilization of resources, and includes procedures for preparedness, operations, and reimbursement.

Fire Prevention
An active fire prevention program may be conducted, as needed, in conjunction with other agencies to provide for the protection of human life and property, and prevent damage to cultural resources or physical facilities. During periods of extreme or prolonged fire danger, emergency restrictions regarding refuge operations may become necessary.

Hazard Reduction for Structure Protection
Hazard fuel reduction is conducted to prevent wildland fires from spreading onto structures owned by the Service. In the Washington Islands NWRs, the U.S. Coast Guard maintains the grounds and structures (lighthouse, bunk house, water tower, and helibase) on Destruction Island.

Pre-Attack Plan
Upon discovery of a fire, all subsequent actions will be based on the following:

- The Incident Commander (IC) will locate, size-up, and coordinate suppression actions. The IC will complete the pre-attack planning checklist.
- Provide for public safety.
- Considering the current and predicted fire conditions, the Incident Commander will assess the need for additional suppression resources and estimate the final size of the fire. The potential for spread outside of the refuge should be predicted, as well as the total suppression force required to initiate effective containment action at the beginning of each burning period.
- The Incident Commander will assess the need for law enforcement personnel for traffic control, investigations, evacuations, etc., and make the request to the FMO.
- Document decisions and complete the fire report (DI-1202).
- Should a wildland fire move into an extended attack a Delegation of Authority will be invoked. Once a Delegation of Authority has been authorized the Incident Commander will make the final decisions pertaining to the fire.

Fire Management Units
Fire Management Units (FMUs) are land management areas which have common wildland fire management objectives and strategies, are manageable units from a wildland fire standpoint, and can be based on natural or manmade fuel breaks. Due to staff limitations, relatively small land management parcels, long response times, valuable resources, and values at risk on neighboring lands, this plan does not authorize managing wildland fire for resource benefits as an option for any Complex lands. Wildland fires will be suppressed using the appropriate suppression response.

The Washington Islands Refuges consist of two FMUs – Wilderness and Destruction.

> **Wilderness FMU.** Includes all islands within Flattery Rocks, Quillayute Needles, and Copalis NWRs, with the exception of Destruction Island. All lands in this FMU are designated wilderness areas.
>
> **Destruction FMU.** Includes Destruction Island.

Fire Effects
Of primary interest are the effects of fire on threatened and endangered species occurring on or near Refuge lands. Those that might be affected by fire include the brown pelican, marbled murrelet, bald eagle, and Steller (Northern) sea lion. Adult birds would abandon roosts and nests, therefore being unaffected by a fire. Smoke and fire may result in chick mortality. In case of fires, adult marine mammals would abandon their haul-outs; their young could be affected by smoke inhalation and fire if they are unable to follow their parents.

Although the impact of fire on adult birds and marine mammals would be negligible, fire also affects their habitat. Habitat destruction depends on the severity of the fire. A low severity fire may have little impact, as nesting birds might be able to reuse their previous nesting sites or move to other appropriate sites nearby. With a severe fire, nesting sites and appropriate alternatives may be completely destroyed, impacting future productivity.

The other threatened and endangered species that occur near Refuge lands, such as the whales and Lake Ozette sockeye would likely not be directly impacted by fire. After a fire, sediment run-off could be an issue for the sockeye. If retardant is used to suppress the fire, it may leach into the water and affect the sockeye, even though the use of fire retardant is restricted within 300 feet of any water bodies.

Suppression Strategies

The Appropriate Management Response (AMR) is any specific action suitable to meet Fire Management Unit objectives identified in the Fire Management Plan. Any AMR must consider factors such as risks to firefighters and public health and safety, land and resource management objectives, weather, fuel conditions, threats and values to be protected, and cost efficiencies. The *Interagency Standards for Fire and Fire Aviation Operations* lists eight possible AMR options, six of which apply to a suppression response. Of these six, five may potentially be used on the Washington Islands Refuges:

Monitoring From a Distance. Fire situations where inactive fire behavior and low threats require only periodic monitoring from a nearby location or aircraft.

Monitoring On-site. Fire situations that require the physical placement of monitors on the fire site to track the fire's spread, intensity, and/or characteristics.

Confinement. Actions taken where fires are not likely to have resource benefits and an analysis of strategic alternatives indicates threats from the fire do not require costly deployment of large numbers of suppression resources for mitigation or suppression. Typically these fires will have little to no on-the-ground activity and fire movement remains confined within a pre-determined area bounded by natural barriers or fuel changes.

Initial Attack. A planned response to a wildfire given the wildfire's potential fire behaviour. The objective of initial attack is to stop the spread of the fire and put it out at least cost. This is an action where an initial response is taken to suppress wildfires consistent with firefighter and public safety and values to be protected.

Control and Extinguishment. These actions are taken on a wildland fire when the selected WFSA alternative indicates a control strategy. Sufficient resources are assigned to achieve control of the fire with a minimum of acres burned.

The wilderness island setting of the Washington Islands NWRs presents a unique challenge to wildland fire suppression. In a 1986 letter to the Fish and Wildlife Service, the Washington DNR determined the following:

1. The risk of fire on any of the islands is low, and legal access by the public is restricted.
2. The islands within refuge areas are scattered off the coast, which precludes immediate access by the public. Access to the islands requires the use of a boat or helicopter. Surf action along any of the islands makes boat docking a difficult action for most people.
3. The sizes of the islands vary, but they are relatively small. Fire spread on the islands, under worst case scenario, would be rapid.
4. Fire suppression resources are available, but not within the time frame necessary to deal effectively with initial attack. This is due to the inaccessibility of the islands by normal transportation modes.
5. The cost of preparing to deal with rapid initial attack on the islands greatly exceeds the risk of a fire occurring.
6. The possibility of damage occurring to natural wildlife habitat during suppression action may exceed the damage caused by, or offset the positive effects of, a naturally occurring fire.

Therefore, a Confinement or Monitoring from a Distance (from the mainland and/or aerial platform) strategy would likely be most appropriate for the Wilderness FMU. If natural or cultural resources are threatened by a fire, a Control and Extinguishment strategy may be implemented if the Incident Commander decides that containing or controlling the fire is necessary, and that doing so would not endanger the safety of firefighters.

The Destruction FMU has nearly the same situation – isolation from the mainland and generally long response times. However, helicopters may be able to be on-scene quickly, depending on their location relative to a fire. USCG personnel, if present on Destruction Island, would perform initial attack on any fires and control it if necessary. If conditions are too dangerous to directly suppress a fire, a confinement or monitoring strategy may be used.

Approval of Suppression Tactics

A full suppression alternative was selected for the Washington Islands Refuges, which requires confinement, containment, and/or control of all wildland fires. Certain guidelines have been developed to assist with this strategy to protect the refuges from unnecessary damage (see following table).

Heavy equipment and aircraft/retardant use is restricted due to cultural, wildlife, and safety concerns. Unless life or property is at imminent risk, consultation with the Resource Advisor and/or Agency Administrator prior to their use is necessary. This decision is based on the fact that for the Wilderness FMU, there is no place to land helicopters or heavy equipment. For the Destruction FMU, helicopters and heavy equipment could land on the USCG helibase on Destruction Island. Only Destruction Island has boat docks.

Washington Islands Refuges – Wildland Fire Suppression Guidelines		
NOTE: If human life and/or property are threatened, the Incident Commander has the authority to order any suppression strategy or tactic at his/her disposal to mitigate the threat, regardless of FMU.		
	FIRE MANAGEMENT UNITS	
	WILDERNESS	**DESTRUCTION**
FMU Description	All islands within Washington Islands NWRs designated as wilderness (excludes Destruction Island).	Destruction Island.
Special Considerations	Most islands inaccessible. Bald eagles nesting/roosting. Public use prohibited.	Structures present, some historic. Destruction Island has helicopter landing areas. Bald eagles nesting on Destruction Island.
Preferred Suppression Strategies	Confinement or monitoring strategy – confine with natural barriers; monitor from mainland and/or aerial platform; control strategy may be used if resources are threatened.	Initial Attack/Control and Extinguishment – aggressively suppress the fire, holding it to the fewest burned acres as possible within safety constraints.
Suppression Tactics	**Must be approved by:**	
Handline/Chainsaws	Prohibited	Incident Commander
Dozer Line	Prohibited	Resource Advisor/Agency Administrator
Foam/Retardant	Prohibited	Resource Advisor/Agency Administrator
Water drops	Resource Advisor/Agency Administrator	Incident Commander
Off-Road Travel	Prohibited	Incident Commander
Safety Considerations	Nearly impossible access by air or water; escape options limited.	Access by air or water may be difficult (weather); escape options limited.

Wildland Fire Situation Analysis

For fires that cannot be contained in one burning period, a Wildland Fire Situation Analysis (WFSA) must be prepared. In the case of a wildland fire, the Refuge Manager, in conjunction with the Zone FMO, will prepare the WFSA. Approval of the WFSA resides with the Refuge Manager. The purpose of the WFSA is to allow for a consideration of alternatives by which a fire may be controlled. Damages from the fire, suppression costs, safety, and the probable character of suppression actions are all important considerations. Every attempt will be made to utilize natural and constructed barriers, including changing fuel complexes, in the control of wildland fire. Rehabilitation efforts will concentrate on the damages done by suppression activities rather than on the burned area itself.

Aircraft Operations

Aircraft may be used in all phases of fire management operations. All aircraft must be Office of Aircraft Services (OAS) or Forest Service approved. An OAS Aviation Policy Department Manual will be provided by OAS.

Post-Fire Rehabilitation and Restoration

There are three methods of repairing damage caused by wildland fires and wildland fire suppression activities – emergency stabilization, rehabilitation, and fire suppression activity damage repair. Any

treatment or activity will have an approved plan developed prior to implementation. Monitoring specifications will be included in the plan for each treatment or activity. Implementation activities will be conducted in a manner that is compatible with long-term goals outlined in approved land management plans, including the Washington Islands Refuges CCP, and in compliance with applicable law and policy, including the National Environmental Policy Act, Endangered Species Act, Clean Water Act, and National Historic Preservation Act.

Fire Investigation
Fire management personnel will attempt to locate and protect the probable point of origin and record pertinent information required to determine fire cause. They will be alert for possible evidence, protect the scene and report findings to the fireline supervisor.

Public Safety, Information, and Education
Washington Maritime NWRC is dedicated to providing for the safety of each visitor and all residents and property adjacent to the refuges' boundaries. The Washington Islands Refuges are closed to public access. During periods of high or extreme fire danger, signs may be posted at visitor centers and local bulletin boards. Information on active fires may be posted in public places. The Incident Commander should provide for the safety of any individuals affected by wildland fires on these refuges.

Educating the public on the value of fire as a natural process, or of the consequences of fire in areas that are not normally subjected to natural fires, is important to increasing public understanding and support for any fire management program. The Complex will use the most appropriate and effective means to explain the overall fire and smoke management program as needed. This may include supplemental handouts, signing, personal contacts, or media releases. When deemed necessary, interpretive presentations will address the fire management program and explain the role of fire in the environment. A program of internal and external education regarding potential fire danger may be implemented. Visitor contacts, bulletin board materials, handouts, and interpretive programs can be utilized to increase visitor and neighbor awareness of fire hazards.

A full copy of the Washington Islands NWRs Wildland Fire Management Plan is available upon request. Please visit the Washington Maritime National Wildlife Complex Headquarters at 33 South Barr Road, Port Angeles, WA 98362, or call (360) 457-8451 to obtain a copy.

Appendix G: Implementation

Step-Down Management Plans

Step-down management plans provide additional guidance to implement the goals and objectives identified in the CCP. The only step-down plan associated with the Washington Islands NWRs CCP at this time is a Fire Management Plan. The FMP was completed in 2004 for the entire Washington Maritime National Wildlife Refuge Complex, and was split in 2005 to better fit the CCPs that are being prepared for the Complex's refuges. A summary of the FMP for the Washington Islands NWRs can be found in Appendix F. The wilderness plan for the Washington Islands Wilderness is incorporated into the CCP; therefore, no step-down plan is needed.

Partnerships

Partnerships are an important component of the implementation of the Washington Islands NWRs' CCP and are reflected in the goals, objectives, and strategies identified in Chapter 2. Refuge staff will work to strengthen existing partnerships with other federal agencies, State agencies, local Tribes, organizations and individuals. They will also look for new partnerships to assist in achieving the goals and objectives, and strategies set forth in this CCP.

Staffing

Current staffing and proposed staffing are shown in two organizational charts at the end of this appendix. The proposed chart shows a 2.15 full-time-equivalent increase in staffing over current levels. Additional staffing would provide: increased coordination with other Federal agencies, State agencies, and Tribes; visitor safety and law enforcement to reduce wildlife disturbance; and environmental education and interpretation of marine resources.

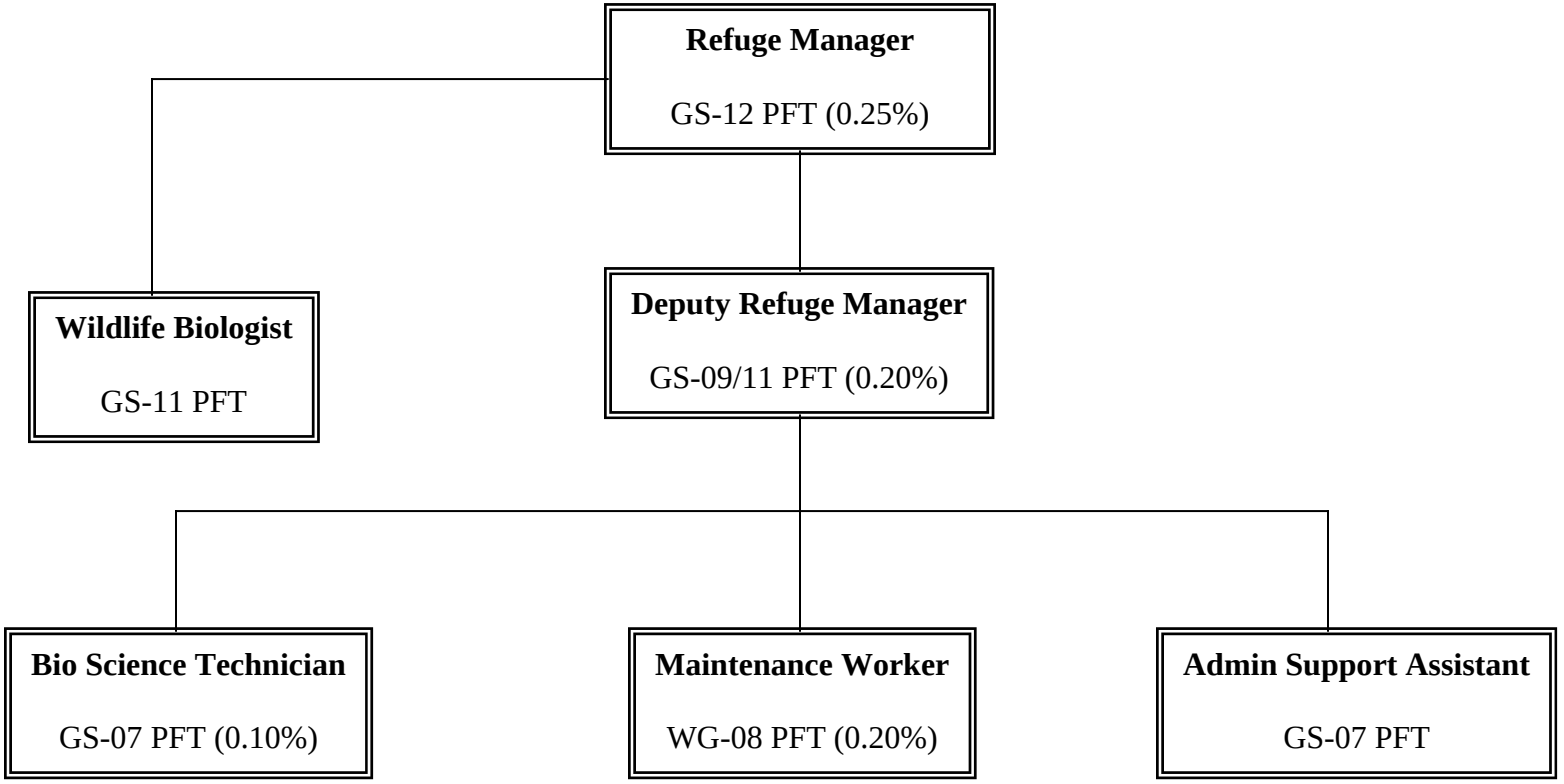
Budget Requests

The following table represents budget requests for RONS (Refuge Operating Needs System) projects. These guide the funding of CCP goals and strategies and will financially enable the Washington Islands National Wildlife Refuges to carry out its plans under the CCP.

Refuge Operating Needs System

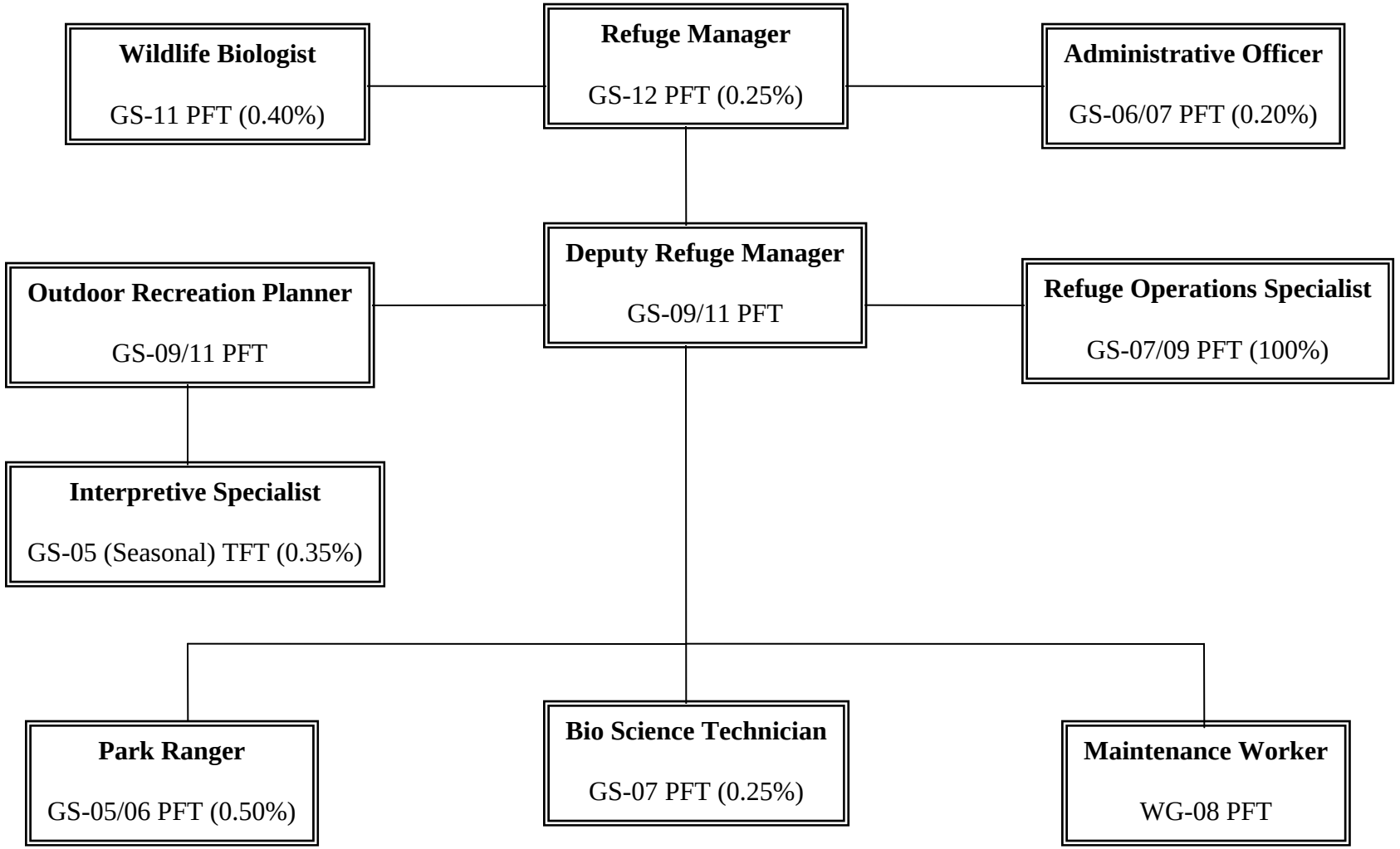
Project No.	**Title** and Description	Cost Estimate (Thousands)	Station Rank
00002	**Monitor wildlife response.** Seabird populations off the Washington coast have declined in recent years. Approximately 80% of the seabirds in the State of Washington nest within our coastal refuges. We would conduct surveys to provide vital data about Trust Resources such as: • preferred feeding and roosting areas for migratory birds • migration patterns of migratory birds • marine mammal distribution, abundance, and behavior • total numbers of a variety of species We would set up a GIS database to help us manage information.	$54.6K	11
99001	**Improve protection and management of seabirds and marine mammals: Assistant Refuge Manager.** More than 870 refuge islands extend along 100 miles of Washington coastline. Numerous Federal, State, local, and tribal entities are involved in marine management issues on the outer coast. An Assistant Refuge Manager (GS-7/9) would coordinate efforts with these entities, conduct outreach and education, monitor, and patrol. These activities will improve seabird and marine mammal protection for our remote refuge islands.	$144.7K	12
01002	**Improve protection and management of seabirds and marine mammals: equipment, facilities, and supplies.** Provide equipment, facilities, supplies, and training needed to support Assistant Refuge Manager position (Project 99001, above).	$180K	12
97002	**Develop refuge video to increase outreach and education.** The video will focus on the value of offshore islands as undisturbed habitat for sensitive species such as nesting seabirds, endangered species, and marine mammals. We will enhance education efforts by using the video at special events, loaning it to cooperators, and distributing it to schools and other interested groups.	$46.7K	14
97002	**Improve resource Protection, Education, and Outreach (0.25% of full time Education/Recreation Specialist)** An education/recreation specialist will improve visitor safety, law enforcement, outreach, education, and volunteer coordination. Wildlife disturbance will be reduced while environmental education and partnerships will increase.	$35K	2
05NNN	**Public Education and Recreation** Our share of construction and operation of a interagency interpretive center on the Washington Coast to serve the Washington Islands NWRs, Olympic National Park, and Olympic Coast National Marine Sanctuary. Includes funding for seasonal interpretive specialist and Park Ranger.	$327K	24

Current Staffing for Washington Islands Refuges



PFT = Permanent Full Time
TFT = Temporary Full Time
(#.##%) = Percentage of year Washington Maritime NWR Complex position that works on Washington Islands Refuges

Proposed Staffing for Washington Islands Refuges



Appendix H: Public Comments and Service Responses

Introduction

This appendix addresses comments that were received on the Washington Islands Draft Comprehensive Conservation Plan and Environmental Assessment (Draft CCP/EA, May 2005) during the official public comment period from June 1-June 31, 2005. Additionally, comments dated by July 15, 2005 and Hoh Indian Tribe comments received May 10, 2006, were also included and are addressed in this appendix. Comments were received by letter, fax, e-mail, and phone. Substantive comments were summarized into 11 topics. Under each topic, comments are paraphrased, lettered, and followed by the Service's responses. Copies of original comments are included in the specific comments section. Comments taken over the phone were paraphrased and therefore are not exact copies of the original phone conversation. The following list of comment topics is provided to help direct readers to comments and responses that most interest them.

Summary of Comments and Service Responses **Page**

1. Alternatives H-2
2. Biological Resources H-3
3. Contaminants H-4
4. Cultural Resources H-7
5. Disturbance H-10
   - Boat-free Zone H-10
   - Overflights H-11
   - Other Disturbance H-14
6. Interagency and Tribal Coordination H-15
7. Invasive species H-19
8. Monitoring and Research H-20
9. Public Awareness of the Refuges and Wildlife Resources H-22
10. Socioeconomics H-24
11. Tribal Treaty Rights H-25

Specific Comments **Page**

Native American Tribes

Hoh Indian Tribe H-33
Makah Tribal Council H-35
Quileute Tribal Council H-42
Quinault Indian Nation H-48

Federal, State, and Local Government Agencies

Olympic Coast National Marine Sanctuary (Sanctuary) H-52

Olympic National Park (ONP) H-55
U.S. Coast Guard (USCG) H-57
Washington Department of Fish and Wildlife (WDFW) H-58
Washington Department of Natural Resources (WDNR) H-59
Forks City Council H-61

Nongovernment Organizations
Audubon Washington H-62
Defenders of Wildlife H-64
Ocean Advocates H-66
Olympic Coast Alliance H-67
Olympic Peninsula Audubon H-68
Pacific Seabird Group H-68
The Nature Conservancy H-70

Individuals
Lonnie Archibald H-72
Larry Leonard H-72
Donald McKelzey H-73
Michael McMinn H-73
C.D. Peevey H-74
B. Sachau H-75
Eric Taylor H-75

Summary of Comments and the Service's Responses

1. Alternatives

A. Comment: We support the proposed Alternative B with it's increased emphasis on reducing disturbance, improving interagency cooperation, enhancing research and monitoring, and increasing public outreach and education (Audubon Washington, Olympic Penninsula Audubon, Olympic Coast Alliance, and Michael Mc.Minn).

Service Response: Thank you for your comment**.**

B. Comment: We support some but not all aspects of Alternative B; we recommend changes or additions to this alternative (Makah Tribal Council, Sanctuary, USCG, Defenders of Wildlife, Ocean Advocates, Pacific Seabird Group, and The Nature Conservancy).

Service Response: Thank you for your comment regarding portions of Altenative B. Other comments regarding Alternative B are addressed under appropriate topics below.

C. Comment: I see no reason to choose an alternative (B. Sachau).

Service Response: The National Environmental Policy Act (NEPA) requires that a reasonable range of alternatives be considered. The Draft and final CCP/EA meet the minimum requirements for identifying and analyzing a "no action" or status quo alternative (Alternative A) and at least one action alternative (Alternative B).

2. Biological Resources

A. Comment: 2.3.2 Sensitive Species Protection is well thought out. 2.3.3 Wilderness Protection is paramount for the Washington Islands Wilderness Area. We support these programs. Chapter 3 and Chapter 4 appear to cover most, if not all, anticipated effects and consequences. We commend you on a comprehensive set of Appendices. (Olympic Coast Alliance)

Service Response: Thank you for your comment.

B. Comment: Page 3-6, paragraph 1 (end of paragraph): Sardine and hake are not currently in decline. Please obtain current information from Pacific Fishery Management Council. Stocks are considered rebuilt. (Quileute Tribal Council)

Service Response: The Service has changed the text to read: "There is concern over Pacific hake and sardine populations because of the relative importance of these two species in seabird and marine mammal diets."

C. Comment: Page 3-11, Birds. In general, references seem out of date. You need to update references and include current research conducted in the NWR., if any exist, or mention that these references are the most recent peer articles. Page 3-18, par 2; Is the Kress reference specific to NWR or in general? This needs to be clear. (Quileute Tribal Council)

Service Response: While there has been some species specific research done on the refuges, the references are the most recent ones we found. Although Kress's work was not conducted on Refuge islands the Service cites his work to show the importance of island habitats and the threats to the species dependent on them.

D. Comment: Chapter 3 affected environment, Page 3-18, last paragraph: Brown pelicans are in La Push, as well (Quileute Tribal Council). Page 3-19. first paragraph. Is the Hoh River a "favored spot:" as hundreds of pelicans are seen there on the sand bars (ONP)?

Service Response: Yes, pelicans do use the sand bars of the lower Hoh River and are also seen around La Push. Since the CCP deals primarily with Refuge islands, we did not mention those other areas.

E. Comment: It should be noted that several species with special status may be missing from the list in Table 3-2 such as western grebe, common loon, and gray whale (Audubon Washington).

Service Response: The Service only included those species that have been documented on the Refuges' islands in Table 3-2, not those that occur in the waters off the Refuges.

F. Comment: Section 3.4 would be more accurate if a website were referenced for updates on listed species, state and federal. Otherwise, your document becomes immediately out of date as species are added or removed. (Quileute Tribal Council)

Service Response: The Service has added the web sites to the bibliography and added a sentence referencing them at the end of the first paragraph in section 3.4.3.

G. Comment: Page 3-32, third paragraph: Commercial fishing in Marine Sanctuary waters (ONP). Commercial and recreational fishing, and invertebrate and marine plant harvesting is allowed and is managed by the Sanctuary and NOAA, however the CCP does not discuss it at all. Even though the use is not controlled by the Service, it does significantly affect the birds and mammals that are under the refuge's jurisdictions. The CCP should describe these activities and their impacts to refuge lands and resources. A compatibility determination should be considered for these activities due to the potential for serious impacts to refuge wildlife and resources. Defenders support the refuges working with NOAA and Tribal agencies to ensure that the activities do not harm refuge resources. (Defenders of Wildlife)

Service Response: While we recognize the importance of ocean resources including fish, invertebrates and marine plants to refuge wildlife, addressing the harvest of these off refuge resources is outside the scope of this CCP planning process. In Chapter 1, Section 1.7.3 we have identified the key issues addressed in this plan. Compatibility determinations are conducted only for existing or proposed activities on national wildlife refuges and where the Service has the authority to regulate the activity.

H. Comment: To protect seals, sea lions, and birdlife we must focus our efforts on the mouths of such rivers as the Hoh and Quillayute where Native Americans often shoot the various species which inhabit our marine sanctuary (Lonnie Archibald).

Service Response: The Service will cooperate with the Tribes, NOAA Fisheries and the State to ensure that all wildlife harvest is legal.

3. Contaminants

A. Comment: Given the severity of risk posed by a major oil spill and public process currently underway to address these issues, progress needs to be made on this effort prior to completion of the CCP/EA. We look forward to working with you to protect our shared resources from the long-term effects of a major oil spill. The Makah Tribe has created the new Office of Ocean and Coastal Resources to coordinate and advance various oil spill related activities the tribe is engaged in. We encourage you to contact Tribal member, Chad Bowechop who is coordinating this effort on behalf of the Tribe. (Makah Tribal Council)

Service Response: We commend the Makah Tribe's leadership in creating an office to coordinate oil spill issues and identifying a central point of contact. The Service's commitment to strengthening our relationship with the Tribe and working together to protect Refuge resources is ongoing and will continue throughout the CCP planning process. Upon completion of the CCP, the framework for focusing our management efforts in a holistic manner will be in place, and implementing new prescribed management actions can begin, including pursuing new Refuge resource protection and conservation opportunities and partnerships.

B. Comment: We would welcome the development of a joint list of actions to be taken in the event of an oil spill (Makah Tribal Council). We commend the refuges' involvement in oil spill reduction efforts and participation in periodic updates of the Outer Coast Geographic Response Plan. However, we encourage the continued development and participation in regional cooperative plans regarding oil spills and the development of a refuge plan. A refuge complex-specific oil spill plan would clearly define the precautionary and mitigation activities that should be undertaken and would help to fully protect the resources of the refuges. (Defenders of Wildlife) In addition to participation in planning activities, funding should be requested for the Service to provide staff support for response actions should there be a spill in the area of the refuges (The Nature Conservancy).

Service Response: We look forward to consulting and coordinating with the Tribes, the Sanctuary, Olympic National Park, and other agencies to develop an effective oil spill response capability. The Service uses the Washington State Response Plan as we need to coordinate on a larger scale because any oil spill will go beyond Refuge boundaries. Refuge staff will respond to any oil spill and support response actions.

C. Comment: We urge the Service to consult with the Makah Tribe and the Sanctuary on the development of a letter to be submitted to Washington Department of Ecology commenting on the ongoing contingency plan rulemaking process and calling for increased protection of our trust resources on the outer coast (Makah Tribal Council and Ocean Advocates). The Sanctuary recommends that the refuge remain engaged in regional oil spill contingency planning, including Washington Department of Ecology's contingency plan rulemaking process and discussions on alternative response technologies (Sanctuary).

Service Response: The Service will continue to review the Washington Department of Ecology's (WDOE) contingency plan rulemaking process and provide comprehensive comments

directly to WDOE that encompass concerns we share with the Makah Tribe, the Sanctuary, and others; issues specific to Refuge resource protection and safety; and issues specific to Service responsibilities such as endangered species. The Refuge will continue to work with all affected parties (Federal, Tribal, State and NGO) to actively support oil spill prevention programs and oil spill contingency planning. We will continue to work with WDOE and other partners to address the use of in situ burning and dispersants.

D. Comment: We urge you to write a letter to WDOE expressing your support for long term funding of a mission capable rescue tugboat at Neah Bay (Makah Tribal Council). We encourage a full tool kit of oil spill response capacity including rescue tug, high seas boom and skimming capability and in situ burning and dispersants application (Ocean Advocates). We support placement of a mission capable rescue tug at Neah Bay (ONP). The Service should provide cost share for the expense of a rescue tug at Neah Bay along with NOAA, the Coast Guard, Washington State, and local Tribes (The Nature Conservancy).

Service Response: The Service supports stationing a rescue tug at Neah Bay and a full range of response capabilities including high seas boom, skimming, and in situ burning. The effectiveness of using dispersants in cold water needs more research prior to our recommending their use in the vicinity of the Refuges. It is unlikely that the Service will receive funding to support a rescue tug. Service staff will continue to respond to any oil spill and support response actions.

E. Comment: The Coast Guard conducted a cost-benefit study that showed a tug at Neah Bay was an expensive measure in comparison to the risk mitigation value. The rescue tug provides a measure of benefit and safety for a specific area of the waterway, whereas there may be alternatives that would benefit the entire waterway. I would encourage you to also explore alternatives that would benefit the entire region such as improving the Vessel Traffic Service (VTS), weather prediction sensors, improved decision making tools for dealing with vessel controls, and broader standby tug availability (USCG).

Service Response: The Service continues to support stationing a rescue tug at Neah Bay and agrees that all methods to protect the area from oil spills need to be explored. With this in mind we have added an additional achievement strategy under Objective WH2 including the methods you mentioned.

F. Comment: Work with Makah Tribe and oil spill agencies to call for oil spill drills that will accurately test the existing response capacity off the refuges (Makah Tribal Council and Ocean Advocates).

Service Response: The Washington Department of Ecology already has an ambitious oil spill drill schedule for 2006, however, none of the drills occur on the outer coast. We are available to work with the Makah Tribe and others in requesting that drills be conducted off the outer coast of Washington.

G. Comment: Work with the Makah Tribe as we complete the Ecological Risk Assessment with the Coast Guard and other State and Federal agencies defining when and where dispersants,

in situ burning, and conventional recovery efforts need to be applied to an oil spill off the Olympic Coast (Makah Tribal Council).

Service Response: We have participated in the most recent Ecological Risk Assessment (ERA) workshop that spanned three sessions in 2005. We look forward to continuing the ERA process as research data become available regarding the use of dispersants in cold waters.

H. Comment: The National Marine Sanctuary Hazardous Incident Emergency Logistics Database System (SHIELDS) contains information useful to agency managers, tribes, response personnel and affiliated research staff. WDNR, the Sanctuary and WDFW are among the agencies who have submitted data to the project at this time. Data layers from the Service would be very useful to this project, especially in the event of a significant oil spill or hazardous material release in the vicinity of the refuge complex. (Sanctuary)

Service Response: There are numerous useful data layers that we have yet to develop. Realizing the utility of SHIELDS, appropriate data layers will be shared when they are developed.

I. Comment: Page 4-4, sec 4.4.2, Fish: Alternative A is likely to be value neutral with regard to impact on fish by oil spills. The Sanctuary already addresses oil spills. Negative determination is overstated. (Quileute Tribal Council and Quinault Indian Nation)

Service Response: We concur and have modified section 4.4.2 to reflect a value neutral impact. We consider ourselves partners with the Sanctuary, Tribes and all other entities in reducing the impacts from oil spills.

J. Comment: The Coast Guard fully supports the removal of garbage and hazardous waste that has the potential to damage the environment. However, in various sections of the Draft CCP/EA it is implied that removal of "debris" includes removal of the remaining buildings and structures at Destruction Island. Complete removal of all man-made improvements on the island would require the expenditure of significant resources. Further, the negative impacts of removal in terms of industrial activity including the need to remove the large amount of debris by helicopter sorties, may exceed the benefit of removal. There may also be historical issues that will require close consultation with the State Historic Preservation Officer. Prior to agreeing to participate in this significant effort, a thorough assessment should be conducted to assure ourselves that this is the correct course of action. Even if it is determined to be beneficial, this will be an extremely resource intensive endeavor that will have to compete with other funding priorities of the Coast Guard. (USCG)

Service Response: We concur that a thorough assessment should be conducted jointly. The Service acknowledges the clean up work already done by the Coast Guard and wants to encourage and partner with the Coast Guard to continue this process where it is critical and feasible, and in compliance with Federal and State regulations including consultation with the State Historic Preservation Officer. We modified objective WH3 and added a strategy to conduct an assessment to prioritize debris removal tasks based on environmental impacts of the debris, removal methods, and costs.

K. Comment: Removal of human-generated debris under Objective WP1 is an admirable activity however a public education campaign discussing the problems associated with marine debris would help to lessen the cleanup work. By educating the public about the harm done to marine mammals, birds, and invertebrates due to marine debris, the generation of this debris may be reduced in the immediate area of the refuge. Reaching out to the fishing community and educating them about these issues will be beneficial to the refuge. (Defenders of Wildlife)

Service Response: There are a number of agencies and NGOs that already have marine debris educational programs. The Service will work with these groups to enhance dissemination of their information.

L. Comment: The Hoh Tribe favors the removal of some of the building and man-made structures from Destruction Island (Hoh Indian Tribe).

Service Response: Thank you for your comment.

4. Cultural Resources

A. Comment: We feel that cultural resource management as described in the CCP could be strengthened by the addition of cultural resource goals or objectives. As a federal agency the refuge is obligated under the National Historic Preservation Act to inventory and potentially manage cultural resources. (Sanctuary, ONP)

Service Response: We added language to section 2.4 Common Features Among the Goals, Objectives, and Strategies, that describes our obligations and actions to protect cultural resources. We added a strategy under Research and Monitoring (RA1 D) to conduct an ethnographic study and we added a strategy under Public Education Management (PE3 C) to educate people about cultural resources.

B. Comment: Page 1-21, paragraph 4, Spiritually significant sites; and page 3-28. No ethnographic study has been done specifically for the Refuges. An ethnographic study should be proposed to identify the important ethnographic resources and identify those eligible to the National Register as Traditional Cultural Properties. Study could address indigenous place names, oral histories relating to islands, traditional bird egg harvest, seal and sea otter hunting history, early history of reserve management including native reserve wardens, as well as the spiritually significant sites. This could be done utilizing oral history, archival review, current interviews, early photos, maps, and other ethnographic studies. (ONP)

Service Response: We added a strategy under the Research and Monitoring theme (RA1 D) to conduct an ethnographic study of the Washington Islands Refuges. We are supportive of ethnographic research that does not negatively impact wildlife and wilderness resources of the Refuges.

C. Comment: Section 1.7.3, page 1-21. The final paragraph under Issue 2 should also indicate that the Makah Tribe considers Ozette and Tskawahyah (or Cannonball/Indian) Islands to be of cultural and spiritual importance (Makah Tribal Council).

Service Response: We added this information.

D. Comment: Page 2-14, section 2.3.5 Research and Monitoring Activity Management. There is no mention of monitoring of archeological resources. Documented archeological sites within the three refuges need to be monitored on a regular basis to determine if there has been any damage or changes in condition due to human causes (vandalism, unauthorized uses, or operations, etc.) or natural causes (erosion, animal burrowing-birds and rabbits). (ONP)

Service Response: We added language in section 2.4 Common Features Among the Goals, Objectives, and Strategies, that describes our obligations and actions to protect cultural resources.

E. Comment: Section 3.5, page 3-27. Reflecting the Tribe's strong cultural ties to their usual and accustomed grounds and stations, many of the rocks and smaller islands in the Refuges were named by the Makah long before these waters were formally charted. In addition, Makah legends are based on or make reference to these rocks. The Draft CCP/EA should note this fact and mention that a documentary film exists in which Makah elders were taken out in boats to discuss the names and stories of the rocks. The Makah Museum and Cultural Center has records of these named rocks (Makah Tribal Council). In section 3.5.1, page 3-27 and 3-28, you have not integrated information provided by Quileute Natural Resources Staff and elected officials at our meetings, that gathering gull eggs, was a regular part of the subsistence diet. You should list all of the diet. (Quileute Tribal Council)

Service Response: We acknowledge that the CCP does not have complete cultural resource information and that it is not a definitive work on the subject. We added a strategy to the research and monitoring goal to do an ethnographic study. We feel that the additional information you mentioned would be more appropriate to include in the ethnographic study rather than the CCP. Working with the Tribes and their cultural staff would be an important part of conducting an ethnographic study of the area.

F. Comment: Section 3.5.1, page 3-28. To say the Quileute were "situated" at the mouth of the Quillayute River is incorrect. The headquarters may have been there, but fishing camps were upstream in the four major tributaries. Tribes were not restricted to mouths of rivers. Hunting/fishing occurred through out the NW on land and sea. (Quileute Tribal Council, Quinault Indian Nation)

Service Response: We changed the sentence to read "the Quileute focused their salmon and other river fishing activities along the Quillayute River and its tributaries. . . " The text already mentions upland hunting and ocean harvesting.

G. Comment: 3.5 Cultural Resources. There are two listed archeological sites on Destruction Island, documented by Berglund (ONP).

Service Response: We added the record numbers of the two Destruction Island prehistoric midden sites to the second paragraph of section 3.5.

H. Comment: Page 3-34. The Quileute and Hoh "tribes" do not have allotments on the Quinault Reservation; some individual tribal members have allotments (Olympic National Park). Page 3-29 History, 3.5.3: Last paragraph on page 3-30. You need to add that Hoh and Quileute tribal members still own allotments in the Quinault Reservation area, even though their ancestors moved to their very small reservations in the 1800s. You allude to this on page 3-34 under section 3.9 Socioeconomics. (Quileute Tribal Council).

Service Response: We changed the sentence under Socioeconomics to read: "Hoh and Quileute tribal members still own allotments on the Quinault Indian Reservation and are entitled to some of the timber revenue."

I. Comment: Page 3-30 first paragraph. Ozette is not part of the Makah Reservation. It is still the Ozette Reservation. It is held in trust for the Makah Tribe. Third paragraph. A one-mile square "reservation" is missing from this sentence. Page 3-32 first paragraph. Mike Girling's name is spelled incorrectly, it is spelled "Gurling". (ONP)

Service Response: We made these changes.

J. Comment: Page 4-12. Is this the first mention of TCPs? They should be mentioned earlier and also included in the glossary. (ONP)

Service Response: We also mention TCPs (Traditional Cultural Properties) at the end of section 3.5.2. We added this term to the glossary.

K. Comment: Page 4-12, Cultural Resources. It is important for the Service to recognize that the traditional gathering of food by tribes is a cultural practice, as much as any artifacts are cultural. Most anthropological or archeological references to tribes indicate this. (Quileute Tribal Council, Quinault Indian Nation)

Service response: The Service introduces traditional gathering practices in section 3.5.1 of the Draft CCP/EA. The Service recognizes that the modern practice of gathering traditional resources is important to tribes and the Service addresses these as trust resources rather than cultural resources as defined by the National Historic Preservation Act (NHPA). NHPA is designed specifically to deal with the physical remains left by people in the past. The Service's Native American Policy speaks of traditional activities and Refuge staff members are prepared to address them in the proposed MOUs (CP1, Strategy D) with each Tribe.

L. Comment: Tribal members consider Destruction Island as a part of their heritage. Any activities, especially cultural surveys, on Destruction Island should be with the active participation of the Hoh Tribe (Hoh Indian Tribe).

Service Response: We added language in the section 2.4 Common Features Among the Goals, Objectives, and Strategies, that describes our obligations and actions to protect cultural resources which includes consultation with Native American tribes.

5. Disturbance (Also see 8C and 11G)

Boat-free Zone

A. Comment: We support the establishment of a 200-yard boat-free zone around refuge islands to protect nesting seabirds and marine mammals that use the islands (Sanctuary, Defenders of Wildlife, Olympic Penninsula Audubon). The 200-yard boat-free zone (strategy WH1 D and WH7 B) and 200-yard tideland lease (strategy WH1 E) are probably the most important actions that could be taken to improve management of the refuges. Buffers would have the effect of helping to protect both the animals living in the colonies on the shore, and also in waters adjacent to the colonies as well. (The Nature Conservancy) A boat-free zone would promote the pristine wilderness aspect of the islands and further protect the unique wildlife resources especially as ecotourism activities are likely to increase (Defenders of Wildlife).

Service Response: Thank you for your comment. Due to the difficulty of trying to establish a boat-free zone in navigable waters off the Washington Coast, WH1 D and WH7 B have been changed to promote voluntary 200-yard boat-free zones around Refuge islands. The Service will continue to pursue tideland leases with Washington Department of Natural Resources around the more important wildlife islands to afford additional protection to these critical areas.

B. Comment: It will also be critical to work with fisheries managers to educate the fishing public about respecting the buffer zones around the islands (The Nature Conservancy). It is crucial that the Refuges promote this boating restriction and work with NOAA and other relevant agencies to gain cooperation and enforcement capabilities (Defenders of Wildlife).

Service Response: An important component of the voluntary 200-yard boat-free zone will be an outreach program to educate boaters to the adverse impacts to wildlife from disturbance caused by boating too close to islands. A poster titled "Help Protect Marine Wildlife" describing the vulnerability of wildlife on the Washington Coast to human disturbance, and boating and recreational guidelines, has already been produced by the Fish and Wildlife Service. This and other outreach tools will be used to educate boaters. Although the boat-free zone is now voluntary, any actions that disturb wildlife are enforceable under existing National Wildlife Refuge System regulations (50 CFR 27.51). The Service will cite wildlife disturbance offenders and continue to work with the various Tribes, agencies and publics to educate and seek voluntary compliance of the 200-yard boat-free zone.

C. Comment: We see the value in promoting a boat-free zone but suggest concentrating efforts around the most sensitive islands. We think that careful analysis should be done to not only consider the locations of major seabird colonies and marine mammal haul outs but also consider fishing practices, recreational boating patterns, anchoring areas, and hazards to navigation. We would be interested in participating in this process. (Sanctuary)

Service Response: The Service agrees that after careful analysis of a variety of parameters efforts should concentrate on those islands considered most sensitive although all the islands provide important habitat for many species dependent on the marine environment. The Service will continue to pursue tideland leases with Washington Department of Natural Resources around the more important wildlife islands to afford additional protection to these critical areas.

D. Comment: Sanctuary staff will occasionally need to be inside the 200-yard boat-free zone to conduct research and management activities. We would be happy to discuss concerns with refuge staff and possibly address them in the MOU suggested in CP6. (Sanctuary)

Service Response: The Service agrees that the MOU would be an appropriate venue to address our mutual needs and concerns including the boat-free zone.

E. Comment: We strongly disagree with the Service's proposal to establish a 200-yard boat-free zone around the islands. This would eliminate fishing for bass, lingcod, bottom fish, and all other fishing that occurs in this type of habitat. Fishing near islands has never had much effect on birds or mammals so this action should not be considered. (L. Archibald, C.D. Peevey, L. Leonard)

Service Response: Studies have shown that seabirds and marine mammals are disturbed by boats. Reducing disturbance will help to ensure the continued presence of these species that depend on coastal habitats. Due to the difficulty of trying to establish a boat-free zone in navigable waters off the Washington Coast, WH1 D and WH7 B have been changed to promote voluntary 200-yard boat-free zones around Refuge islands. The Service will continue to pursue tideland leases with Washington Department of Natural Resources around the more important wildlife islands and to enforce existing National Wildlife Refuge System regulations (50 CFR 27.51) to cite wildlife disturbance offenders.

F. Comment: We are opposed to the 200-yard boat-free zone. This will have a tremendous impact on fishing and tourism in our area. Public hearings need to be held in the Forks area to give local citizens the opportunity to comment. By these comments to you we are officially requesting that an economic impact study be competed as part of your rule making process (Forks City Council).

Service Response: Due to the difficulty of trying to establish a boat-free zone in navigable waters off the Washington Coast, WH1 D and WH7 B have been changed to promote voluntary 200-yard boat-free zones around Refuge islands. Establishing this voluntary boat-free zone will help protect breeding and resting seabirds and marine mammals and ensure species presence and viability to the visiting public, including an ever increasing eco tourism industry. This is not a new rule making process as we will use existing National Wildlife Refuge System regulations (50 CFR 27.51) to cite wildlife disturbance offenders. We added this as a strategy under objectives WH7 E. There are additional bottom fishing and other types of fishing opportunities outside of the voluntary 200-yard boat-free zone. We do not plan on doing an economic impact study for the reasons mentioned above. While we did not conduct public hearings we have provided opportunities for public citizens to provide comments during the CCP planning process.

Overflights

G. Comment: I am opposed to any attempted restrictions (altitude or otherwise) on aircraft operations in this area, beyond what is already spelled out by the existing Federal Aviation Regulations (Eric Taylor). The 2000-foot ceiling is ludicrous. I have flown over those islands at 500 feet and the birds were not impacted. (Larry Leonard)

Service Response: There are existing FAA regulations and advisories, and Olympic Coast National Marine Sanctuary regulations that apply to overflights. National Wildlife Refuge boundaries are designated on updated FAA aeronautical charts. Wildlife disturbance frequently occurs when airplanes fly low over Refuge islands. We will use existing National Wildlife Refuge System regulations (50 CFR 27.34) to cite wildlife disturbance offenders. There are also safety concerns associated with low flying aircraft such as striking birds and having sufficient altitude to make it to land if an emergency exists.

H. Comment: Strong concern for aircraft safety if forced to fly 2000 feet above Refuge area, especially in winter. Usually fly above 2000 feet but want to stay below clouds. Suggest that you make 2000 feet a recommendation rather than a rule to allow pilot discretion during bad weather conditions, such as fog or low clouds. (Donald McKelzey)

Service Response: In adverse weather and emergency situations human safety comes first. The Service recognizes that weather conditions along the coast can change rapidly and that aircraft safety may necessitate occasionally flying below the 2000 feet FAA advisory and Sanctuary regulation. There are also safety concerns associated with low flying aircraft such as striking birds and having sufficient altitude to make it to land if an emergency exists.

I. Comment: The strategy to "Promote the 2000-foot minimum flight altitude over the islands" is one of the most important components of the Draft CCP (The Nature Conservancy). The CCP makes an important point that airplane over-fights and ships containing oil or other products pose significant threats to the health and safety of the wildlife resources of these islands. We urge you to continue to work with the FAA and NOAA to create legal boat-free zone zones around the islands, and to have these legal restrictions placed on all navigation charts and aeronautical charts. (Pacific Seabird Group)

Service Response: Thank you for your comment. National Wildlife Refuge boundaries are designated on updated FAA aeronautical charts. The Service will work with NOAA to ensure Refuge areas are identified on navigational charts. We added this as strategy WH2 H.

J. Comment: It is also not clear whether the Fish and Wildlife Service has the legal authority to regulate overflights. If not it would be helpful if the final CCP would explain under what authority the Olympic Coast National Marine Sanctuary is able to regulate overflights. Furthermore the final CCP should clarify what is meant by "over the islands" (Audubon Washington)

Service Response: The Service does not have authority over air space but does enforce Code of Federal Regulations that address harassment of wildlife by aircraft (50 CFR 27.34) There are existing FAA regulations and advisories and Sanctuary regulations (15 CFR 922.152 (a)(6) that apply to overflights over the Refuges. Sanctuary regulations define the airspace where the 2,000-foot ceiling applies and National Wildlife Refuge boundaries are designated on updated FAA aeronautical charts.

K. Comment: The Sanctuary supports the "overflight impacts awareness program" outlined in objective WH6 and recommends that this effort can be coordinated with the Sanctuary's ongoing overflight outreach efforts. If the Olympic Coast is the sight of a National Marine Sanctuary

pilot project we would welcome participation by refuge staff (Sanctuary). As stated in the Olympic Coast National Marine Sanctuary Management Plan, low-flying aircraft (under 2,000 feet) are restricted. Currently, this restriction is not being enforced by the Federal Aviation Administration. The Service should work cooperatively with the National Park Service, and NOAA to engage the FAA to enforce a minimum 2000-foot altitude over refuge islands, the national marine sanctuary, and the national park and inform pilots from surrounding airfields of these restrictions. (Defenders of Wildlife)

Service Response: We added "Work with others to . . ." to the beginning of objective WH6. The Service acknowledges the important education accomplishments and monitoring activities of the Sanctuary and looks forward to working with the Sanctuary if they are chosen for the pilot project and with their outreach efforts. The Service will continue to work with all Federal and State agencies that have authority over flying aircraft to encourage enforcement of overflight restrictions. In addition, a poster specifically aimed at pilots, asking them to maintain a 2,000-foot altitude above rocks, reefs and islands, has been developed for the Oregon Coastal Refuges. This could easily be adapted for use in Washington. A flyer aimed at educating pilots has been produced by the ONP, the Sanctuary, and the Service. The Sanctuary has hired pilots to do outreach at fly-ins and they use this flyer as an educational tool. In addition, the Refuge will use existing Refuge regulations to enforce wildlife disturbance incidences (50 CFR 27.34).

L. Comment: Surveys that WDFW and USFWS conduct to keep mapped data current and accurate are all below 2000-foot elevation (WDFW). Throughout the document there is reference to aerial surveying of species yet this, other than oil spills, is the item that is articulated again and again to be a major disturbance to breeding birds and pullouts for marine mammals. Recommend including a table of on-going and future planned research, methodologies (flights, frequencies, altitude) and how they are evaluated. (ONP)

Service Response: Refuge research and monitoring flights are conducted on a limited basis as described in the Minimum Requirement Analysis (Appendix E-1) and Biological Assessment (Appendix H). When engaged in these activities Refuge staff fly lower than 2,000 feet. Surveys are scheduled to collect the greatest amount of data while causing the least amount of disturbance. The Service recognizes the responsibilities and needs of WDFW and other Federal and Tribal resource managers to likewise gather data and their efforts to minimize impacts. The 2,000-foot minimum flight altitude is recommended for all non-special purpose activities.

M. Comment: The environmental consequences section discusses the benefits but not the disturbance impacts associated with survey flights. The Service has provided a disturbance zone related to aerial operations and impacts to bald eagles and marbled murrelets. WDFW and ONP coordinate the bald eagle surveys on the coast and can provide the refuge information on nest locations and foraging areas to assist in your analysis of effects. (ONP)

Service Response: The Service added information on wildlife disturbance from survey activities to Chapter 4, Environmental Consequences under 4.4.2 Marine Mammals, and Birds; and 4.4.3 Federally Protected Species. The Service also already described the details of disturbance impacts in Appendix E-1, Minimum Requirement Analysis. Refuge staff members conduct Section 7 consultation with both the Service and NOAA Fisheries with respect to refuge operations. A Biological Assessment is included in Appendix H. Guidelines provided from

these agencies are followed. The Refuge also has access to and utilizes WDFW bald eagle nest site database.

N. Comment: There are many entities involved in approval of aerial surveys on the coast, including the national park, marine sanctuary, refuge, tribes, and others. To resolve this inconsistency, we believe that it would be beneficial to outline a system in the plan to evaluate and streamline the permit process for collecting data necessary for management of wildlife resources on the coast. (WDFW)

Service Response: The Service is concerned with the cumulative impacts to coastal wildlife from increased survey activity and requests, and is committed to working with the various resource managers to evaluate our collective needs in order to minimize potential adverse impacts and to explore opportunities to streamline the permitting process.

Other Disturbance

O. Comment: The CCP states that the islands will remain closed to public use and access. It would be helpful to clarify in the CCP how this is accomplished. Specific references to the applicable regulations related to trespass, as well as other issues addressed in the CCP would be of value. Consideration should be given to including applicable CFRs as an appendix. (Sanctuary)

Service Response: The Service has modified Achievement Strategy A under Objective WH1 to read: "Maintain the policy of restricted public access to the Refuges and enforce existing Refuge Regulations on trespass (50 CFR 26.21)."

P. Comment: PSG generally agrees that access to the refuge islands should be restricted, especially during the birds' breeding season. If FWS determines that access to some refuge islands will not pose threats to the mission of the refuges, we believe that such access should be open to PSG members and the general public as well, not just members of certain tribes as implied in the Conservation Plan (p.2-10). (Pacific Seabird Group)

Service Response: The Service is not proposing opening the Refuges to public use. Limited research may take place and if and when it does, no single group will be given priority. The Service has unique relationships with the various Tribes adjacent to these Refuges. The Service's Native American Policy articulates the general principles that will guide the Service's government-to-government relationship with Native American governments in the conservation of fish and wildlife resources including reasonable access to Service managed or controlled lands and waters for exercising ceremonial, medicinal, and traditional activities recognized by the Service and by Native American governments. The Service will permit these uses if the activities are consistent with treaties, judicial mandates, or Federal and tribal law and are compatible with the purposes for which the land is managed.

Q. Comment: Page 3-2, Section 3.4, paragraph 2: Listing activities that have impacted Destruction Island has some interesting juxtaposition, lawful ones or peaceful ones should not be juxtaposed with unlawful, or violent, activities. We also question whether tribal subsistence harvest over the years have in fact "disturbed" the island, since human harvest of the species has

occurred for centuries and has been a factor in the ecosystem since time immemorial. (Quileute Tribal Council)

Service Response: The Service listed known activities that have or may have impacted Destruction Island. Even lawful/peaceful activities can disturb wildlife and habitats.

R. Comment: Page 3-36: Tribes have accessed the island for centuries, true at the time of designation. You need to mention this, although we would disagree that tribes would have trammeled the land or left debris. (Quileute Tribal Council)

Service Response: This section of the CCP deals with current wilderness resources. Past Tribal use is discussed under 3.5.2 Archaeology. Although the Refuges are closed to public use to protect wildlife and fragile habitat resources, the Wilderness Act does not preclude use by man but notes that wilderness is an area "where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain."

S. Comment: The following should be completely banned in this area: Hunting, trapping, all new roads, all two stroke vehicles of any kind, grazing, mining, drilling, logging, prescribed burns (B. Sachau).

Service Response: The Draft CCP/EA does not propose allowing any of these activities on the Refuges.

6. Interagency and Tribal Coordination

A. Comment: Objective CP1: Begin working with Tribes on issues and resources of mutual interest to promote conservation – this can be achieved by promoting interagency meeting and supporting baseline inventory creation and monitoring for the islands within the refuge complex (Makah Tribal Council, Hoh Indian Tribe). There has been little or no notification to the tribe of law enforcement efforts or conservation opportunities on the NWR in the immediate vicinity of the Hoh reservation. Without notification there is no opportunity for joint efforts in law enforcement, conservation, or research opportunities. (Hoh Indian Tribe)

Service Response: The Service agrees that interagency meetings will help identify issues and resources of mutual interest. Objective CP 1 includes several other strategies to begin working with Tribes.

B. Comment: The CP objectives do not appear to recognize that Tribes have trained staffs including natural resources, law enforcement, biologists, and attorneys. When you discuss objectives you give technical roles to WDFW, ONP, USCG etc. but not the Tribes. (Quileute Tribal Council).

Service Response: CP1 states that the Service will begin to work with the Tribe on issues and resources of mutual interest to promote conservation. Achievement strategies include research, monitoring, and resource protection efforts, all of which would involve Tribal technical expertise.

C. Comment: Objective CP3: Coordination with Tribes including Makah Tribal Historic Preservation Office (Makah Tribal Council).

Service Response: Since this objective is primarily about the protection and conservation of intertidal and subtidal areas around the Refuge islands, the Service will coordinate with Tribal Natural Resources staff and any other staff the Tribal Councils designate.

D. Comment: The USFWS and other government agencies have been negligent in contacting the Hoh Tribe on overflights and landings to Destruction Island. The Tribe should be notified long in advance of such operations. (Hoh Indian Tribe).

Response: We will be happy to share information regarding refuge wildlife surveys and other Service activities on Destruction Island at annual meetings with the Hoh Indian Tribe.

E. Comment: Page 1-11, under 1.5 Related Actions and Activities. Tribes, U.S.Coast Guard, and Olympic Coast National Marine Sanctuary are all mentioned but Olympic National Park (ONP) is not. Consider ONP a related activity especially related to enforcement. Page 2-2 first paragraph: ONP has an agreement for fire protection which should be mentioned and cited accordingly. (ONP)

Service Response: We added a new section 1.5.5 National Park Service with the following text: "Flattery Rocks NWR and Quillayute NWR as mentioned in 1.3.2 Historical Overview, were included within the exterior boundaries of Olympic National Park in 1986 but are managed as national wildlife refuges by the Service. The ONP assists the Refuge in developing informational and educational programs, providing law enforcement, monitoring trespass, and conducting cooperative research. In addition ONP and the Service have entered into an agreement whereby ONP will assist the Service in wildfire suppression on Refuge lands as resources are available."

F. Comment: We recommend adding an achievement strategy on page 2-11, under Objective CP5 – to reiterate the importance of maintaining the NPS radio facility at Destruction Island to park emergency communications (ONP).

Service Response: The Service added the following text to the discussion section under Objective CP5, "It is important to maintain the NPS radio facility on Destruction Island to facilitate law enforcement and ONP emergency communications."

G. Comment: The CCP is substantively deficient in not referencing the National Marine Sanctuary Act as a law that is applicable to the refuge's CCP (Sanctuary).

Service Response: We added the National Marine Sanctuary Act to Appendix C, Laws and Executive Orders Potentially Applicable to the CCP and EA for Washington Islands National Wildlife Refuges.

H. Comment: The Sanctuary is interested in developing an MOU with the Service. There are many strategies in the CCP that could be included in such a document. The Service should also consider adding the Sanctuary into discussions on USCG servicing flights and joint law

enforcement with the NPS and perhaps develop three-way MOUs. (Sanctuary) Objective CP6: "Coordinate with OCNMS…" Suggest changing Achievement Strategy A to read: "The MOU will address trespass law enforcement, oil spill response planning and action, overflight restrictions . . ." (The Nature Conservancy)

Service Response: Our relationship with the Sanctuary and each of these other agencies is unique enough to warrant a separate MOU with each. The Service has made the suggested changes and some others to Objective CP6, Strategy A.

I. Comment: Cooperative Program Objective CP4, Strategy A: It is our position that our activities at Destruction Island do not significantly affect the wildlife. Two Biological Assessments conclude in part that, "…USCG helicopter flights and maintenance activities do not significantly impact the seabirds and other wildlife species at Destruction Island." We do not believe we can reduce the frequency of Coast Guard Aids to Navigation servicing visits without jeopardizing the reliability of this critical navigation aid. The quarterly visits can be scheduled in advance to avoid bird nesting periods etc. but when responding to an emergency outage we will not necessarily be able to avoid sensitive time periods. (USCG)

Service Response: The Service understands and agrees that Destruction Island aids to navigation need to be maintained to ensure reliable operation. As technology improves it is hoped that the number of maintenance visits can be reduced. The Service will continue to work with the Coast Guard to provide suggested flight paths and time frames for maintenance visits to minimize impacts.

J. Comment: The Department of Natural Resources staff looks forward to expanding partnerships with the USFWS in the management and protection of aquatic environments in Washington State and in the achievement of several objectives identified in this Draft CCP (WDNR).

Service Response: Thank you and the Service also looks forward to our expanded partnership.

K. Comment: WDFW is responsible for the sound stewardship of the State's fish and wildlife. To accomplish this goal, we value partnerships with agencies like the Service that share responsibility for fish and wildlife management. Working collaboratively with the Refuge on wildlife monitoring and research is critical to our mission, and we welcome the emphasis on collaboration in the preferred alternative. We look forward to continuing ongoing coordination on specific areas of wildlife management, monitoring, and research on the Washington Islands National Wildlife Refuges. (WDFW)

Service Response: Thank you. The Service also looks forward to our continued partnership.

L. Comment: Both Objectives CP2 and CP3 are keys to success. Recommend changing CP2, Achievement Strategy C to read "Coordinate with WDFW law enforcement to protect refuge wildlife <u>and the resources on which they depend</u>". (The Nature Conservancy)

Service Response: We made these changes.

M. Comment: Coordination between organizations is also an area where we think there is room for the most improvement, namely with respect to identifying specific strategies related to inventorying, monitoring and managing the marine fish and other resources that seabirds and marine mammals depend on for food. These actions are not explicitly called out in the Draft CCP/EA, but are necessary to ensure the long term viability of bird and mammal populations living in the refuges. (The Nature Conservancy) 2.3.4 Cooperative Programs: All of your Objectives are laudatory and well thought out. It might be appropriate to include in CP9, or add a CP10, that would provide for "Cooperation with ecological conservation nonprofit citizen organizations." (Olympic Coast Alliance)

Service Response: The Service has added an objective and strategies that address working with nongovernmental organizations under Cooperative Programs: *"Cooperate with interested nongovernmental organizations NGOs to promote awareness of the Refuges and conservation of the Refuges' habitats, cultural resources, and wildlife and the resources on which they depend."* See additional write up under CP9.

N. Comment: Olympic Coast Alliance believes your agency's concerns should extend to the waters surrounding the Refuge's islands and rocks. It is not 100% clear that the comprehensive conservation plan addresses this as well as it might (Olympic Coast Alliance). Section 2.3.4, Objective CP3 – The park supports a coordinated effort for the protection and coordination of the intertidal and subtidal zones. We are currently developing the ONP General Management Plan (GMP) which will address options within the intertidal areas of the park (Olympic National Park). Intertidal and subtidal lands as well as the aquatic plants and animals are outside of the jurisdiction of NWR and are beyond the scope of this document (Quileute Tribal Council, Quinault Indian Nation).

Service Response: The Service recognizes the critical linkage between the Refuges' resources and the marine environment. Intertidal and subtidal lands are very important to the wildlife that uses the Refuges. These lands are, however outside the boundaries of the Washington Islands National Wildlife Refuges, therefore, the Refuges do not have management authority in these areas. Certain human uses of intertidal and subtidal areas may adversely affect wildlife use of adjacent refuge lands. It is essential for all the agencies with resource management responsibilities in and around the intertidal and subtidal areas to coordinate regarding human use and management of these areas for the benefit of wildlife. By working together, we can increase our opportunities and actions to improve conditions for wildlife. One of the activities the CCP identifies for these areas is the removal of derelict fishing gear and other marine debris that accumulates around the islands and is a hazard to wildlife coming out of the water and onto the Refuges. The Service acknowledges the NPS coordinated effort for the protection and coordination of the intertidal and subtidal zones and we look forward to participating in the development of Olympic National Park's GMP.

O. Comment: The fact that the sanctuary has overlapping jurisdiction with the Refuges needs to be recognized (Sanctuary). There are several places in the document where we disagree with the way the Service used the term jurisdiction. We especially recommend changes to section 1.3.3. (Quileute Tribal Council, Quinault Indian Nation, Makah Tribal Council).

Service Response: The Service eliminated the term "jurisdiction" from the final CCP/EA and instead uses terms such as management responsibility, ownership, and designation, to improve the clarity and understanding of the document. Section 1.3.3 was rewritten to describe some of the many designations and management responsibilities in the area, some of which overlap. Changes can also be found in other parts of the document where the term "jurisdiction" was formerly used.

P. Comment: Headings are different on the table on page 2-21. Should use the same terms, i.e. Cooperative Programs vs. Interagency and Tribal Coordination. (ONP)

Service Response: The headings in Table 2-1 are based on the issues including "Interagency and Tribal Coordination" identified in Chapter 1, section 1.7.3, while "Cooperative Programs" is a management goal with associated objectives. The two terms are obviously related but by being different they help to distinguish the issue from the goal.

7. Invasive species

A. Comment: We strongly support USFWS efforts to control invasive species that threaten native wildlife of the State (WDFW, Pacific Seabird Group).

Service Response: Thank you for the comment. The difficult task of controlling invasive species will depend on the collaborative efforts of government agencies, tribes organizations and private citizens.

B. Comment: No actions were identified to implement control of invasive species. We suggest changing objective WH4 to read ". . . develop *and implement* control measures on an ongoing basis. . ." and the achievement strategy B to read "Survey islands for invasive species, and when information exists regarding infestations, *implement control measures to reduce or eliminate invasive species.* (Audubon Washington)

Service Response: We agree that invasive species control implementation was only implied and have included your suggestions in the document. We also changed the first sentence in objective WH4 discussion to read "*Invasive species are a threat to the native flora and fauna of the refuge islands and removal of these species, when possible, is a high priority of the refuges*."

C. Comment: The CCP does not adequately address invasive species in the intertidal zone (Sanctuary).

Service Response: We are responsible for managing the islands above the intertidal zone; however, we are very concerned with the spread of invasive aquatic species and support cooperative efforts with other agencies that do not conflict with the purpose of the Refuges.

D. Comment: Page 3-22, 3rd paragraph: Seems like there should be a stronger emphasis to eradicate rabbits (ONP). Removing European rabbits from Destruction Island should be a priority (Pacific Seabird Group). Page 4-8 Specifically mention rabbits as an example of invasive species (ONP). The Hoh Tribe recognizes that European rabbits probably have a negative effect

on the native species of Destruction Island and would look favorably on the Service's eradication efforts depending on methodology. The tribe needs to be consulted in the early planning for such efforts. (Hoh Indian Nation)

Service Response: We share your concern for the effects that the introduced rabbits are having on Destruction Island's ecosystem. Our past efforts to remove the rabbits have not been successful; however, new control techniques specific to rabbits have been recently applied on other seabird breeding islands. We have added an achievement strategy under objective WH4 to conduct an environmental assessment (EA) to evaluate impacts associated with various methods for removing European rabbits from Destruction Island. We will proceed with rabbit eradication only if the EA shows that the benefits are greater than potential negative impacts. Development of this EA will involve interested parties including the Hoh Indian Tribe.

E. Comment: We feel the invasive species removal program should be expanded to the California sea lion population, as their rapid population increases may be at the heart of the Stellar Sea Lions decline. These species need to be closely managed in order to provide optimum opportunity for Tribal, Commercial, and Sport Fishing harvests. (Forks City Council)

Service Response: Invasive species are defined as organisms and plant species that have been introduced into new ecosystems and are having harmful impacts on the natural resources in these ecosystems. Washington State is within the natural range for the California sea lion population. California sea lions are native species that are protected by the Marine Mammal Act of 1972 (16 USC 1361 et seq.). We have no plans to control California sea lion use of the Refuges.

8. Monitoring and Research (Also see 5L, 5M, 6A and 9F)

A. Comment: 2.3.5 Research and Monitoring Activity Management: All five of the RA's appear to be both desirable and essential programs (Olympic Coast Alliance).

Service Response: We thank you for your comment.

B. Comment: Objectives CP2, CP9, RA1, and RA3 all address the need for coordination, cooperation, and communication in wildlife surveying, monitoring, and research. All are commendable objectives, but in sum they do not fully address all the needs. Each has its own limitations. Perhaps these should be combined into an additional CCP objective that will establish a process for multiagency coordination of research and monitoring efforts. Perhaps this is beyond the scope of the CCP. (Audubon Washington)

Service Response: The Service agrees that this is beyond the scope of the CCP but acknowledges the need for a comprehensive coordination process and is fully supportive of working with agencies and Tribes to that end.

C. Comment: The Sanctuary is specifically interested in research that better documents overflight and boater disturbance (Sanctuary).

Service Response: The Service continues to support additional research into both boat and aerial disturbance as described in Strategy RA1 B.

D. Comment: An additional critical area of research are the causes for declining seabird populations (Sanctuary). Objective RA1, Achievement Strategy B: Suggest adding "encourage research on food requirements of seabirds and marine mammal populations in relation to fish and other marine resources surrounding or within reasonable foraging distance from refuges." Objective RA2: Update refuge seabird monitoring plan… Suggest adding new strategy to "coordinate with NOAA, WDFW, and Tribes to estimate foraging ranges of seabirds and to inventory or estimate available marine food resources." (The Nature Conservancy)

Service Response: The Service has conducted research on the effects of El Nino events on segments of the seabird population. While we did not add the recommended strategies under RA1and RA2 because we already identified our highest priority research needs, we will consider additional research as appropriate.

E. Comment: Section 3.4.2, pages 3-6 to 3-7: The Makah Tribe recommends that FWS study the impact of sea otters on such species as sea urchins, abalone, sea cucumbers, and crabs within the Refuges. A Tribal member has observed that few of these invertebrate species can be found in areas inhabited by sea otters, making subsistence or commercial harvesting impossible. (Makah Tribal Council)

Service Response: The Refuge is not currently conducting any sea otter research. Because of the sea otter's special status under the Marine Mammal Protection Act, the Western Washington Fish and Wildlife Service field office in Lacy, Washington would likely be the Service's lead on any sea otter research. We would consider and evaluate any proposed sea otter research on refuge lands like other research proposals in terms of benefits and risks to refuge wildlife and habitats.

F. Comment: In some cases other agencies or researchers may need access to the islands to conduct damage assessment, research or monitoring activities. How will these needs be evaluated and managed? We recommend that research access and permitting be added components to any proposed plans. (Sanctuary) Recommend including a table on on-going and future planned research, methodologies (flights, frequencies, altitude). How are they evaluated? (ONP)

Service Response: Research requests will be evaluated as outlined in the plan's Appendix E-1 Minimum Requirements Analysis and E-2 Compatibility Determination. All non-Service research will be managed under Refuge Special Use Permits. Frequencies and other details regarding research conducted by refuge staff is also outlined in Appendix E-1

G. Comment: Objective RA4 – What is the process by which researchers would be required to use specific methods? (Sanctuary)

Service Response: The Service is in the process of developing a Regional Seabird Monitoring Plan to standardize comparable methods and will supply it to those wanting to do research on the Refuges.

H. Comment: Objective WH5 – It is in both the Refuge and Sanctuary's interest to attempt to standardize and share database layers whenever possible. Objective RA2 – These data need to be made available to resource agencies in a timely manner. Objective RA3 – Distribution of data and draft results cannot wait for peer reviewed journals or agency reports and a mechanism for sharing results needs to be developed. (Sanctuary)

Service Response: We agree, the Service is interested in all cooperative opportunities. The Service will share database layers and will attempt to standardize whenever possible. To ensure we are obtaining and using the best available data, it is important for the Service to compare and evaluate data, and determine appropriate applications before releasing it for other uses. Data out of context can result in inaccurate findings. Reports will be presented in final format, annual reports, and on the Refuge web site. The feasibility of sharing data in a less formal manner should be explored further, first by identifying current data sources, applications, and data gaps for both agencies, then determining if our respective data layers could be appropriately applied for other than their original intent.

I. Comment: WDNR has extensive GIS data, which can be provided to support the needs of this conservation plan including data sets for eelgrass and kelp distribution and other intertidal resources (WDNR).

Service Response: Thank you. Refuge staff will contact WDNR to see what information is available.

J. Comment: Table 2-1 Remember to use local knowledge, not everything is in peer reviewed journals. Page 4-11, It would be correct to note the contribution to monitoring that occurs. Sanctuary relies on our monitoring for seabird fatalities. (Quileute Tribal Council)

Service Response: Through public involvement in the planning process, the Service requests and obtains information about land uses, habitat conditions, and issues important to local communities. This information is analyzed and address throughout the CCP planning process. As we increase our efforts to coordinate with the Tribes, opportunities for exchanging information will increase. The Service added the following language to the last paragraph under section 4.4.3, State Protected Species: *"The enhanced cooperation between the State, Tribes, and the Service under Alternative B (CP1, CP2) would have positive effects on future joint efforts regarding these species."*

K. Comment: The Hoh Tribe would be interested in beginning a dialogue with Refuge staff and others on sources of funding, survey protocols, and research project design for conducting long-term monitoring of coastal species along the Tribes' ceded land coast and the islands and rocks off the tribal coast (Hoh Indian Tribe).

Service Response: The Service has conducted long-term monitored of some wildlife species using the refuge islands and rocks. Even Service activities on and near refuge lands is limited because of the need to minimize disturbance to nesting and resting wildlife and their critically important habitats. New research proposals would be evaluated on a case by case basis regarding the value of the research and impact to wildlife and wilderness. Additional off-refuge research and monitoring could be an important way to complement the work already being done

by the Service. Potential tribal funding sources for fish and wildlife projects include the Service's Tribal Wildlife Grant Program and Tribal Landowner Incentive Program administered out of the Service's Regional Office in Portland, Oregon.

9. Public Awareness of the Refuges and Wildlife Resources (Also see 4A and 11I)

A. Comment: Outreach and education are a major priority for the sanctuary and we support the goal and objectives of the public education management theme (Sanctuary). Consider making a stronger argument for education and interpretation given that the refuges are closed to the public (ONP).

Service Response: The Service concurs that strong off-site interpretive and educational programs are necessary given the sensitivity and inaccessibility of the Refuges.

B. Comment: We support plans for future interpretive facilities but suggest some alternative locations including: somewhere on the coast but not necessarily Kalaloch (ONP); in close proximity to the refuge and the sanctuary (Sanctuary); Kalaloch (Olympic Peninsula Audubon); Forks (Quileute Tribal Council, Lonnie Archibald), Rialto Beach (Lonnie Archibald), or Hoh Reservation (Hoh Indian Tribe).

Service Response: We will work with other agencies and Tribes to consider a range of appropriate locations for an interagency interpretive center. Strategy A under objective PE3 was changed to no longer state that the visitor center will be at Kalaloch.

C. Comment: Page G-2 Project number 05NNN speaks to their "share" of the construction and operation of an interpretive center on the Washington Coast ($327,000). Don't know were the figure came from but expect its low. (ONP) We believe that having an excellent web site for the refuge will ultimately provide more and better information to the public at a far smaller cost than will a permanent visitor center (Pacific Seabird Group).

Service Response: This is the Service's best estimate of our share of the construction costs based on design, labor and material costs estimated during development of the Draft CCP/EA. The costs will change depending on inflation prior to construction and how much other agencies contribute to the project. The Service agrees that a website is an excellent, relatively low-cost way to reach a wide variety of audiences and would complement our other efforts. Construction of an interagency interpretive center would, however, would give visitors the ability to see wildlife through indirect means such as videos and remote cameras, and help them understand what they can do to conserve the sensitive wildlife and habitats of the Washington Coast.

Comment: Consider green and sustainable design criteria when developing plans for interpretive facilities and the local USFWS headquarters. This would be a great model for our community. (Olympic Peninsula Audubon)

Service Response: The Services concurs that green and sustainable design techniques should be incorporated into our interpretive facilities. Most new construction projects do incorporate these elements as funding allows.

E. Comment: 2.3.6 Public Education Management. We are also interested in education and outreach and suggest including cooperation with ecological conservation nonprofit citizen groups within your Objective PE 3, "Promote refuge conservation awareness by coordinating with other agencies, Tribes, and organizations to develop off-site interpretive facility, by 2008" (Olympic Coast Alliance). Our Chapter would be pleased to meet with you and your staff to discuss our presenting bird, environmental, and conservation talks in your exhibit space. We could also discuss sharing traveling displays and library materials from our Audubon Center (Olympic Penninsula Audubon).

Service Response: The intent of Objective PE3 is to coordinate with ecological conservation nonprofit citizen groups as well as others. The Service appreciates your support for its environmental education and interpretation programs and looks forward to improving these programs while we develop new partnerships with conservation organizations.

F. Comment: Do not to overlook the value of the Annual Narrative Report and research and monitoring publications in raising public awareness. Making the above information readily available to groups like Audubon would allow information about the value of the Refuges' wildlife resources to trickle down to a broad cross section of the public. (Audubon Washington)

Service Response: The Service agrees that data on bird population and distribution (including census data gathered on refuges) should be readily available to interested public. Under Objective CP10 the Service will produce annual summary reports which will make results of research and monitoring activities available to the general public. An annual biological summary will be posted on the website for the Washington Maritime NWR Complex under Objective PE2. This website would be the most accessible way to make this information available to the public.

G. Comment: The Hoh Tribe requests that the interpretive center work with tribal members to include Hoh Tribe information and cultural information. The Tribe would definitely want input on the area that cameras are installed and covering in case there are sensitive issues involved. (Hoh Indian Tribe).

Service Response: Objective PE3 includes working with tribes and other partners to interpret cultural resources of the area. If we obtain the funding and resources to install a wildlife viewing camera we will work with the Hoh Tribe to ensure that sensitive areas are not impacted.

H. Comment: The tribe would like the inter-agency interpretive center to be funded so that hiring preference is given to Hoh tribal members for some interpretive and other positions.

Service Response: The Service, Park Service, and Sanctuary do not have the authority to designate a Native American hiring preference position. The only federal agency that has that authority is the Bureau of Indian Affairs. If the Service obtains funding for any new positions on the outer coast we would consider qualified tribal members along with other qualified applicants for these positions.

10. Socioeconomics

A. Comment: Page 3-34, Section 3.9, Socioeconomics. It is error to say that areas which do not fall within reservations are “protected” (Quileute Tribal Council).

Service Response: The Service has changed the text to read..."Most of the areas not contained within one of these reservations are managed by the NPS, Forest Service, or WDNR.

B. Comment: At the top of page 3-35 you “plug” the Forks lodging facilities. It would only be fair to plug the Ocean Park cabins, trailer hookups, and camping facilities at La Push. (Quileute Tribal Council)

Service Response: The Service did not intend to "plug" any particular area when it discussed the increasing lodging, restaurants, and sightseeing services in the area. Although Forks is noted as the regional hub we did not mean to imply that this was the only area where these services exist. We have added to the text ..."Visitor services including lodging, restaurants, and charter opportunities also exist on most tribal reservations."

C. Comment: Page 3-25, Table 3-4. While showing median income, why emphasize the whole county? Sequim and Port Angeles probably drive Clallam County’s way up. Same for Port Townsend in Jefferson County. The income of West End communities would be far more relevant to this CCP. (Quileute Tribal Council)

Service Response: The Service has added Port Angeles and Forks to Table 3-4 to reflect West End communities.

11. Tribal Treaty Rights

A. Comment: The Service is inconsistent in the treatment of treaty rights in the Draft CCP/EA. In Chapter 1, the Service states that tribal treaty rights are beyond the scope of the CCP, yet in some instances they are acknowledged and in other places the CCP tries to directly or indirectly limit treaty rights. (Quileute Tribal Council, Quinault Indian Nation, Makah Tribal Council, Hoh Indian Tribe)

Service Response: As stated in Chapter 1, section 1.7.2 of the Draft CCP/EA, the Service believes that “defining the application of tribal treaty rights is outside the scope of this CCP planning effort.” The treaty rights that we acknowledge and address in the CCP are those whose application has been legally defined (e.g. fishing rights). We are not attempting to resolve those treaty rights whose application to national wildlife refuges has not been legally defined. We are committed to working with each of the Tribes independent of the CCP process to develop memorandums of understanding that address access to the refuges and other needs of the Tribes, consistent with the Service’s Native American Policy. We do not intend to enlarge or diminish treaty rights or to otherwise resolve unadjudicated treaty rights through this CCP. We added the following sentence to the Tribal Treaty Rights paragraph in Chapter 1 section 1.7.2 of the final CCP/EA to further clarify our intentions. . . “*Neither the existence of this CCP/EA nor any*

portion of its contents is intended to enlarge or diminish treaty rights or to have any influence over the resolution of unadjudicated treaty rights."

B. Comment: Tribal treaty rights are not outside the scope of the CCP and should be acknowledged (Quileute Tribal Council, Quinault Indian Nation, Makah Tribal Council).

Service Response: We have acknowledged in several places in the CCP/EA treaty rights whose application has been legally defined. Further, as noted above, we are committed to working with the tribes, independent of the CCP process, through memorandums of understanding, and consistent with Service policy to address tribal access and other needs relative to the refuges.

C. Comment: Abrogating treaty rights is beyond the scope of this document. You need to include in your discussion that neither alternative will affect treaty rights. (Quileute Tribal Council, Quinault Indian Nation)

Service Response: We agree that abrogating treaty rights is beyond the scope of this document. We added the following sentence to the Tribal Treaty Rights paragraph in Chapter 1 section 1.7.2 of the final CCP/EA to further clarify our intentions . . ."*Neither the existence of this CCP/EA nor any portion of its contents is intended to enlarge or diminish treaty rights or to have any influence over the resolution of unadjudicated treaty rights."*

D. **Comment:** The Service needs to acknowledge the Tribes' role as co-managers of Refuge resources based on the federal courts in U.S. V. Washington, 384 F. Supp. 312 (W.D. Wash 1974) and its numerous subproceedings and appeals. (Quileute Tribal Council, Quinault Indian Nation, Makah Tribal Council, Hoh Indian Tribe). The Hoh Tribe considers itself a co-owner of the islands (Hoh Indian Tribe).

Service Response: The above court case refers to the tribes' equitable share being 50% of all harvestable fish within the tribes' traditional fishing places. Washington Islands Refuges' resources do not include harvestable fish. Based on the definitions of co-management and cooperative management in the Service's Native American Policy, we view the Tribes as cooperative managers while the Service carries the burden of legal responsibility associated with ownership and management of the Refuges. Recognizing the cooperative management role the Tribes play in the marine ecosystem, we want to partner with the Tribes for the protection of refuge resources. We have identified several objectives and strategies in the CCP to accomplish this including: "*Begin working with Tribes on issues and resources of mutual interest to promote conservation*" (CP1); "*Coordinate with Tribes, Sanctuary, ONP, and WDNR in managing for the protection and conservation of intertidal and subtidal zones surrounding the refuge islands*" (CP3) and "*Establish and develop partnerships with Tribes, State and other Federal agencies as well as universities and conservation groups to pursue joint research projects*." (RA1.A).

E. Comments: Memorandums of understanding (MOUs) between the Tribes and the Service need to be completed and included in the final CCP in order to adequately address impacts to Treaty Rights (Makah Tribal Council). The proposal to develop MOUs and exclude tribal treaty rights integration into the CCP is a new initiative, and as presented is contrary to USFWS policy (Quinault Indian Nation). Problems include: an MOU is a side document between a single Tribe and the Service; it is finite in time; and its enforceability (Quileute Tribal Council).

Service Response: The Service's Native American Policy encourages the use of formal agreements with Tribes and other partners. A Memorandum of Understanding (MOU) is the document most often used by the Service to develop operating agreements with partners. We are proposing to develop MOUs with the Tribes outside the CCP planning process for the following reasons:

- We do not see the MOU as a vehicle that alters treaty rights, therefore, there would not be any impacts to the treaty rights themselves in either the CCP or in the MOU.
- As a time-limited agreement, an MOU can address access based on Native American Policy; joint projects; resource data sharing; and many other areas of mutual interest between the Service and a Tribe.
- In the unlikely event that the MOU proposes anything with potential environmental impacts not already considered in the CCP, then a separate environmental assessment would be prepared.
- Since each Tribe has the opportunity to develop an MOU with the Service it can be tailored to their specific situation and offers the greatest flexibility.
- As a time limited document it can be reviewed and updated as needed.
- Since an MOU is an agreement by both parties, enforcing it should not be a problem.
- Developing MOUs with 4 Tribes could easily cause delay in completing the CCP and we do not have the CCP staff and resources to continue the CCP planning process until the MOUs are completed.

F. Comment: We do not support the establishment of a boat-free zone around refuge islands because it would severely restrict tribal access to usual and accustomed fishing, sealing, and whaling grounds as well as sites of spiritual and cultural importance such as Ozette and Tskawhyah Islands (Makah Tribal Council). The 200-yard boat-free zone around the islands would preclude tribal harvest of intertidal shellfish in violation of the Boldt decision. This must be corrected to say "except for treaty fishing." (Quileute Tribal Council, Quinault Indian Nation).

Service Response: We are committed to working with the Tribes to address access needs for sites of spiritual and cultural importance based on the Service's Native American Policy. We did not intend to regulate tribal treaty fishing with the 200-yard boat-free zone. We modified this strategy in the CCP to say "Continue and enhance efforts to *promote a voluntary* 200-yard boat-free zone around refuge islands in cooperation with other appropriate groups." While the voluntary boat-free zone does not impact tribal treaty fishing, we are interested in working with the Tribes and others to minimize wildlife disturbance. An MOU between the Tribes and the Service can assist in accomplishing these agreements.

G. Comment: Section 2.3.4, Objective CP6: Any MOU between the FWS and the Sanctuary must reflect the fact that tribes have concurrent jurisdiction for marine organisms and own 50% of them in their respective U&As. Neither the FWS nor the Sanctuary has the authority to limit the tribal right to harvest fish and shellfish for commercial, subsistence or ceremonial purposes, in a tribe's U&A (Quileute Tribal Council, Quinault Indian Nation).

Service Response: It is not our intention to use an MOU with the Sanctuary to limit tribal fishing and shellfishing within a Tribe's U&A. We removed "boating (sport and commercial) restrictions," from this strategy.

H. **Comment:** Section 2.3.6 regarding Public Education: Include education of public on treaty rights and the role of Tribes as co-managers of the fishery resources with state and federal agencies (Quileute Tribal Council). The information Center should include a thorough coverage of Tribal Treaty rights as a public education display (Hoh Indian Tribe).

Service Response: The Service will work with Tribes to educate and inform the public about tribal treaty rights and fish and wildlife programs as appropriate. We can also refer interested people to internet or other sources of information on treaty rights as they become available.

I. **Comment:** Section 3.4.2 under Marine Mammals: Discussions of treaty rights regarding sea otters, seals, and sea lions need to be elaborated or discussed separately. This section is in contradiction to USFWS statement that treaty rights are beyond this document. (Quileute Tribal Council, Quinault Indian Nation) Marine mammal take by tribal members is rare and considered customary and subsistence take. However, the Hoh tribe does occasionally approve harvest by tribal members and reserves that treaty right. (Hoh Indian Tribe)

Service Response: We eliminated discussions of tribal harvest of marine mammals from section 3.4.2. Pat Gearin (Marine Mammal Biologist with NOAA, pers comm.) has stated that this subsistence harvest is not considered to be a large impact on these species.

J. **Comment:** Discussions of tribal commercial fishing do not identify it as a treaty right (Quileute Tribal Council).

Service Response: In Section 1.3.3 the Service already identified tribal fishing and shellfishing as a reserved treaty right. We modified the discussion of commercial fishing by tribes in section 3.9 to identify it as a treaty right.

K. **Comment:** Section 3.4.2 under Birds: Since you mention tribal treaty rights to other species, it appears relevant here to mention that tribes have traditionally harvested gull and other sea bird eggs, sea birds, and waterfowl. This section and section 3.4.3 contain the presumption that the USFWS has the right to curtail tribal rights to harvest birds and eggs. We disagree. (Quileute Tribal Council, Quinault Indian Nation) The Tribe has historically used or harvested nearly all the vertebrate, invertebrate, and plant species within the NWR and maintains its treaty right to do so now and in the future (Hoh Indian Tribe).

Service Response: In section 3.5.1 we have stated that Tribes traditionally harvested birds and other species. Treaty rights are not mentioned under birds in section 3.4.2 nor in section 3.4.3. The Service has drawn no independent conclusions about the application of treaty rights or their effects on the management goals of the Washington Islands Refuges. Instead, the Service will pursue working with the Tribes to develop MOUs that are respectful of the rights and needs of each Tribe and consistent with preserving the wildlife and wilderness values of the Refuges.

L. Comment: Tribes have reserved treaty rights to access refuge islands for fishing, hunting and gathering. (Quileute Tribal Council, Quinault Indian Nation, Makah Tribal Council, Hoh Indian Tribe)

Service Response: The Service acknowledges in the CCP those treaty rights whose application has been legally defined (e.g. fishing rights). We are not attempting to resolve those whose application to national wildlife refuges has not been legally defined. We are committed to working with each of the Tribes independent of the CCP process to develop memorandums of understanding that address access and other needs of the Tribes based on our Native American Policy. We do not intend to enlarge or diminish treaty rights or to otherwise resolve unadjudicated treaty rights in this CCP.

M. Comment: The Service has not complied with their own refuge planning policy (2000); Native American Policy (1994): FWS Strategic Plan 2000-2005: Secretarial Order 3206 (1997) and Executive Order 13175, in consulting with Tribes and integrating treaty rights into the CCP. (Quileute Tribal Council, Quinault Indian Nation, Makah Tribal Council)

Service Response: We believe that we have complied with the applicable portions of the above mentioned Policies, Plans, and Orders regarding working with Tribes to the extent that they apply to this CCP process. Our efforts to consult and coordinate with Tribes have included: meeting with Tribes individually prior to releasing the public draft of the CCP; identifying actions in the CCP to increase coordination between the Service and Tribes for the protection of natural resources; providing interim drafts of the CCP for tribal review; and making changes to the Draft and final CCP/EA based on the Tribes' comments.

N. **Comment:** The Quinault Indian Nation is very concerned with this latest draft of the CCP, comments previously provided by the Quinault Indian Nation have not been incorporated or accurately reported within this most recent draft of the CCP. Of paramount concern to the Quinault Indian Nation is the lack of recognition by the USFWS of our previous objections to the inclusion of allotted lands within the Quinault Indian Reservation in the Washington Islands National Wildlife Refuges. The Quinault Indian Nation requests that these land be removed from the refuge plan. (Quinault Indian Nation)

Service Response: The Service has seriously considered the Quinault's comments during all phases of the CCP planning process including comments on the Draft CCP/EA and has made changes as appropriate. We appreciate your concern and acknowledge there are outstanding questions regarding the exact location of the boundary between the Washington Islands National Wildlife Refuges and the Quinault Indian Reservation. We have identified a strategy in the CCP under section 2.3.4, CP1(E) to work on resolving these boundary issues. We would welcome any legal, historical, and/or survey information the Quinault Indian Nation has regarding the boundaries of the Quinault Indian Reservation. As requested previously by the Quinault Indian Nation, we removed the names of several islands from the text of the Draft CCP/EA. We are not prepared, however, to change the maps until this issue is resolved. The management guidelines of the CCP will only apply to refuge lands.

O. Comment: The USFWS has never answered the Quinault Indian Nation's question; How are eroded headlands measured and determined to be off-shore islands? Much of the coast line along the Quinault Indian Reservation is composed on eroding headlands. (Quinault Indian Nation)

Service Response: In part because of earlier comments from the Quinault Indian Nation, the Service eliminated our Internal Draft CCP/EA proposal to consider adding newly created off-

shore islands to the Refuges. This eliminated the need to define eroded headlands vs. off-shore islands in the Public Draft CCP/EA. If this issue comes up again while we work through clarifying Quinault Indian Reservation/Washington Islands National Wildlife Refuges boundaries the Service is committed to working with the Tribe and the Bureau of Indian Affairs in resolving any boundary/ownership questions.

P. Comment: What is the Service's jurisdiction over Ozette Island (ONP)?

Service Response: Ozette Island became part of the Flattery Rocks National Wildlife Refuge to be managed by the Service in 1907 under Executive Order 703.

Q. Comment: Figure 1-1 should depict the location of coastal tribes' reservations (Makah Tribal Council).

Service Response: This figure is intended to show the general location of the three coastal national wildlife refuges and does not depict adjacent ownership.

R. Comment: We have in the past advised USFWS that the Quinault Indian Nation requires prior notification of NWR staff, contractors, or collaborators presence on the reservation. Recent discussions with WDFW revealed studies done in cooperation with the USFWS that the Quinault Indian Nation was unaware of on islands, shoreline, and uplands of the Quinault Indian Reservation. (Quinault Indian Nation)

Service Response: Refuge staff is aware of and will continue to respect the Quinault Indian Nation's requirement for prior notification of staff on the reservation. The Refuge does not have any contractors doing work in the vicinity nor have we authorized any collaborators to work on anything but the Washington Islands Refuges. We will communicate your concerns to other Service programs outside of the Refuge System. We will also be glad to share information regarding refuge wildlife surveys and refuge natural resources of mutual interest at annual meetings with the Tribes.

S. Comment: The refuge vision statement is incompatible with treaty rights. The vision statement should make clear that the goal of "minimum human intrusion" must coexist with the treaty rights to hunt, fish, and gather marine resources. Nothing in the Executive Orders establishing the Refuges or the Wilderness Act prohibits hunting, fishing, or gathering within the Refuges (Makah Tribal Council).

Service Response: The term "minimal human intrusion" is consistent with the wilderness designation of the Refuges and broad enough to allow flexibility for some human activities including potential tribal access consistent with the Service's Native American Policy.

T. Comment: In section 1.7.2, the second, fourth and fifth bullet points should be changed as follows:

- Right of access under the Treaty of Neah Bay to Flattery Rocks NWR, which is entirely encompassed within the Tribe's usual and accustomed grounds and stations.

- The Tribe states that the fishing, hunting and gathering of marine resources, such as gathering eggs, collecting sea foods, and subsistence hunting of marine mammals, are tribal rights reserved by the Treaty of Neah Bay. The Tribe wants to protect these fundamental rights from any adverse effects of the CCP. The Tribe considers these islands within their usual and accustomed ground and stations to be subsistence resources in case of future need.
- The Service's jurisdiction and management authority over the right of access to the Refuge's lands and adjoining waters and over certain islands, particularly Ozette Island. (Makah Tribal Council)

Service Response: We made these changes.

U. Comments: In section 1.7.3 the "threat" from gillnet fishing is not explained. The Tribe has a gill net fishery within the Refuges which overlap with its "usual and accustomed grounds and stations" (Makah Tribal Council). The definition of gillnet needs to be refined. Tribal gillnets are not the same as oceanic gillnets over which there is controversy due to high bycatch (Quileute Tribal Council).

Service Response: We clarified in section 1.7.3 that the threat from gillnetting is bycatch, particularly of seabirds. We improved the definition of gillnet in the glossary. All gillnets have problems with accidental bycatch of non-target species, such as seabirds and marine mammals.

V. Comment: In Section 1.7.3: The Service needs to acknowledge that the goal of minimizing disturbance to wildlife must coexist with the Tribes' treaty right of access for hunting, fishing and gathering marine resources and that this is not trespass. In section 2.3.4 the phrase *"and develop management guidelines for Tribal access to the Refuges."* should be added to Objective CP1 (Makah Tribal Council). The Tribe requests that the Service provide information and presentations on the seasonal, temporal, and spatial influences of importance to certain bird and other species that may be affected by fishing boats or seagull egg gathering, etc. Having information may help tribal fishermen, hunters, and gatherers time their activities, when possible, to minimize unintended consequences. (Hoh Indian Tribe)

Service Response: We are committed to working with the Tribes to develop MOUs that address access in a manner that is both respectful of the rights and needs of each Tribe and consistent with preserving the wildlife and wilderness values of the Refuges. Developing MOUs with each tribe represents the appropriate tool to address access rather than one set of "management guidelines." Refuge staff would be glad to make presentations to Tribes about refuge wildlife.

W. Comments: In section 2.1.2, 1st paragraph: The Tribes' "unique relationship" is not with the Washington Coast but with the United States (Quileute Tribal Council, Quinault Indian Nation). The phrase *"and the Treaties between these Tribes and the United States which protect the right of access to the Refuges' land and adjoining waters"* should be inserted after the phrase "Because of the unique relationship of the Makah, Quileute, Quinault and Hoh Tribes (Tribes) with the Washington coast" (Makah Tribal Council).

Service Response: We eliminated this part of the sentence due to multiple objections.

X. Comment: The CCP/EA does not adequately address the impacts of the plan on tribal treaty rights (Quileute Tribal Council, Quinault Indian Nation, Makah Tribal Council).

Service Response: It is not our intention and we do not believe that the CCP has any impact on tribal treaty rights. We added the following sentence to the Tribal Treaty Rights paragraph in Chapter 1 section 1.7.2 of the final CCP/EA to further clarify our intentions: *"Neither the existence of this CCP/EA nor any portion of its contents is intended to enlarge or diminish treaty rights or to have any influence over the resolution of unadjudicated treaty rights."*

Y. Comments: The CCP should include in the Glossary of Terms "usual and accustomed grounds and stations" and tribal access in order to distinguish tribal access from public access and trespass (Makah Tribal Council).

Service Response: We added U&A for "usual and accustomed grounds and stations" to the list of acronyms in Appendix A. We added "Usual and Accustomed Grounds and Stations" and "Tribal Access" to the Glossary of Terms in Appendix A.

Z. Comment: Pursuant to FWS' duties under Executive Order 13175 to consult and collaborate with tribal officials in the development of federal policies that have implications for tribal treaty rights, the Tribe requests the opportunity to consult further with FWS regional staff to clarify the ambiguities in the Draft CCP/EA and FWS responses to the 2001 comment letter. (Makah Tribal Council). The Quinault Indian Nation requests a government-to-government consultation on how tribal treaty rights are dealt with within the CCP/EA (Quinault Indian Nation).

Service Response: We believe that we have adequately consulted with Tribes on the Washington Islands NWRs'CCP. We do not intend to enlarge or diminish treaty rights or to otherwise resolve unadjudicated treaty rights in this CCP. We added the following sentence to the Tribal Treaty Rights paragraph in Chapter 1 section 1.7.2 of the final CCP/EA to further clarify our intentions: *"Neither the existence of this CCP/EA nor any portion of its contents is intended to enlarge or diminish treaty rights or to have any influence over the resolution of unadjudicated treaty rights."* The Service recommends that we continue government-to-government discussions to develop MOUs outside of the CCP process.

AA. **Comment:** There are inconsistencies with the current Draft CCP/EA and FWS responses to the Makah Tribe's 2001 letter which states that the conservation purposes of the Refuges are "incompatible with hunting and gathering," and that the "Washington Islands Refuges have been closed since they were established in 1907." These responses cannot be reconciled with the assertion that Treaty rights fall outside the scope of the CCP or that there will be no significant effects on the Tribes' exercise of the Treaty rights. (Makah Tribal Council) The Hoh Tribe has treaty rights that pre-date the designation of the NWR system and therefore has rights that override NWR plans or regulations (Hoh Indian Tribe).

Service Response: The Washington Islands Refuges have been closed to general public use, including hunting and gathering, since they were established. As stated in Chapter 1, section 1.7.2 of the Draft CCP/EA, "defining the application of tribal treaty rights is outside the scope of this CCP planning effort." The treaty rights that we acknowledge in the CCP are those whose

application has been legally defined (e.g. fishing rights). We are not attempting to resolve those whose application to national wildlife refuges has not been legally defined.

We are committed to work with each of the Tribes independent of the CCP process to develop memorandums of understanding that address access and other needs of the Tribes based on our Native American Policy. We do not intend to enlarge or diminish treaty rights or to otherwise resolve unadjudicated treaty rights in this CCP.

HOH INDIAN TRIBE

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U.S. FISH & WILDLIFE SERVICE
RECEIVED
MAY 12 2006
WASHINGTON MARITIME NWRC
PORT ANGELES, WA 98362

April 4, 2006

USDI, Fish and Wildlife Service
Attn: Kevin Ryan, Refuge Manager
Washington Maritime National Wildlife Refuge Complex
33 S. Barr Road
Port Angeles, WA 98362

Re: Hoh Tribe Comments on Washington Islands National Wildlife Refuge Draft Comprehensive Conservation Plan and Environmental Assessment.

Dear Kevin,

The Hoh Tribe appreciates your gesture to allow us to comment on the Washington Islands National Wildlife Refuge Draft Comprehensive Conservation Plan and Environmental Assessment (CCP). The tribe was unable to comment previously due to the election of a new Tribal Council and changes in personnel in the Natural Resources Department.

The CCP states (pp. 1-19) that tribal treaty rights are outside the scope of the CCP. Much of the CCP addresses issues such as trespassing, resource consumption, and marine species that directly deal with the issue of treaty rights. The CCP states this again in Section 2.1.2 in a description of the Proposed Action. Therefore it is assumed that those references in the document are meant for non-tribal members. The Hoh tribe maintains the rights of its members to hunt, fish, gather, and trespass on open and unclaimed lands in the tribal Usual and Accustomed area (U & A), which includes all of the NWR along the coast. As of yet, there have been no meetings between the NWR and the Tribal Council to develop MOU's or other arrangements. The tribe is considered a government to government co-manager of the resource and is also 50% owner of the resource as interpreted by federal courts in U.S. v. Washington, 384 F. Supp. 312 (W.D. Wash. 1974) and its numerous subproceedings and appeals.

Section 1.7.2 Tribal Consultation. The opening paragraph states that the NWR is important culturally to the tribes. The marine areas partially claimed by the NWR are

important to the economic status of the tribes as well, and the Hoh tribe considers itself a co-owner of the islands and marine area. The tribes are working with the Olympic Coast National Marine Sanctuary and the Marine Protected Areas now on their relationship as co-managers. The Hoh tribe also co-manages marine resources with the National Park Service, NOAA, NMFS, Coast Guard, the State of Washington Departments of Fish and Game and Ecology among others.

Section 1.7.3, Issue 2 Interagency and Tribal Coordination. As stated in other sections, the tribe has not had more than a cursory meeting with NWR personnel to begin a co-management dialogue. The other government agencies including USFWS, OCNMS, and Coast Guard have been negligent in contacting the tribe on over flights and landings to DI. The tribe should be notified long in advance of such operations. The OCNMS has approved Environmental Assessments for Coast Guard over flight and landing on DI without previous consultation with the Hoh tribe. This is an oversight and needs to be corrected. In addition there has been little or no notification to the tribe of law enforcement efforts or conservation opportunities on the NWR in the immediate vicinity of the Hoh reservation. Without notification there is no opportunity for joint efforts in law enforcement, conservation, or research opportunities.

Section 2.2, one of the six goals developed is to "Promote effective coordination and cooperation….. and Tribes adjoining ownership or jurisdiction." And to "Continue and enhance long-term monitoring and sustain applied research." The Tribe is in favor of both these goals but has not seen a lot of action in regards to either. We appreciate the initiative of Mr. Ryan instigating the comment process with Tim Snowden, our Natural Resources Director. Along those lines, the Tribe is very much interested in obtaining assistance in cooperative grants that would allow the Tribe to use its personnel and tribal members to begin a long-term monitoring program along the Tribes ceded land coast and the islands and rocks off the tribal coast. The Tribe would be interested in beginning a dialogue with the NWR and others on sources to procure funding, biological and other survey protocols, and research project design. The Tribe, given its long-term commitment of personnel and location would be an ideal long-term monitoring station for coastal bird, mammal, and other surveys. There is also a very strong need for baseline population data for coastal species that are now residing along our coast. This baseline data would be very useful in the event of a catastrophic occurrence such as an oil spill. With baseline population data we would have a good guide to estimate what "restoration" of the ecosystem would be. Otherwise, restoration would simply be a guess as to what the population of most species was before the event if one should occur. This same strategy would help achieve Section 2.3.5. Research and Monitoring, Objective RA1, RA2, and RA4.

Section 2.3.1 Wildlife Habitat. Objective WH1. As stated in the first page of this document, the tribe does not have an operating MOU with the NWR and the tribe is a co-manager of the NWR. The tribe has treaty rights that pre-date the designation of the NWR system and therefore has rights that override NWR plans or regulations. Therefore the tribe recognizes its right to access its islands at will at the present time.

Section 2.3.6 Public Education Management, Objective PE3 A and E. The Hoh Tribe would like to discuss the development of the inter-agency interpretive center proposed for Kalaloch Beach. The tribe would like to have input on the location and design of the structure, perhaps even a possible one on the reservation. The tribe is requesting that the center to work with tribal members to include Hoh Tribe information and cultural information. The Information Center should include a thorough coverage of the Tribal Treaty Rights as a public education display. This would increase understanding of the Tribal Treaty Rights that are exercised by the Hoh and other tribes along the Olympic Coast. The tribe would like the inter-agency center to be funded so that hiring preference is given to Hoh tribal members for some interpretive and other positions. In Strategy D the tribe would definitely want to have input on the area that cameras are installed and covering in case there are sensitive issues involved.

Section 3.4.2 Wildlife. Marine mammal take by tribal members is rare and considered customary and subsistence (C & S) take. However, the Hoh tribe does occasionally approve harvest by tribal members and reserves that treaty right. The tribe has historically used or harvested nearly all the vertebrate, invertebrate, and plant species within the NWR and maintains its treaty rights to do so now and in the future.

Section 3.4.2 Non Avian Terrestrial Fauna. As noted elsewhere, Destruction Island (DI) is considered part of the Hoh tribal legacy and is very important and special to the tribe. The introduction of European rabbits (*Oryctolagus cuniculus*), an exotic species, is not a welcome one by the tribe. The tribe recognizes that the rabbits in all probability have a negative effect on the native species on DI. The tribe would look favorably on USFWS eradication efforts depending on the methodology. The tribe needs to be consulted in the early planning for such efforts to be sure there are no negative cultural or environmental side effects.

Section 3.4.3 Species with Special Status. The tribe is the oldest acting environmental steward in the region and has promoted conservation in order to protect its economic and cultural existence. However, with the constantly changing world of sensitive, threatened, and endangered species there are undoubtedly environmental variables that tribal members are unaware of. The tribe requests that the USFWS provide information and personal presentations of that information to its natural resources staff and interested hunters and fishermen on seasonal, temporal, and spatial influences of importance to these species. For instance are there certain times when there is critical nesting or mating behavior for certain bird species that may be affected by fishing boats or seagull egg gathering, etc. Having information may help tribal fishermen, hunters, and gatherers time their activities, when possible, to minimize unintended consequences.

Section 3.5 Cultural Resources. As noted above tribal members consider DI as a part of their heritage. Any activities, especially cultural surveys, on DI should be with the active participation of the Hoh tribe. The tribe favors the idea put for the by the USFWS to remove some of the buildings and man-made structures. Again the tribe reserves the right of tribal members to hunt, fish, and gather on DI and the islands and rocks within the NWR.

Sincerely,



Tim Snowden
Director of Natural Resources
Hoh Indian Tribe
360-374-6735



Vivian Lee
Chairwoman
Hoh Tribe Business Council
360-374-6582

TMS/tms

MAKAH TRIBAL COUNCIL
P.O. BOX 115 • NEAH BAY, WA 98357 • 360-645-2201

IN REPLY REFER TO:

July 6, 2005

Kevin Ryan
Refuge Manager
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Wildlife Refuge Complex
33 S. Barr Road
Port Angeles, WA 98362

FISH & WILDLIFE SERVICE
RECEIVED
JUL 07 20
WASHINGTON MARITIME NWRC
PORT ANGELES, WA

Dear Mr. Ryan,

The Makah Tribe appreciates the opportunity to comment on the draft Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA) for the Washington Islands National Wildlife Refuges. Previously, the Tribe submitted comments on the July 2001 Interim Draft CCP/EA and is pleased to see that certain changes were made prior to the release of the May 2005 Draft CCP/EA. The Tribe's 2001 comments and the Fish and Wildlife Service's (FWS) responses are attached as Appendix A to this letter. The Tribe continues to strongly support the CCP's emphasis on prevention of catastrophic oil spills, placement of a mission-capable rescue tug boat at Neah Bay, and coordination of conservation, research and monitoring of fish and wildlife with the coastal tribes.

In reviewing the Draft CCP/EA and FWS' responses to the Tribe's 2001 comments, however, the Tribe remains concerned about the failure of the CCP to squarely address the impacts of the plan on the Tribe's Treaty right. As written, the Draft CCP will have significant impacts on the Tribe's right to fish, hunt and gather marine resources secured by the 1855 Treaty of Neah Bay. Specifically, the Draft CCP contains an explicit prohibition on all boat use within 200 yards of the Refuges' islands. Because the Flattery Rocks Refuge overlaps with the Tribe's usual and accustomed grounds and stations, this restriction on tribal access is a direct infringement of the Tribe's Treaty right. It is also troubling to observe numerous inconsistencies within the Draft CCP/EA and FWS' responses to the 2001 comment letter, as these make it extremely difficult for the Tribe to determine FWS' position and how it will affect the Tribe's exercise of its Treaty rights

In general, the Tribe supports FWS' plan to address tribal access to usual and accustomed grounds and stations – a fundamental right of the Treaty – in a memorandum of understanding. However, deferment of these negotiations to a later, unspecified time prevents the Tribe from submitting meaningful comments on the draft CCP/EA because the full impact of the CCP on the exercise of Treaty rights cannot be known until the memorandum is agreed upon. The Tribe also contends that the CCP's impacts on Treaty rights must be considered by FWS as part of the

NEPA process. This cannot be accomplished unless the memorandum with the Tribe is incorporated into the final CCP and the cumulative impacts on Treaty rights of both documents are examined in the EA.

The National Environmental Policy Act.

The CCP is a federal action requiring FWS to consider the potential environmental impacts under the National Environmental Policy Act (NEPA). Draft CCP/EA at 1-3. FWS is currently preparing an EA to determine the impacts of the CCP and whether an environmental impact statement (EIS) is necessary. Under NEPA, the EA must provide a brief discussion "of the environmental impacts of the proposed action and alternatives," 40 C.F.R. § 1508.9, and if FWS concludes that the CCP will not have any significant effect on the environment, the agency issues a finding of no significant impact (FONSI), 40 C.F.R. §§ 1501.4, 1508.13, "accompanied by a convincing statement of reasons to explain why [the CCP's] impacts are insignificant," *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 730 (9th Cir. 2001) (citation omitted). If, however, a federal action "'significantly [affects] the quality of the human environment,' then [FWS] must prepare an EIS providing a detailed and comprehensive analysis of the potential environmental impacts of the proposed action." *Anderson v. Evans*, 371 F.3d 475, 487 (9th Cir. 2004) (quoting 42 U.S.C. § 4332(2)(C)). In preparing either an EA or EIS, FWS must take a "hard look" at the environmental impacts of the CCP. *Ctr. for Biological Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1166 (9th Cir. 2003).

For purposes of NEPA, the "human environment" includes the "natural and physical environment and the relationship of people with that environment." 40 C.F.R. § 1508.14. In preparing the EA, FWS must consider the CCP's impacts on the human environment, including "cultural, economic [and] social" effects regardless of whether they are "direct, indirect, or cumulative." 40 C.F.R. § 1508.8. Whether a federal action "significantly" affects the environment depends on the "context," which includes the affected region and the affected interests, 40 C.F.R. § 1508.27(a), and "intensity." The latter factor relates to the severity of the impact and encompasses considerations such as the "degree to which the impacts are likely to be highly controversial" or "highly uncertain" and whether the action threatens a violation of federal law. 40 C.F.R. §§ 1508.27(b)(4), (b)(5), (b)(10); *see also Anderson*, 371 F.3d at 487-88.

The Makah Tribe's 2001 Comments and FWS' Responses.

The 2001 comment letter emphasized the importance of the Tribe's right under the Treaty of Neah Bay to hunt, fish and gather marine resources on Refuge lands, which overlap with the Tribe's usual and accustomed grounds and stations. These rights secured by the Treaty 150 years ago remain critical to the economic, cultural and social well-being of the Makah people, and it is vital that they are recognized and protected in this planning document. In its 2001 comment letter, the Tribe cautioned that the draft CCP and EA did not protect the Tribe's Treaty rights to hunt, fish and gather marine resources because its blanket "no trespassing" policy severely limits the Tribe's right of access to usual and accustomed grounds and stations secured by the Treaty of Neah Bay. The letter urged FWS to modify the CCP to provide access to the Refuges and adjacent waters so that the Tribe could exercise its Treaty rights and visit sites of cultural and spiritual importance. To accommodate the right of access while protecting the

natural resources of the Refuges, the Tribe proposed developing a cooperative agreement with FWS. Additionally, the Tribe's letter explained in detail the legal basis for the Tribe's Treaty rights and the limits on state and federal regulation of these rights and provided specific comments on sections of the draft CCP/EA.

In response to the Tribe's specific comments regarding the importance of recognizing and protecting Treaty rights, FWS stated that "resolving the scope of treaty rights goes beyond the scope of this planning effort [and] [r]ather than pursue the legal question of defining treaty rights, the Service would like to work with the Tribes to develop Memoranda of Understanding that will protect the natural resources of the Washington Islands National Wildlife Refuges and address tribal access." App. A at 5. To implement this proposal, FWS added to Objectives WH1 and CP1 the negotiation of "Memoranda of Understanding with coastal tribes regarding the time, place, and manner of tribal access to the Refuges *where appropriate and compatible*." App. A at 7 (emphasis added); *see also* Draft CCP/EA at 2-4, 2-10.

General Comments on Draft CCP/EA and FWS' Responses to 2001 Comment Letter.

The qualification of the Tribe's right of access to situations where it is "appropriate and compatible" is extremely vague and prevents the Tribe from providing meaningful comments on the draft CCP/EA until it knows the specific details of the memorandum of understanding. Moreover, the Tribe is concerned that FWS has already informally determined that hunting, fishing, and gathering, regardless of whether it is undertaken by Tribal members in the exercise of the Tribe's Treaty right, is incompatible with the purpose of the Refuges. As FWS stated in its responses, it "considers the Refuges to be withdrawn for conservation purposes specifically as '. . . a preserve and breeding ground for native birds and animals.' (Executive Orders 703-705) and therefore *incompatible with hunting and gathering*." App. A at 6 (emphasis added). Furthermore, instead of agreeing that the Refuge goal of "minimal human intrusion" must coexist with the Makah Treaty right, FWS asserted that this objective is "broad enough to allow flexibility for *some* human activities including *potential tribal access*." App. A at 6 (emphasis added); *see also id.* at 9 (200-yard boat free zone). FWS' lack of commitment to the Tribe's right of access to Refuge lands and adjacent waters and its informal determination that all hunting and gathering is incompatible with the conservation purpose of the Refuges presents a serious obstacle to the Tribe's exercise of its Treaty rights and the ability of the Tribe to enter into a memorandum of understanding that adequately protects these rights.

For these reasons, if the CCP does not incorporate the memoranda of understanding addressing tribal access and Treaty rights issues more generally, it would violate the Tribe's Treaty right. As discussed more fully in the Tribe's 2001 comment letter, neither state nor federal governments may regulate the exercise of Indian Treaty rights except under the conservation necessity principle. App. A at 2-3. Moreover, the *Boldt* decision and its progeny established that the Tribe may seek injunctive relief in federal court for any regulation of its Treaty right that does not satisfy this stringent standard. *See United States v. Washington*, 384 F. Supp. 312, 342, 402-05 (W.D. Wash. 1974). Here, the Tribe may seek appropriate relief because FWS has not demonstrated that blanket restrictions on tribal access to the Refuges' lands and adjacent waters, such as the 200-yard boat free zone, are "essential to conservation" of any species. *Id.* at 342.

In addition, the substantial uncertainties regarding the contents of the memorandum of understanding between the Tribe and FWS and its protection of the Tribe's Treaty right make it abundantly clear that the memorandum must be negotiated and finalized prior to completion of the CCP/EA. Indeed, the Tribe's 2001 comments urged FWS to incorporate the memorandum into the final CCP. *See* App. A at 8. The Tribe's Treaty right is much too significant an issue to exclude from the environmental review process. Without the memorandum, FWS cannot take the required "hard look" at the environmental impacts in the EA, nor can the Tribe participate in the environmental review process for the CCP in a meaningful way since it cannot know how the CCP and memorandum – if an agreement can be reached – will affect its members' right to hunt, fish and gather marine resources under the Treaty of Neah Bay. Indeed, if the Tribe's reading of the CCP is correct and the memorandum is not prepared in conjunction with the CCP, it is likely that this federal action will "significantly" affect the human environment so as to require preparation of an EIS. Accordingly, the Tribe requests that FWS establish and implement a timetable for negotiating the memoranda of understanding with the coastal tribes that will allow the completed memoranda to be incorporated into the final CCP and analyzed in the EA, or EIS if necessary.

The Tribe's ability to submit meaningful comments is also hindered by the significant internal inconsistencies in the Draft CCP/EA which are compounded when read with FWS' responses to the Tribe's 2001 comment letter. It appears that several different FWS staff members participated in drafting these documents, and the final CCP/EA needs to clarify or eliminate these inconsistencies in order to serve as an effective planning document.

The most obvious inconsistency is the statement that Tribal treaty rights are outside the "scope of this CCP planning effort." Draft CCP/EA at 1-19. Yet the draft CCP/EA, as written, clearly implicates the Tribes' treaty rights through the 200-yard boat free zone and the prohibition of public use of the Refuges' islands, including a definition of "public" in the Glossary that includes Indian tribes. Notwithstanding the boat free zone and public use prohibitions, the Draft CCP/EA's evaluation of effects on the Tribes states that FWS "anticipates negligible effects related to environmental justice" because "[a]ny potential changes under the MOUs to the way Tribes exercise reserved treaty rights within their usual and accustomed locations, would be by agreement." Draft CCP/EA at 4-14. It is notable that while FWS claims Treaty rights are outside the scope of the CCP, it nonetheless evaluates the impacts of the planning document on the Tribes' treaty rights in Section 4.8.

The inconsistencies of the Draft CCP/EA are further exacerbated by considering FWS' responses to the Tribe's 2001 comment letter. Objectives WH1 and CP1 both include Achievement Strategies regarding the negotiation of memoranda of understanding with the Treaty Tribes "regarding the time, place, and manner of tribal access to the Refuges where appropriate and compatible." Draft CCP/EA at 2-4 and 2-10. Yet FWS' responses, which emphasize that "resolving the scope of treaty rights goes beyond the scope of this planning effort," App. A at 5, state that the conservation purposes of the Refuges are "incompatible with hunting and gathering," App. A at 6. FWS also stated in response to a comment regarding tribal access that the "Washington Island Refuges have been closed since they were established in 1907." App. A at 13. These responses cannot be reconciled with the assertion that Treaty rights

fall outside the scope of the CCP or that there will be no significant effects on the Tribes' exercise of their Treaty rights. *See* Draft CCP/EA at 4-14. Finally, FWS appears to view tribal access as distinct from general public access, *see* App. A at 8, but the CCP's formal definition of "public" in the Glossary of Terms includes Indian tribes, *see* Draft CCP/EA at A-6.

The foregoing inconsistencies underscore the importance of incorporating the memoranda of understanding into the CCP and NEPA processes. Without negotiation of the memoranda and a specific determination of the impacts of the CCP and memoranda on the Tribes' Treaty rights, the environmental review of the CCP cannot be adequate.

Specific Comments on the 2005 Draft CCP/EA.

In addition to the concerns expressed above regarding the Draft CCP's inadequate protection of the Tribe's Treaty right, the inconsistencies of the Draft CCP/EA and FWS' responses to the Tribe's 2001 comments, and the deferred negotiation of the memorandum of understanding until after completion of the CCP and EA, the Tribe provides the following specific comments on the Draft CCP/EA.

Chapter 1.

Figure 1-1, Page 1-2. Figure 1-1 should depict the location of the coastal tribes' reservations. This is important given the statement in Section 1.3.3, Pages 1-9 to 1-10 that "The Quileute, Makah, Hoh, and Quinault Tribes manage reservation lands that border the Washington Island NWRs" and that "several Tribes . . . exercise jurisdiction along the shoreline." The proximity of the four Tribes to the Refuges is mentioned throughout the CCP. *See, e.g.,* Draft CCP/EA at 3-29 to 3-30, 3-34.

Section 1.2.2, Page 1-3. The list of "problems, etc.," should include the following item: **"and (7) the need to protect the Treaty rights of the Makah, Quileute, Quinault and Hoh Indian tribes through Memoranda of Understanding incorporated into the CCP."**

Section 1.3.2, Pages 1-4 and 1-8. The last paragraph on Page 1-4 is repeated at the top of Page 1-8.

Section 1.3.3, Page 1-10. The sentence referring to the coastal tribes' "usual and accustomed grounds and stations" should be rewritten as follows:

These Tribes are parties to treaties with the United States that secure the right of access to off-reservation "usual and accustomed grounds and stations" which overlap with the Washington Islands NWRs. The treaties reserve to the Tribes the right to participate in activities such as fishing, shellfishing, and in the case of the Makah, whaling and sealing. The Tribes exercise jurisdiction over these treaty-protected activities in the Refuges and surrounding waters.

This is the first mention in the CCP/EA of the treaties and it should be more than a passing reference. Additionally, the "activities reserved by treaties" do not overlap with "State

and Federal jurisdictions," which would suggest that the state and federal governments can ordinarily regulate the right of access or other treaty-protected activities. As the Makah Tribe explained in its 2001 comments, regulation of Indian treaty rights is limited by the stringent "conservation necessity principle." App. A at 2-3. Rather, the important point is that the usual and accustomed grounds and stations overlap *geographically* with the area of the Refuges. It is also necessary to mention the tribes' jurisdiction over the exercise of treaty-protected rights in the Refuges by their members.

Section 1.4, Page 1-11. The vision statement proposed for the Refuges is incompatible with the Makah Tribe's treaty rights. The vision statement should make clear that the goal of "minimal human intrusion" must coexist with the treaty rights of the Makah Tribe to hunt, fish and gather marine resources. Nothing in the Executive Orders establishing the Refuges or the Wilderness Act prohibits hunting, fishing, or gathering within the Refuges. The Wilderness Act does not prohibit all human presence or disturbance in designated wilderness areas. Instead the Act only prohibits "permanent improvements or human habitation" and requires management to preserve the area's natural condition. 16 U.S.C. § 1131(c). Nothing in the Wilderness Act prohibits temporary human occupation of wilderness areas for hunting, fishing and gathering, which are common activities throughout the National Wilderness Preservation System.

Section 1.7.2, Page 1-19. Based on the extensive written comments submitted by the Tribe on the Interim Draft CCP/EA in 2001, the second, fourth and fifth bullet points should be changed as follows:

· Right of access under the Treaty of Neah Bay to Flattery Rocks NWR, which is entirely encompassed within the Tribe's usual and accustomed grounds and stations.

· The Tribe states that the fishing, hunting and gathering of marine resources, such as gathering eggs, collecting sea foods, and subsistence hunting of marine mammals, are tribal rights reserved by the Treaty of Neah Bay. The Tribe wants to protect these fundamental rights from any adverse effects of the CCP. The Tribe considers these islands within their usual and accustomed grounds and stations to be subsistence resources in case of future need.

· The Service's jurisdiction and management authority over the right of access to the Refuge's lands and adjoining waters and over certain islands, particularly Ozette Island.

Section 1.7.2, Page 1-19 ("Tribal Treaty Rights"). As discussed above, the Tribe believes that the proposed memorandum of understanding is a critical component of both the CCP and the NEPA processes. Even if FWS is correct that Treaty rights are outside the scope of the CCP planning effort, they are certainly not outside the scope of the required environmental review of the CCP. FWS cannot adequately determine the environmental impacts of the CCP without considering its impact on the Tribe's Treaty right. Thus, the memoranda of understanding should be developed jointly with and incorporated into the final CCP and should be reviewed as part of the EA. *See* App. A at 8. This section should indicate that the memoranda of understanding will be incorporated into the final CCP.

The final sentence should read:

The Service will continue meeting with the Tribes as part of the CCP and NEPA processes to develop memoranda of understanding which will be incorporated into the final CCP. The memoranda will recognize that the objective of preserving the wildlife and wilderness values of the Washington Islands Refuges must coexist with the Treaty rights and cultural and subsistence needs of the Tribes.

Section 1.7.3, Page 1-20. The statement regarding the purpose of "Tribal consultation and coordination" should also mention that such consultation is necessary to recognize and protect the Tribes' Treaty right to fish, hunt, and gather marine resources.

Section 1.7.3, Page 1-20. The "threat" from gill net fishing is not explained, unlike marine debris and oil spills. Is the concern merely that abandoned gill nets are a form of marine debris? *See* Draft CCP/EA at 1-22 (Issue 5). If not, FWS should specify its concerns with gill net fishing in the Refuges. The Tribe has a gill net fishery within the Refuges, which overlap with its usual and accustomed grounds and stations.

Section 1.7.3, Page 1-21. The final paragraph under Issue 2 should also indicate that the Makah Tribe considers Ozette and Tskawahyah (or Cannonball/Indian) Islands to be of cultural and spiritual importance.

Section 1.7.3, Page 1-21. As discussed above, the Tribe believes the memoranda of understanding are critical to the NEPA process and should be included in the final CCP. Thus, the section on "Disturbance" should mention that the memoranda of understanding will be incorporated into the final CCP and will be analyzed as part of the NEPA process. This discussion needs to acknowledge that the Service's goal of minimizing or eliminating disturbance to wildlife must coexist with the Tribe's treaty right of access for hunting, fishing and gathering marine resources. The discussion also must acknowledge that Tribal access to the Refuges for the purpose of exercising treaty rights is not a "trespass."

Chapter 2.

Section 2.1.2, Page 2-2. In the first paragraph the phrase **"and the Treaties between these Tribes and the United States which protect the right of access to the Refuges' lands and adjoining waters"** should be inserted after the phrase "Because of the unique relationship of the Makah, Quileute, Quinault, and Hoh Tribes (Tribes) with the Washington coast". This clarifies that the legal rights secured by the Treaties, in addition to the Tribes' geographical ties to the region, are the basis for the memoranda of understanding. For the reasons discussed above, the memoranda of understanding should be incorporated into the final CCP, and the first paragraph of this section should be changed to indicate the memoranda will not be separate from the CCP process.

Section 2.3.1, Page 2-4. The Makah Tribe cannot support Achievement Strategy D of Objective WH1 in its current form because the proposed 200-yard boat free zone around the

Refuges' islands would severely restrict tribal access to usual and accustomed fishing, sealing, and whaling grounds. Additionally, the boat free zone would cut off access to sites of cultural and spiritual importance such as Ozette and Tskawahyah (or Cannonball/Indian) Islands. The boat free zone directly contradicts FWS' Native American Policy, which states that FWS "will provide Native Americans reasonable access to Service managed or controlled lands and waters for exercising ceremonial, medicinal, and traditional activities." Accordingly, this Achievement Strategy should be modified to indicate that tribal boat use in proximity to the islands is either exempted altogether or will be addressed in the memoranda of agreement described in Achievement Strategy G.

The boat free zone highlights another internal inconsistency in the draft CCP/EA. Although the document asserts that Tribal Treaty rights are outside the scope of the CCP, there are several instances where the restrictions of the CCP directly affect Tribal treaty rights. The boat free zone is a particularly notable example because it per se limits tribal access to usual and accustomed grounds and stations. The assertion that Treaty rights are outside the scope of the CCP and restrictions like the boat free zone and blanket no trespassing rules cannot coexist in this planning document and must be reconciled in recognition of the Treaty right of access. This internal conflict again makes clear that the proposed memoranda of agreement addressing access issues must be incorporated into the final CCP and reviewed in the NEPA process.

Section 2.3.1, Page 2-4. FWS indicated in its responses to the Tribe's 2001 comment letter that it considers "tribal access" to be different from "public access." App. A at 8. If this continues to be the position of FWS, it should define "public access" in its Glossary of Terms and specifically exclude tribal access. Without further clarification, the Glossary is a source of confusion on this matter because it defines the term "Public" as including "Indian tribes." *See* Draft CCP/EA at A-6.

Section 2.3.1, Page 2-4 (Achievement Strategy G). For the reasons discussed above, the Tribe believes that the phrase "where appropriate and compatible" is vague and could easily be interpreted as conflicting with the Tribe's Treaty right to hunt, fish, and gather marine resources in the Refuges and the federal government's obligation to the Tribe under the Treaty of Neah Bay. The Tribe has already stated its position that the memorandum of understanding should be incorporated into the final CCP, and this should be reflected in the following changes to the wording of Strategy G:

Negotiate MOUs to be incorporated into the final CCP with Tribes regarding the time, place, and manner of tribal access to the Refuges.

Section 2.3.1, Page 2-7. For the reasons discussed above in relation to Objective WH1, Achievement Strategy D, the Makah Tribe cannot support Achievement Strategy B of Objective WH7 which establishes a 200-yard boat free zone around the Refuges' islands. This Achievement Strategy should be modified to indicate that tribal boat use in proximity to the islands is either exempted altogether or will be addressed in the memoranda of agreement described in Objective WH1, Achievement Strategy G.

Section 2.3.4, Page 2-9. The Cooperative Programs Goal should clarify that the Makah Tribe's jurisdiction overlaps with – and is not merely "adjoining" – other governmental jurisdiction in the Flattery Rocks NWR. The Makah Tribe's usual and accustomed grounds and stations encompasses the entirety of the Flattery Rocks NWR, and within this area the Tribe exercises jurisdiction over its members' Treaty hunting, fishing, and gathering activities.

Section 2.3.4, Page 2-9. An essential part of FWS cooperating and coordinating with the Makah Tribe is through the recognition and protection of the Tribe's treaty rights to access Refuge lands and harvest marine resources within the Refuges. The first objective under the "Cooperative Programs" theme should reflect this reality by adding to Objective CP1 the phrase **"and develop management guidelines for Tribal access to the Refuges."**

Section 2.3.4, Page 2-10. Same comment for Objective CP1, Achievement Strategy D as for Objective WH1, Achievement Strategy G, above.

Section 2.3.5, Page 2-14. The Tribe is interested in pursuing joint research projects on Refuge resources with FWS or other entities, and views this work as part of its responsibility as a co-management authority for the resources within its usual and accustomed grounds and stations. The Tribe would also like the opportunity to review and comment on research proposals and permit requests to FWS for projects taking place in the Refuges, similar to the arrangement it already has for projects in the OCNMS.

Section 2.3.6, Page 2-17. The Public Education goal should include educating the public about the Treaty of Neah Bay and the Treaty of Olympia, the Tribes' exercise of their Treaty rights, the interpretation of these Treaty rights in the *Boldt* decision and subsequent cases, particularly the shellfish case, and the Tribes' role as co-managers of the fishery resource with state and federal agencies.

Chapter 3.

Section 3.4.2, Pages 3-6 to 3-7. The Makah Tribe recommends that FWS study the impact of sea otters on such species as sea urchins, abalone, sea cucumbers, and crabs within the Refuges. A Tribal member has observed that few of these invertebrate species can be found in areas inhabited by sea otters, making subsistence or commercial harvesting impossible.

Section 3.4.2, Pages 3-7 to 3-9. The Treaty of Neah Bay specifically secures to the Makah Tribe the right of whaling and sealing. As a result of the Ninth Circuit Court of Appeals' decision in *Anderson v. Evans*, 371 F.3d 475 (9th Cir. 2004), Treaty harvests of marine mammals are managed by the National Oceanographic and Atmospheric Administration (NOAA) in accordance with the procedures of the Marine Mammal Protection Act which are designed to ensure conservation of marine mammal stocks. The right of access, however, is independent of this process, and may not be impeded by the boat free zone or other aspects of the CCP.

Section 3.5, Page 3-27. Reflecting the Tribe's strong cultural ties to their usual and accustomed grounds and stations, many of the rocks and smaller islands in the Refuges were named by the Makah long before these waters were formally charted. In addition, Makah

legends are based on or make reference to these rocks. The Draft CCP/EA should note this fact and mention that a documentary film exists in which Makah elders were taken out in boats to discuss the names and stories of the rocks. The Makah Museum and Cultural Center has records of these named rocks.

Section 3.6, Page 3-30. The opening sentence of this section underscores the need for the memoranda of understanding regarding tribal access to the Refuges to be incorporated into the final CCP. Here, FWS states that "Because the Washington Islands NWRs are closed to the *public*, there is no official *public* use of the this area." Draft CCP/EA at 3-30 (emphasis added); *see also* Draft CCP/EA at 3-32 ("No public use has historically, or is currently allowed on the Washington Islands NWRs."). FWS goes on to explain that "refuge areas are closed to the public to protect wildlife resources . . . ." Draft CCP/EA at 3-31. Because Appendix A of the Draft CCP/EA defines "public" to include Indian tribes, this blanket prohibition on public use could easily be understood to apply to tribal access to the Refuges for the purposes of exercising Treaty rights. It is therefore essential to include the memoranda of understanding in the final CCP so that the prohibition on public use is not interpreted or misconstrued to prohibit tribal access to the Refuges. Additionally, the apparent contradiction between prohibited public use and tribal access must be clarified in the CCP.

Section 3.6, Page 3-31. The discussion of treaty rights should be clarified so that tribal access in the exercise of Treaty rights is not confused with "public use." The paragraph should also be rewritten as follows to include the memoranda of understanding:

Four Native American Tribes have treaty rights to fish, hunt and gather marine resources in their usual and accustomed grounds along the Olympic Coast. The Tribes' access to the Refuges' islands and adjoining waters in association with exercising these treaty rights will be addressed in the memoranda of understanding incorporated into this CCP.

Section 3.6, Page 3-32. To the statement that "Landing a watercraft on any of the Washington Islands NWRs [] is illegal," the Tribe repeats its comments regarding the 200-yard boat free zone above.

Section 3.7, Pages 3-32 to 3-33. The statement that "Current public use restrictions and management practices of the Service do not interfere with the Tribes exercising their treaty rights to harvest fish" is untrue. The 200-yard boat free zone interferes directly with tribal access to certain rockfish that are found in close proximity to the Refuges' islands. In addition, because subsistence hunting of marine mammals and gathering of shellfish and other marine resources are also important Treaty-reserved activities of the Makah Tribe, Section 3.7 should evaluate the effect of the boat free zone and other access restrictions on the Tribe. This is yet another situation in which incorporation of the memoranda of understanding regarding tribal access into the CCP is critical to a thorough consideration of the environmental impacts of the plan.

Section 3.10, Page 3-35. Some Tribal members take their boats through the Refuges to avoid busy traffic further out in the ocean or to seek shelter from inclement weather. They occasionally set anchor or moor their boats close to certain islands of the Refuges for purposes of

safety. The 200-yard boat free zone could adversely affect public health and safety by eliminating this mooring location in rough weather.

Chapter 4.

Under NEPA, FWS must take a "hard look" at the social, economic and cultural impacts of the Makah Tribe and the other Treaty tribes along the Washington coast if the CCP, in conjunction with the memoranda of understanding, prohibits or otherwise limits tribal access to the Refuges. *See Ctr. for Biological Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1166 (9th Cir. 2003); 40 C.F.R. §§ 1508.8, 1508.14

Section 4.1, Page 4-1. The second paragraph regarding tribal access must recognize that the Makah Tribe's right of access is secured by the Treaty of Neah Bay. This right has not been abrogated by Congress – nor can it be abrogated by an executive order or agency regulation – and guarantees that Tribal members have the right to access the Refuges' lands and adjacent waters. The CCP should recognize that tribal access is based on the Treaty, and not "approved agreements." Additionally, FWS needs to acknowledge that exercise of the Tribe's Treaty right involves fishing, hunting and gathering of marine resources and will necessarily result in some impact to the resources of the Refuges. The objective of "minimiz[ing] impacts to all resources" through the memoranda of understanding must coexist with the Tribe's Treaty right to fish, hunt, and gather marine resources.

Section 4.4.2, Pages 4-4 to 4-5. If FWS agrees with the Tribe that the memoranda of understanding will be incorporated into the CCP, the impact of tribal access to the Refuge and harvest of marine resources will need to be addressed in this section.

Section 4.8, Page 4-14. The last two sentences of this section are confusing because they appear to conflict with the CCP's discussion of restrictions on access and preservation of marine resources in the Refuges. A fair reading of this section would suggest that the Tribes currently may exercise their Treaty rights in the Refuges without limitation by the 1989 Management Plan, and must agree with FWS on any limitations under the CCP. If this is the manner in which FWS anticipates the CCP will affect the Tribes' exercise of their Treaty rights, it should be stated upfront in the document and all other references to tribal access and the memoranda of understanding should refer to it.

The Tribe's reading of this section is also in conflict with FWS' responses to the Tribe's 2001 comments, including its statements that the Refuges "have been closed since they were established in 1907," App. A at 13, and that the "conservation purposes" of the Refuges are "incompatible with hunting and gathering," App. A at 6. FWS should clarify these apparent inconsistencies through further explanation of the relationship between Treaty rights and the CCP's restrictions on access to the Refuges and incorporation of the memoranda of understanding in the final CCP.

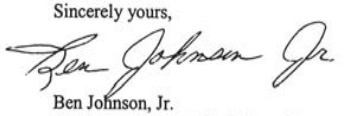
Appendices.

The CCP should include the following terms in its Glossary of Terms, Appendix A: "usual and accustomed grounds and stations" and "tribal access." The inclusion of the latter term is important to clarify that "tribal access" is distinguished by FWS from "public access on an ongoing basis," App. A at 8, and that the CCP's prohibition of trespass does not apply to Tribal members accessing the Refuges in the exercise of their Treaty rights.

Conclusion.

The Makah Tribe remains committed to working with FWS to conserve the resources of the Refuges while ensuring that its Treaty right to fish, hunt, and gather marine resources in the Refuges is recognized and protected. Pursuant to FWS' duties under Executive Order 13175 to consult and collaborate with tribal officials in the development of federal policies that have implications for tribal treaty rights, the Tribe requests the opportunity to consult further with FWS regional staff to clarify the ambiguities in the Draft CCP/EA and FWS' responses to the 2001 comment letter. Because the Tribe also believes the memorandum of understanding should be incorporated into the final CCP and evaluated in the NEPA process, it would be appropriate to begin discussions about the memorandum as soon as practicable in keeping with the letter and spirit of FWS' Native American Policy.

Sincerely yours,



Ben Johnson, Jr.
Chairman, Makah Tribal Council

Enclosure: Makah Tribe's 2001
Comment Letter and FWS' Response

MAKAH TRIBAL COUNCIL

P.O. BOX 115 • NEAH BAY, WA 98357 • 360-645-2201

IN REPLY REFER TO:

7 July 2005

Kevin Ryan
Refuge Manager
Washington Maritime National
Wildlife Refuge Complex
33 S. Barr Road
Port Angeles, Washington 98362

Dear Mr. Ryan,

Please accept these comments as a supplement to our July 6, 2005 letter regarding the draft Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA) for the Washington Islands National Refuges in that the Makah Tribal Council has just recently launched an oil spill prevention/response initiative. The purpose of this letter then is threefold.

First, we would like to expand the statement made in our July 6th letter on the draft Comprehensive Conservation Plan and Environmental Assessment for the Washington Islands National Wildlife Refuges that, "The Tribe continues to strongly support the CCP's emphasis on prevention of catastrophic oil spills, placement of a mission-capable rescue tug boat at Neah Bay, and coordination of conservation, research and monitoring of fish and wildlife with the coastal tribes." Given the severity of risk posed by a major oil spill and public processes currently underway to address these issues (see below), progress needs to be made on this effort prior to the completion of the CCP/EA.

Second, the Makah Tribal Council would like to inform you of the new oil spill prevention/response initiative we have undertaken – the creation an Office of Ocean and Coastal Resources. The primary purpose of the Office is to coordinate and advance the various oil spill related activities the tribe is engaged in such as acting as a Federal Trustee overseeing the Tenyo Maru damage assessment, as a co-manager setting cleanup and prevention standards with State and Federal agencies, as well as serving as front-line primary responders under contract to the maritime industry. Chad Bowechop is coordinating this program development on behalf of the Makah Tribe. Chad is a tribal member and experienced in oil spill prevention/response efforts. I encourage you to contact him about how you intend to implement the sections of the CCP/EA pertaining to oil spills. He can be reached at 360.645.2433. This work also needs to be coordinated with staff from Olympic National Park (ONP) and the Olympic Coast National Marine Sanctuary (OCNMS).

Finally, we offer you these following specific comments on the CCP pertaining to oil spill issues:

1. Interagency coordination and Tribal consultation (ISSUE 2) is needed on oil spill issues – We would welcome the development of a joint list of actions to be taken in the event of a significant spill such as defining procedures for emergency research, needs for staff training, individual agency roles, assessing long term response and clean-up capability, and streamlined damage assessment guidelines. Many of these tasks can be done in coordination with OCNMS and ONP.
2. Significant threat to area from oil spills (ISSUE 5) – We urge USFWS to consult with the Makah Tribe and the OCNMS on the development of a letter to be submitted to WDOE commenting on the ongoing contingency plan rulemaking process calling for increased protection of our trust resources on the outer coast.
3. Objective WH2- We urge you to write a letter to the WDOE expressing your support for long term funding of a mission capable rescue tugboat at Neah Bay. It is critical that the tug's capability be increased to include salvage, fire fighting, skimming.
4. Objective CP1: By 2006, begin working with Tribes on issues and resources of mutual interest to promote conservation - this can be achieved by promoting interagency meetings and supporting baseline inventory creation and monitoring for the islands within the refuge complex.
5. Objective CP3 - Coordinate with Tribes (including the Makah Tribal Historic Preservation Office), OCNMS, ONP, and WDNR in managing for the protection and conservation of intertidal and subtidal zones surrounding refuge islands. The inhabitants of these refuges islands will bear the brunt of damages from a major oil spill.
6. Work with the Makah Tribe and oil spill agencies to call for oil spill drills that will accurately test the existing response capacity off the refuges.
7. Work with the Makah Tribe as we complete the Ecological Risk Assessment with the Coast Guard and other State and Federal Agencies defining when and where dispersants, Insitu burning and conventional recovery efforts need be applied to an oil spill off the Olympic Coast.

We look forward to working with you to protect our shared ocean and coastal resources from the long-term effects of a major oil spill. Please do not wait until the CCP/EA is complete to start on this critical effort.

Sincerely,

Ben Johnson Jr.
Chairman, Makah Tribal Council

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June 21, 2005

Mr. David Allen,
Regional Director
US Fish and Wildlife Service
911 NE 11th Avenue
Portland, OR 97232-4181

Dear Mr. Allen:

Re: Washington Islands National Wildlife Refuges, Draft Comprehensive Conservation Plan and Environmental Assessment of May 2005

Thank you for forwarding the latest version of the Draft CCP and providing a reasonable time for comment. This document has been reviewed by both our environmental attorney/environmental policy analyst and our marine policy analyst/marine biologist. We are combining the comments and putting some larger references into an Appendix to this letter.

We observe that in your letter of March 4, 2005 and in the draft document, the Service states that an MOU will be developed to deal with treaty rights, so they are not discussed in the CCP. However, in fact, the treaty rights are discussed in many places within the CCP and even dealt with in ways we find jurisdictionally troubling. We will note those places in our comments, which will be handled in order of appearance in the CCP 5/2005 draft.

While we understand the Service is anxious to complete this process, we hope that it will be completed in compliance with larger national policies of the Department of Interior with respect to tribes (e.g., Secretarial Order of June, 1997)), and in compliance with executive orders (e.g., EO 13175), regarding meaningful consultation and action in response to tribal comments regarding impact on treaty rights.

Our comments are attached to this cover letter, along with the Appendix. While some reference treaty concerns, others are technical.

Sincerely,

Russell Woodruff, Chair
Quileute Tribal Council

cc: Kevin Ryan, USFWS Port Angeles
Scott Aikin, USFWS Portland

Comments of the Quileute Tribe on 5/2005 CCP
Washington Islands National Wildlife Refuges

Chapter 1.

1. Despite claims in Chapter 1 that Tribal Treaty Rights are beyond the scope of the CCP, treaty rights are discussed throughout the document. In some instances, treaty rights are acknowledged, in others, this document tries to (directly or indirectly) limit treaty rights. We submit that including them in the document is appropriate, and we indicate where we think the Service has erred in the manner of including them (despite the early disclaimer to the contrary).

The Quileute Tribe has stated before and is stating again that the CCP should integrate treaty rights into this Planning Document, and not table them for an MOU. In fact, such are the directives from the Service at the Washington, DC level. You must be aware of the language adopted for writing a planning document such as the Refuge CCP (see your website at http://policy.fws.gov/602fw3.html). We are reattaching PDF sections (Appendix) from the website document to this letter, which illustrate how tribal treaty references belong directly in a CCP. We think the Refuge CCP should follow your own federal guidance for such documents.

2. See the Appendix to this letter also, for Part 512 of the Department of Interior Departmental Manual planning, excerpted. It calls for planning with tribes to be explicit in any DOI planning, operational or management documents. Quileute believes that the MOU is a "sideline" way of dealing with our issues.

3. Page 1-9, Sec 1.3.2, par 2: Tribes have jurisdiction as co-managers with NOAA and WA. The entire OCNMS is within Tribal U&A.

4. Page 1-9, Sec 1.3.3, par 1: Tribes also have jurisdiction on islands within their U&A.

5. Page 1-9, same: Non sequitur: Although service jurisdiction... linked to surrounding marine environment.... All environments are linked regardless of jurisdictions.

6. Page 1-9, sec 1.3.3, par 2: Along the Washington Coast *and on Islands*....

7. Page 1-10, par 1: Tribes co-manage, not just have access to, their U&A.

8. Page 1-11, sec 1.5.2: Co-management is with the state and federal governments.

9. Page 1-12, sec 1.5.3: OCNMS shares resource jurisdiction of the area with the tribes.

10. Page 1-14. Under Section 1.56, Applicable Legal Mandates, and Appendix C, you have omitted the Secretarial Order between Interior, Commerce, and the Tribes, of June, 1997. A copy is attached in the Appendix to this letter. It goes into considerable detail regarding just how consultation is supposed to work. It is far more proactive and specific with respect to the tribal role in planning resource management, than we see in this CCP. One problem with an MOU is that it creates a side document between a single tribe and the Service. Another problem is that it is finite in time. A third problem is its enforceability. We need the public to be up-front aware of the tribal planning role, in this CCP management document.

Page 1-19, Tribal Treaty Rights: Treaty Rights are not outside the scope of this document and are in fact discussed through out, despite the initial "disclaimer." This issue needs to be addressed formally in this document.

Chapter 2.

1. Page 2-2, sec 2.1.2: Line 5 needs amendment. .The Tribes' unique relationship is not with the *Washington Coast* (a geographic term), but with the United States (a government). The tribes' relationship with the U.S. is through a contract with the United States, not because of geographic location.

Neither alternative (A or B) for Proposed Action, nor any statements in this document, will affect Tribal treaty rights. Abrogating treaty rights is beyond the scope of this document. Supreme Court cases hold that abrogation may only be done by Congress and must be explicit on the action of abrogation, when such abrogation occurs (*i.e.*, a law that empowers an agency to regulate its resources does not accomplish this).

2. Objective WH7 on page 2-7, paragraph B, promotes a 200-yard boat-free zone around the islands. This would preclude tribal harvest of intertidal shellfish, guaranteed by the Boldt decision. (*US v Washington*, 384 F. Supp. 312, W.D. Wash. 1974, and its subproceedings, including several cases on shellfish). *It is beyond the scope of USFWS authority to interfere with tribal shellfish harvests on these islands in the tribes' respective U&As. [This would be unlawful abrogation.] It must first be demonstrated that the species in question must be limited for reasons of actual conservation (not some prospective planning for protection).* This paragraph must be corrected to say "except for treaty fishing" or some such language. This is not a negotiable point.

3. Cooperative Programs 2.3.4, CP1, page 2-9. You seem to misunderstand the tribal role. Tribes are interested in preserving for the 7th generation, but they *harvest*. This is not conservation. We are talking about using the resource for food. The cultural, the spiritual, the ceremonies themselves are wrapped around the *food*; e.g., the first springer salmon. It is not that tribes go out to the islands and pray about ancestors. It is that they go out there and harvest for food in the traditional manner, as preserved by the treaties.

This is an area where you are dealing with conservation through a planning document. This is a troublesome retention of attempted regulation of treaty rights in this document. See comment 2 for Chapter 2, above.

Looking at the CP paragraphs overall, none appears to take cognizance of the fact that the tribes have trained staffs including *natural resources law enforcement, biologists, and attorneys.* Their fishermen also have resident knowledge. [We see this in 2.3.5 but it needs to be in the CPs, as with the federal and state agencies named.] Yet, when you discuss Objectives CP2 re WDFW, or CP5 re NPS, or CP4 re USGS, or CP6 re OCNMS, you give technical/legal roles to their staffs. We think you need to recognize what tribes have in the way of technical management. We did a Power Point show for the ONCMS, about the Quileute Tribe in the21st Century. This CP section needs to be rewritten overall to reflect real tribal roles.

4. Page 2-10, Objective CP3 on page 2-10. Intertidal and subtidal lands are outside of jurisdiction of NWR and are beyond the scope of this document. Further, the Service may not engage in "prospective conservation" by zoning, or otherwise limit harvest in the intertidal zone, with respect to tribes. This is part of the Boldt decision. The Sanctuary just tried this and failed, for this very reason. Shellfish harvest is 100% a *US v Washington*- protected right, dealt with by the courts fully. Prospective conservation is beyond the scope of this agency; there can only conservation upon demonstration of a species' need for such protection. This is tribal food, a preserved treaty right, and beyond USFWS scope to limit per this CCP or otherwise. In some ways, this document is more troubling to us than

previous ones. It goes farther in trying to curtail treaty rights, despite claiming that this subject is tabled.

5. Page 2-11, Objective CP6. In drafting an MOU with OCNMS, be alert to the fact that tribes have concurrent jurisdiction for the marine organisms and own 50% of them in their respective U&As. The entire OCNMS falls within tribal U&As. There is no authority in either Commerce or Interior to limit the tribal right to harvest "fish" (invertebrates and vertebrates), for commerce or subsistence or ceremony, in a tribe's U&A.

6. Page 2-16, Objective RA5: The Service should interview the local fishermen with their resident knowledge. Dan Basta of the National Marine Sanctuary recently found OCNMS to be deficient for not adequately incorporating local knowledge into its Marine Conservation Work Group planning for intertidal zones.

7. Page 2-17, Par. 2.3.6 re PE goal on interpretive center. We are concerned about interpretive centers being located in agency "headquarters" so remote from the site. Why not have the interpretive center in Forks, instead of way off near Sequim? Tie it to an existing federal or state building with some interpretive work already in place if you feel a tribal tie would be creating partiality. You talk about this in PE2, at Kalaloch. We think having one at the Dungeness facility would be duplication. That might be a place for the library, but not an interpretive center.

Include education of public on treaty rights and role of Tribes as co-managers of the fishery resources with state and federal agencies.

9. In your table 2-1, regarding MOUs with tribes and respect for federal laws, remember that the federal court decisions are in every respect an extension of the treaties, Constitution, statutes, and regulations they interpret and are every bit as binding. People (including federal staffers) so often read "laws" as the statutes and stop there.

10. Table 2-1, disturbance—you'll need to fix that failure to recognize tribal shellfish boats.

11. Table 2-1 Monitoring and Research: remember to use local knowledge about the fishery and wildlife. Not everything is in a peer-reviewed journal, simply because a researcher has not yet chosen to look at the issue yet. However, be sure much is known by local residents and has been passed down.

Chapter 3.

1. Page 3-1, Section 3.2, par 2: Change sentence: Upwelling is the wind-driven...found to be critical to biological activity *in this region*.... (Upwelling is not a source of nutrients in all areas of the ocean.)

2. Section 3.2, par 3: Columbia River Plume is adjacent to the Refuge, but not in the Refuge. Jurisdiction of the Refuge is the high tide line.

3. Page 3-2, Sec 3.2, first sentence: Change sentence: ...properties, nutrients, ...as water *flows* (strike pours)...

4. Page 3-2, Sec 3.2, last par: They Both vary.... Define "they". Sentence is a non sequitur and needs to be rewritten.

5. Section 3.4 would be more accurate if a website were referenced for updates on listed species, state and federal. Otherwise, your document becomes immediately out of date as species are added or removed.

6. Page 3-2, Sec 3.4 par 2: Listing activities that have impacted Destruction Island has some interesting juxtaposition. Lawful ones or peaceful ones should not be juxtaposed with unlawful, or violent, activities. We also question whether tribal subsistence harvests over the years have in fact "disturbed" the island, since human harvest of the species has occurred for centuries and has been a factor in the ecosystem since time immemorial.

7. Page 3-3, Sec 3.4.1, par 1: While this document should logically deal with factors on agency lands that impact the ecosystem outside its jurisdiction, when referencing an ecosystem beyond its jurisdiction, the document should state so, up front. Kelp does not grow within the jurisdiction of the NWR. In addition, the Edwards and Foster reference is not relevant to the Washington coast. That reference does not state harvest is a threat and reports harvest to have no effect or significant impacts. There is no reference to sedimentation or boat sewage in the reference.

8. Page 3-5, Sec 3.4.2, Fish. Fish are not within the jurisdiction of NWR. Further, the statements regarding State groundfish strategic planning are incorrect, as the Palsson et al. work refers to Puget Sound and not to the Pacific Coast. Marine reserves in the Pacific are far from settled, as are appropriate groundfish catch and bycatch; and to indicate there are already "steps that will be taken in Washington" in this CCP is presumptuous. Work in the Sound does not translate out to this coast. Again, for the forage fish, be sure when talking about enacted state plans, what coast you are discussing.

9. Page 3-6, par 1 (end of paragraph): Sardine and hake are not currently in decline. Please obtain current information from PFMC. Stocks are considered rebuilt.

10. Page 3-7, par 4: Discussion of treaty rights re sea otters. This needs to be elaborated or discussed separately. This section is in contradiction to the Chapter 1 statement that treaty rights are beyond this document.

11. Page 3-8: top of page: Discussion of treaty rights re seals. Same comment as immediately above.

12. Page 3-8, last par. Discussion of Treaty Rights. Hake and sardine are not considered in decline (see above). Same comment as above re treaty rights and sea lions.

13. Page 3-9, paragraphs 3 and 4: Cetaceans are not within the jurisdiction of NWR. This needs to be acknowledged for the benefit of readers without such knowledge (see our note about kelp, above).

14. Page 3-10. Invertebrates: Again we see extensive discussion here of tribal fishing because of treaty rights, although you do not identify the tribal fishing as such.

15. Page 3-11, Birds. In general, references seem out of date. You need to update references and include current research conducted in the NWR, if any exists, or mention that these references are the most recent peer articles.

You mention tribal treaty rights to other species, and the presumed right of USFWS to curtail them (with which we disagree). It appears relevant here to mention that tribes have traditionally harvested gull eggs. Tribes plan to continue to do this, with or without an MOU.

16. Page 3-18, par 2: Is the Kress reference specific to NWR or in general? This needs to be clear.

17. Page 3-18, last paragraph: Brown pelicans are in La Push, as well.

18. Page 3-25, par 4: "an ounce of prevention...." This philosophy does not apply to tribal treaty rights.

19. Page 3-27. Regarding 3.5 and cultural resources: sea levels have been rising since the last Ice Age. No doubt cultural records are submerged.

20. Page 3-27. Regarding 3.5.1, you have not integrated information provided by Quileute Natural Resources staff and elected officials at our meetings, that gathering gull eggs was a regular part of the subsistence diet. You need to add that to the text on page 3-28. Not everything is in books, but that does not make it wrong. These books came from previous interviews with elders. You had live interviews and their remarks need to be used, as well.

21. Page 3-28, par 2: Limited description of tribes. Tribes were not restricted to mouths of rivers. Hunting/fishing occurred throughout the NW on land and sea. Also, tribes gathered gull eggs, urchins, etc. should list all of diet.

22. Page 3-28, par. 3.5.1: To say the Quileute were "situated" at the mouth of the Quillayute is error as well. The headquarters may have been there, but fishing camps were upstream in the four major tributaries, and they ranged south many miles along the coast and north into Lake Ozette, as well. The marine fishery was also a regular part of Quileute existence, as with the other coastal tribes. A wealth of evidence of this sort has been used in US v Washington. Your staff needs to enlarge its data resources. The tribes had marine sailing canoes and used them to range far out to sea. They did not stay at one river mouth. Any reference that indicates this is inadequate and must not be deemed definitive for this CCP, which has legal as well as technical implications.

23. Page 3-29 History, 3.5.3: Last paragraph, on page 3-30. You need to add that Hoh and Quileute tribal members still own allotments in the Quinault Reservation area, even though their ancestors moved to their very small reservations in the 1800s. You allude to this on page 3-34.

24. Page 3-30, Sec 3.6, par 2: Discussion of Treaty Rights. There *is* access to refuge islands for treaty fishing, hunting and gathering rights.

25. Page 3-32. Section 3.7 Environmental Justice. We like this paragraph, but it does not mesh with your earlier statements about restricting boat access within 200 yards of islands, or conservation of shellfish in the tidal/intertidal zones. Did different people write the sections and not get together later?

With respect to par 2: Tribes have historically used the NWR.

26. Page 3-33, same Section: Discussion of Treaty Rights. NWR does not involve fish (not relevant.) Treaty rights are not limited to fish. See our discussion of gull eggs, e.g., above.

27. Page 3-34, Section 3.9, Socioeconomics. It is error to say that areas which do not fall within reservations are "protected." The tribal marine Usual and Accustomed Areas are open to commercial, ceremonial, and subsistence fishing as a matter of law. This includes finned fish and shellfish of every species (invertebrates). So line 6 of your first paragraph needs to insert: "Except for the Usual and Accustomed Areas of the oceans in which these four tribes fish, ..." You need to recognize in the paragraph starting with "The Area economy" that tribes also fish under their treaty rights for subsistence and ceremonial reasons. That is primarily the kind of fishing that is going on in the Refuge area, from the Quileute standpoint, although things could change.

28. Socioeconomics, continued: At the top of page 3-35 you "plug" the Forks lodging facilities. It would only be fair to plug the Ocean Park cabins, trailer hookups, and camping facilities at La Push. Cabins come in a wide variety of size, amenities, and prices! Many people come here because the facilities are right on the ocean, not 15 miles from it.

29. Page 3-25, Par. 3.9, Socioeconomics, continued. While showing median income, why emphasize the whole county? Sequim and Port Angeles probably drive Clallam County's way up. Same for Port Townsend, re Jefferson County. The income of West End communities would be far more relevant to this CCP.

30. Page 3-36: Tribes have accessed the island for centuries, true at the time of designation. You need to mention this, although we would disagree that tribes would have trammeled the land or left debris.

Chapter 4.

In general you need to include in your discussion that neither alternative will affect treaty rights. (They can only be abrogated by Congress, not by a management document.)

1. Page 4-4, sec 4.4.2, Fish: Alternative A is likely to be value neutral with regard to impact on fish by oil spills. OCNMS already addresses oil spills. Negative determination is overstated.

2. Page 4-4, also in 4.4.2: Please note in the document that fish are not under the NWR jurisdiction (occur beyond its borders).

3. Page 4-4 and 4-5. Marine mammals fall under NOAA jurisdiction, which you allude to in discussion of Alternative B on page 4-5. That perhaps should be stated up front. Jurisdiction over their habitat does not fall within NWR.

4. On page 4-5, under Alternative B, you also observe overlapping jurisdiction with OCNMS. Tribes have overlapping jurisdiction throughout the entire area of OCNMS and should be involved in discussions regarding species management whenever OCNMS is.

5. Page 4-5, Marine Invertebrates,. While there may not be a PFMC management plan for marine invertebrates as with other fisheries, they are under the governance of *US v. Washington* and the Magnuson-Stevens Act. The state and the respective tribes divide up harvest of 50% of the fishery. You may be able to keep non-treaty fishers out of this area, but it is illegal to keep the tribal fishers out. The last paragraph of page 4-5 is erroneous and needs to be deleted or undergo major rewriting.

6. Page 4-7, Birds. Somewhere in this page should be integrated the tribal right to harvest birds/bird eggs, which you are reserving for MOU discussion and thus not exposing to the public, a PR problem for us. Since you allude to tribal rights all through the document, they should be alluded to here, as well. We read here that Makah want to harvest common murres. Quileute have traditionally harvested gull eggs and will continue to do so, until the gulls are listed under ESA, not a likely prospect.

7. Page 4-11, Monitoring: It would be correct to note the tribal contribution to monitoring that occurs on the coast. OCNMS relies on our monitoring for seabird fatalities, for example.

8. Page 4-12, Cultural Resources. It is important for the Service to recognize that the traditional gathering of food by tribes is a cultural practice, as much as any artifacts are cultural. Most anthropological or archeological references to tribes indicate this.

Appendix A

Page A-4, Gillnet: This definition needs to be refined. Tribal gillnets are not the same as the oceanic gillnets of which there is great controversy. You need to make a clear distinction; not all gillnet use has high bycatch.

* * * * * * * * * * * *

Quileute "Appendix" to specific comments on CCP/EA, above.

In addition to requirements in the CCP manual for addressing Treaty Rights, The DOI also has this requirement for planning documents.

Part 512 of the Department of Interior Departmental Manual states:

3. **Responsibilities**.

A. **Heads of bureaus and offices** are responsible for identifying any impact of Departmental plans, projects, programs or activities on Indian trust resources. Department officials shall:

(1) Establish procedures to ensure that the activities of Departmental organizations impacting upon Indian trust resources are explicitly addressed in planning, decision, and operational documents;

4. **Procedures**.

A. **Reports**. As part of the planning process, each bureau and office must identify any potential effects on Indian trust resources. Any effect must be explicitly addressed in the planning/decision documents, including, but not limited to, Environmental Assessments, Environmental Impact Statements, and/or Management Plans prepared for the project or activity. The documentation shall:

(1) Clearly state the rationale for the recommended decision; and

(2) Explain how the decision will be consistent with the Department's trust responsibility.

B. **Consultation**. In the event an evaluation reveals any impacts on Indian trust resources, trust assets, or tribal health and safety, bureaus and offices must consult with the affected recognized tribal government(s), the appropriate office(s) of the Bureau of Indian Affairs, the Office of the Solicitor, and the Office of American Indian Trust. Each bureau and office within the Department shall be open and candid with tribal government(s) during consultations so that the affected tribe(s) may fully evaluate the potential impact of the proposal on trust resources and the affected bureau(s) or office(s), as trustee, may fully incorporate tribal views in its decision-making processes. These consultations, whether initiated by the tribe or the Department, shall be respectful of tribal sovereignty. Information received shall be deemed confidential, unless otherwise provided by applicable law, regulations, or Administration policy, if disclosure would negatively impact upon a trust resource or compromise the trustee's legal position in anticipation of or during administrative proceedings or litigation on behalf of tribal government(s).

See attached PDF document submitted on a previous occasion, regarding your website on process.

Secretarial Order attached, as well. You have referenced the EO, so we will not be attaching that.

Quinault Indian Nation

POST OFFICE BOX 189 ☐ TAHOLAH, WASHINGTON 98587 ☐ TELEPHONE (360) 276-8211

June 30, 2005

Mr. David Allen,
Regional Director
US Fish and Wildlife Service
911 NE 11th Avenue
Portland, OR 97232-4181

Re: Comments to Washington Islands National Wildlife Refuges, Draft Comprehensive Conservation Plan and Environmental Assessment of May 2005

Dear Mr. Allen:

Thank you for the opportunity to review the most recent version of the draft Comprehensive Conservation Plan (CCP) and Environmental Assessment of May 2005 for the Washington Islands National Wildlife Refuges. Our Department of Natural Resources and policy staff have reviewed the document and provided specific comments that are listed in the enclosed comments document.

The Quinault Indian Nation is very concerned with this latest draft of the CCP. Comments previously provided by the Quinault Indian Nation have not been incorporated or accurately reported within this most recent draft of the CCP.

Of paramount concern to the Quinault Indian Nation is the lack of recognition by the USFWS of the Quinault Indian Nation's previous objections to the inclusion of allotted lands within the Quinault Indian Reservation in to the Washington Islands National Wildlife Refuges. The Quinault Indian Nation requests that these lands be removed from the refuge plan.

In addition the Quinault Indian Nation maintains that all islands, sea stacks and rocks above the low tide line that are directly West of the Quinault Indian Nation Reservation are eroded headlands, and are therefore also part of the Reservation and are owned by the Quinault Indian Nation. The Quinault Indian Nation requests that these eroded headlands be removed from the Comprehensive Conservation Plan and Environmental Assessment for the Washington Islands National Wildlife Refuges.

The Quinault Indian Nation has also noted that in your letter of March 4, 2005 and in the draft CCP document, that the USFWS has excluded integrating tribal treaty rights into the CCP and instead intends to develop independent Memorandums of Understanding (MOU) with each affected tribe at a later date as a means of dealing with tribal treaty rights. Upon review of the CCP we find that treaty rights are discussed throughout the document, and are proposed to be dealt with in a variety of ways we find troubling.

The proposal to develop MOUs and exclude tribal treaty rights integration in to the CCP is a new initiative, and as presented, is contrary to USFWS policy (Sec. Order 3206, 1977, Sec. Order of June 1997, USFWS Tribal Policy 1994, and the USFWS Strategic Plan: 2000-2005, page 50). The Quinault Indian Nation requests a government-to-government consultation on how tribal treaty rights are dealt with within the Comprehensive Conservation Plan and the Environmental Assessment.

We understand your desire to complete this planning process. We would hope that it be completed with meaningful consultation and action in regards to resolution of real estate and tribal treaty right issues.

Thank you again for the opportunity to comment on the CCP and the Environmental Assessment. If you have any questions, please contact Grover Oakerman (360-276-8211 ext 299, goakerman@quinault.org). Please find enclosed our specific text comments.

Sincerely,

Pearl Capoeman-Baller

Pearl Capoeman-Baller, President
Quinault Indian Nation

cc: Bruce Jones
Grover Oakerman
Kevin Ryan, USFWS Port Angeles
Scott Aikin, USFWS Portland

Enclosure: Quinault Indian Nation Comments to Washington Islands National Wildlife Refuges, Draft Comprehensive Conservation Plan and Environmental Assessment of May 2005

Quinault Indian Nation Comments to Washington Islands National Wildlife Refuges, Draft Comprehensive Conservation Plan and Environmental Assessment May, 2005

Chapter 1

General

This CCP proposal to develop MOU's by excluding tribal treaty right integration in to the CCP is a new initiative and as presented is contrary to USFWS policy (Sec. Order 3206, 1977, Sec. Order of June1997, USFWS Tribal Policy 1994, and the USFWS Strategic Plan: 2000-2005, page 50). We request that the segregation tribal treaty rights from the CCP be dealt with through government-to-government consultation between the USFWS and the Quinault Indian Nation.

The Quinault Indian Nation believes the use of an MOU process within the CCP does not adequately address tribal treaty issues.

Upon review of the CCP we find that treaty rights are discussed throughout the document and are proposed to be dealt with in a variety of ways we find troubling. Despite stated goals to the contrary we feel that the USFWS has erred in developing this CCP by attempting to unilaterally deal with tribal treaty issues.

Specific Comments

Page 1-9, Sec 1.3.2, par 2: Quinault Indian Nation has jurisdiction as co-managers with NOAA and WA. The entire OCNMS is within the tribal U&A's.

Page 1-9, Sec 1.3.3, par 1: Tribes also have jurisdiction on islands within their U&A. Some islands listed within the CCP are within the Quinault Indian Reservation and should be removed from this document.

Page 1-10, par 1: Within their U&A the Quinault Indian Nation are co-managers of these areas. They do not just have access rights.

Page 1-11, sec 1.5.2: The Quinault Indian Nation are co-managers with the state and federal governments.

Page 1-12, sec 1.5.3: OCNMS shares resource jurisdiction of the area with the tribes.

Page 1-14. Under Section 1.56, Applicable Legal Mandates, and Appendix C, you have omitted the Secretarial Order between Interior, Commerce, and the Tribes, of June, 1997.

Page 1-18 We request that within the Tribal Consultation Section, Quinault Indian Nation, summary page 1-18 accurately reflect Quinault Indian Nation comments and concerns. The Quinault Indian Nation is concerned by the lack of recognition by the USFWS of the Quinault Indian Nation's previous objections to the USFWS's inclusion of allotted lands within the Quinault Indian Nation Reservation in to the Washington Islands National Wildlife Refuges. The Quinault Indian Nation requests that these lands be removed from the refuge plan.

These lands include: the Little Hogsback, Hogsback, and Tunnel islands are within the boundary of the Quinault Indian Reservation as set by the Treaty of Quinault in 1855, have been allotted by the Bureau of Indian Affairs and are owned by the Quinault Indian Nation and individual allotted landowners. The Quinault Indian Nation again requests that these properties within the boundaries of the Quinault Indian Reservation be removed from the draft Comprehensive Conservation Plan and Environmental Assessment for the Washington Islands National Wildlife Refuges.

The USFWS has never answered the Quinault Indian Nation's question; How are eroded headlands measured and determined to be off-shore islands? Much of the coastline along the Quinault Indian Reservation is composed on eroding headlands.

The Quinault Indian Nation maintains that due to elevating sea levels and resulting erosion that all islands, sea stacks and rocks above the low tide line that are directly West of the Quinault Indian Nation Reservation, are part of the reservation and are owned by the Quinault Indian Nation. At low tide some of these areas are still connected to the headlands. These areas include but are not limited too Willoughby Rock, Split Rock, Flat Rock, Big Stack Rock, and the Grenville Arch. The Quinault Indian Nation requests that these lands be removed from the Comprehensive Conservation Plan and Environmental Assessment for the Washington Islands National Wildlife Refuges.

We have in the past advised the USFWS that the Quinault Indian Nation requires prior notification of NWR staff, contractors or collaborators presence on the reservation. We have concerns that due to lack of coordination and consultation that studies are being conducted within the boundaries of the Quinault Reservation without the knowledge or approval of the Quinault Indian Nation by various entities working in cooperation with the USFWS. Recent discussions with the Washington Department of Fish and Wildlife revealed studies done in cooperation with the USFWS that the Quinault Indian Nation was unaware of on islands, shorelines, and uplands of the Quinault Indian Reservation. Until these discussions with WDFW, results of these studies have not been shared with the Quinault Indian Nation.

Page 1-19, Tribal Treaty Rights: Treaty Rights are not outside the scope of this document; the USFWS has erred in this statement, and in fact discusses tribal treaty rights throughout the document, despite this initial "disclaimer."

Chapter 2

General

This entire chapter is flawed and is need of a rewrite.

previous ones. It goes farther in trying to curtail treaty rights, despite claiming that this subject is tabled.

5. Page 2-11, Objective CP6. In drafting an MOU with OCNMS, be alert to the fact that tribes have concurrent jurisdiction for the marine organisms and own 50% of them in their respective U&As. The entire OCNMS falls within tribal U&As. There is no authority in either Commerce or Interior to limit the tribal right to harvest "fish" (invertebrates and vertebrates), for commerce or subsistence or ceremony, in a tribe's U&A.

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11. Table 2-1 Monitoring and Research: remember to use local knowledge about the fishery and wildlife. Not everything is in a peer-reviewed journal, simply because a researcher has not yet chosen to look at the issue yet. However, be sure much is known by local residents and has been passed down.

Chapter 3.

1. Page 3-1, Section 3.2, par 2: Change sentence: Upwelling is the wind-driven...found to be critical to biological activity *in this region*.... (Upwelling is not a source of nutrients in all areas of the ocean.)

Indian Nation was unaware of on islands, shorelines, and uplands of the Quinault Indian Reservation. Until these discussions with WDFW, results of these studies have not been shared with the Quinault Indian Nation.

Page 2-13: Table 2-1: This table needs to be rewritten to reflect previous comments.

Chapter 3

Specific Comments

Page 3-3, Sec 3.4.1: This document should discuss factors on agency lands that impact the ecosystem outside of its jurisdiction, but when referencing an ecosystem or species beyond USFWS's jurisdiction, the USFWS needs to acknowledge the extent of it's jurisdiction. An example is that kelp does not grow within the jurisdiction of the NWR. Though the USFWS does have co-management responsibilities for sea otters it does not have responsibilities for other marine mammals.

Page 3-5, Sec 3.4.2, Fish are not within the jurisdiction of NWR. We disagree with several statements and conclusions drawn by the USFWS in this section. We would suggest that the USFWS seek wider input including the Quinault Department of Fisheries staff before re-writing this section. This section should be rewritten to better reflect the CCP stated goals of the section, which are: "identifies the current environmental conditions".

Page 3-7 & 8, Discussion of treaty rights relating to sea otters and seals either needs to be elaborated on, or discussed separately. This section is a contradiction to USFWS previous statement that treaty rights are beyond this document.

Page 3-9: Cetaceans are not within the jurisdiction of NWR.

Page 3-10. Invertebrates: USFWS again has included extensive discussion of tribal fishing because of treaty rights.

Page 3-11: This section contains the presumption that the USFWS has the right to curtail treaty tribal reserved rights to harvest (with which we disagree). The Quinault Indian Nation has traditionally harvest sea bird eggs, sea birds and waterfowl from these areas.

Page 3-25: This section again contains the presumption that the USFWS has the right to curtail treaty tribal reserved rights.

Page 3-28: This section incorrectly describes how and where tribes hunted/fished/and gathered. There has been extensive evidence presented in US v Washington documenting this use. The USFWS needs to re-write this section. In no case were tribes limited or restricted to the mouths of rivers in their use of the environment.

Page 3-30, Discussion of Treaty Rights. The Quinault Nation requests information contained in this section be removed and placed separately in a section identified as Treaty Rights. By having this discussion in a section identified as History there is the implication or bias that somehow that treaty tribal rights are out date, expired or are not current and in effect. The Quinault Indian Nation has reserved treaty rights to access refuge islands to carry out treaty reserved fishing, hunting and gathering. We request the USFWS add additional sections stating how tribal treaty rights are in effect and how they related to the CCP.

Page 3-32. Section 3.7 Environmental Justice: The Quinault Indian Nation respectfully suggests that the USFWS review this draft CCP and edit it to be consistent with this section.

Page 3-33, same Section: Discussion of Treaty Rights. The Quinault Indian Nation has reserved treaty rights to access islands to partake in treaty fishing, hunting and gathering.

Page 3-34, Section 3.9, Socioeconomic: Tribes have marine Usual and Accustomed Areas outside of their reservations that are open to commercial, ceremonial, and subsistence fishing as a matter of law.

Chapter 4

General

USFWS needs to restate here that no alterative or Proposed Action, nor any statements in this document, will affect Tribal treaty rights. The USFWS needs to acknowledge the tribes' rights as co-managers in these sections.

Specific Comments

Page 4-4, sec 4.4.2, Fish: Alternative A benefits and Negative determination are likely over stated. OCNMS already addresses oil spills.

Page 4-4: Please again state in the document that fish are not under the NWR jurisdiction.

Page 4-4 and 4-5. Management of marine mammals (except sea otters) fall under NOAA jurisdiction. Jurisdiction over their habitat does not fall within NWR.

Page: 4-5: Alternative B, you observe overlapping jurisdiction with OCNMS. Tribes have overlapping jurisdiction throughout the entire area of OCNMS and should be involved in all discussions regarding species management.

Page 4-5, Marine Invertebrates: Marine invertebrates as with other fisheries, are under the governance of *US v. Washington* and the Magnuson-Stevens Act. The state and the respective tribes regulate harvest within these fisheries. The USFWS may have the ability to regulate the access of non-treaty fishers in this area, but it is illegal to keep the tribal fishers out. The last paragraph on page 4-5 is in error and needs to either be rewritten or removed.

Page 4-7, Birds. The Quinault Indian Nation has reserved treaty rights to hunt birds and gather eggs within these areas.
Page 4-12, Cultural Resources. It is important for the USFWS to recognize that the traditional gathering of food by tribes is a cultural practice.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT
Olympic Coast National Marine Sanctuary
115 East Railroad Avenue, Suite 301
Port Angeles, WA 98362-2825

June 30, 2005

Kevin Ryan, Refuge Manager
Washington Maritime National Wildlife Complex
33 S. Barr Road
Port Angeles, WA 98362

Dear Kevin,

We would like to thank the Washington Islands National Wildlife Refuges (refuge) for the opportunity to comment on the Draft Comprehensive Conservation Plan and Environmental Assessment (CCP). We reviewed the CCP in the context of the comments that we submitted, dated June 5, 2000, and feel that in general the CCP addresses our major comments and concerns. The Olympic Coast National Marine Sanctuary (sanctuary) in general supports the preferred alternatives stated in the CCP (alternative B). Two places where the CCP is substantively deficient, from the sanctuary's perspective, is the lack of acknowledgement that the sanctuary's jurisdiction (to the mean higher high water line) overlaps with the refuge's boundaries and that the National Marine Sanctuary Act is not referenced as a law that is applicable to the refuge's CCP.

We have summarized our more specific comments by the listed "Key Planning Issues", occasionally listing the "Management Themes". A description of how these different groupings are related may help with the readability of the document. One possible means would be a matrix showing what themes were applied to each of the issues.

Issue 1. Public Awareness

Outreach and education are a major priority for the sanctuary and we support the goal and objective of the public education management theme. We are especially interested in working with the refuge on objective PE3, especially the development of interpretive facilities in close proximity to the refuge and the sanctuary.

Issue 2. Interagency and Tribal Coordination

One of the purposes of the National Marine Sanctuary Act (NMSA) is the development of coordinated plans for the protection and management of the sanctuary with appropriate Federal agencies, State and local governments, Native American tribes and organizations. Many of the strategies listed in the CCP will facilitate the sanctuary's ability to meet this goal of the NMSA. We are especially interested in working with the refuge and other partners on the following objectives:

Objective CP1 - in addition to working with tribes on research and monitoring we encourage the refuge and the tribes to collaborate on resource protection efforts, especially on oil spill issues. It would be helpful to have local resource protection agencies and tribal governments coordinate on areas such as procedures for emergency research, needs for staff training, individual agency roles in the Incident Command Structure, assessing long term response, response technologies and clean-up capability, and streamlined damage assessment guidelines.

Objective CP3 - we support the refuge's strategy to jointly develop policy and protection plans for the intertidal and subtidal areas surrounding refuge islands. This could potentially be done in conjunction with the sanctuary's upcoming management plan review or through an independent process. We recommend that research access and permitting be added components to any proposed plans.

Objective CP4 - the refuge may want to consider including the sanctuary in these discussions. The sanctuary also has a MOU with the USCG and servicing flights to Destruction Island are part of the agreement. Because the flights undertaken by the USCG require flying in the overflight restricted zone of the sanctuary it would be useful to include the sanctuary in these discussions and perhaps develop a three-way MOU.

Objective CP5 - the refuge should consider adding the sanctuary in any discussions related to joint law enforcement. The sanctuary shares jurisdiction with the refuge and Olympic National Park in the intertidal zone. NOAA's Office of Law Enforcement has recently increased its presence in the area and we anticipate an increased level of support to sanctuary enforcement efforts. We

also recommend that permit procedures for prohibited activities be included in this agreement.

Objective CP6 - the sanctuary supports the refuge's interest in developing an MOU. There are many stated strategies in the CCP that could be included in such a document.

Objective CP7 - the sanctuary has been involved in overflight education and monitoring for a number of years and is willing to collaborate with the refuge in this area. The 3 refuges are currently located on the Seattle Sectional Aeronautical Chart along with a general statement on "Regulations regarding flights over charted National Park Service Areas, U.S. Fish and Wildlife Service Areas, and U.S. Forest Service Areas."

The National Marine Sanctuary West Coast Region has recently contracted with the University of Washington to provide recommendations on the development of an overflight monitoring protocol; we will provide the refuge with a copy upon completion. We have requested support for a pilot project, in either Olympic Coast NMS or Monterey Bay NMS, using the recommendations of the resulting report in 2006. If the Olympic Coast is the sight of the pilot project we would welcome participation by refuge staff.

Issue 3. Disturbance

The CCP states that the islands will remain closed to public use and access. It would be helpful to clarify in the CCP how this is accomplished. Specific references to the applicable regulations related to trespass, as well as other issues addressed in the CCP would be of value. Consideration should be given to including applicable CFRs as an appendix. In some cases other agencies or researchers may need access to the islands to conduct damage assessment, research or monitoring activities. How will these needs be evaluated and managed?

The sanctuary is also concerned with disturbances to nesting seabirds and marine mammals. Due to our overflight regulation the sanctuary has mostly concentrated on overflight disturbances, but sees the value in putting an increased effort in the issue of disturbances from boating (Strategies WH1 and WH7). The sanctuary suggests that the refuge consider concentrating their "boat free zone" efforts around the most sensitive islands. We also suggest that when considering which areas should be designated that a careful

analysis be done. This analysis should not only consider the locations of major seabird colonies and marine mammal haul outs, but also considers fishing practices, recreational boating patterns, anchoring areas and hazards to navigation. We believe that the success of this effort will be greatly improved if the current uses are considered, the user communities and resource managers are engaged and the most sensitive areas are the focus of the effort. The sanctuary would be interested in participating in this process, possibly through its management plan review process.

While the sanctuary supports the 200 yard boat free zone and will make sure to abide by it when transiting through the sanctuary, sanctuary staff will on occasion need to be inside this area to conduct research and management activities. We would be happy to discuss any concerns the refuge has with sanctuary activities adjacent to the refuge islands, possibly addressing them in the MOU suggested in CP6. The fact that the sanctuary has overlapping jurisdiction with the refuge needs to be recognized.

As mentioned in our comments on CP7, the sanctuary is in the process of developing a west coast regional overflight monitoring protocol. If implemented this may be of value to the refuge. The sanctuary also supports the "overflight impacts awareness program" outlined in objective WH6. We recommend that this effort can be coordinated with the sanctuary's ongoing overflight outreach efforts.

Issue 4. Monitoring and Research

The sanctuary supports the goals and objectives of the research and monitoring management theme, with the following additions. As previously discussed the sanctuary is interested in overflight monitoring, while discussed elsewhere in the document it could also be included here. The sanctuary is also specifically interested in research that better documents overflight and boater disturbances. We believe that the current level of knowledge in this area is inadequate and is needed to assist in management of both the sanctuary and the refuge.

Objective WH5 - The sanctuary has invested significant resources into GIS data layers and infrastructure and could potentially be an asset to the refuge as they begin this work. It is in both the refuge and sanctuary's interest to attempt to standardize and share database layers whenever possible.

Objective RA1 - An additional critical area of research are the causes for declining seabird populations (potentially ecosystem programs).

Objective RA2 - These data (GIS or otherwise) need to be made available to resource agencies in a timely manner. We also suggest that the refuge work with the sanctuary in linking colony data with offshore distribution and abundance studies.

Objective RA3 - Distribution of data and draft results cannot wait for peer reviewed journals or agency reports, which can take years. A mechanism for findings to be discussed and presented to co-managers of the resources needs to be developed so that there is timely receipt of information. This will serve the purpose of increased protection of refuge resources by facilitating partner agencies management functions, i.e., sanctuary permitting.

Objective RA4 - What is the process by which researchers would be required to use specific methods? Is a permit system proposed?

Issue 5. Contaminants

The sanctuary fully supports the refuge's objective to reduce the risk of oils spills. This was a major reason for the designation of the sanctuary and an area where the sanctuary and refuge's interests are clearly aligned. The sanctuary and refuge should continue to actively support each other in both oil spill prevention programs and in oil spill contingency planning. The sanctuary recommends that the refuge remain engaged in regional oil spill contingency planning. Current initiatives that the refuge may want to monitor include Washington Department of Ecology's contingency plan rulemaking process and discussions on alternative response technologies. It would be helpful in the case of an oil spill if the refuge had previously considered its position on the use of dispersants and in-situ burning.

The National Marine Sanctuary Program Sanctuary Hazardous Incident Emergency Logistics Database System (SHIELDS) contains an Arc IMS mapping project including natural and cultural resource layers, maritime data such as nautical charts and protected area boundaries, and other information useful to agency managers, tribes, response personnel and affiliated research staff. WDNR, OCNMS and WDFW are among

the agencies who have submitted data to the project at this time. Data layers from USFWS would be very useful to this project, especially in the event of a significant oil spill or hazardous material release in the vicinity of the refuge complex.

Issue 6. Invasive Species Management

The sanctuary believes that the CCP does not adequately address the issue of invasive species in the intertidal zone. It is not clear if objective WH4 includes intertidal invasive species monitoring. We recommend that this be included and that the sanctuary be invited to participate in the work. The sanctuary began an assessment of aquatic invasive species in the summer of 2001. This work is continuing and will provide a baseline of current conditions upon which future monitoring can be compared. The introduction of invasive species has the potential to dramatically change the biodiversity of the coast and ecosystem dynamics. In some cases sanctuary researchers may need to access the intertidal zone of some of the islands to conduct this work.

Cultural Resource Issues

We are separating our comments on cultural resources management, because they do not seem to fit neatly into one of the other issue areas. The sanctuary feels that this area of the CCP could be strengthened. As a federal agency the refuge is obligated under the National Historic Preservation Act to inventory and potentially manage cultural resources.

While the CCP does discuss cultural resources in the Environmental Consequences chapter, the CCP does not include any goals or objectives that are specific to cultural resource management. Management activities related to Destruction Island Lighthouse could potentially be done in cooperation with the USCG (CP4) and/or the sanctuary (CP6).

In closing, we appreciate the effort put into developing the draft CCP and look forward to working with the refuge in implementing those recommendations that are in areas of joint jurisdiction and common interest.

Sincerely,

Carol Bernthal

Carol Bernthal
Superintendent
Olympic Coast NMS



OLYM_SuperIntendent
@nps.gov
Sent by:
Janet_Kailin@nps.gov

To: FW1PlanningComments@fws.gov
cc:
Subject: Revised Comments on Draft CCP/EA. Please replace earlier comments with these.

06/30/2005 08:38 AM

Comments from Olympic National Park on USFWS "Washington Islands National Wildlife Refuges Draft Comprehensive Conservation Plan and Environmental Assessment"

Chapter 1 Introduction, Purpose and Need

Between page 1-4 and 1-8 an entire paragraph has been duplicated, might want to delete in the final copy.

Page 1-8
Mention should be made that the early bird reserve wardens were often tribal members. We have archival documents at ONP with the names of some of these wardens.

Page 1-11
Under 1.5 Related Actions and Activities, tribal, USCG and Marine Sanctuary are all mentioned but ONP is not, though we figure in later in the document. Consider ONP a related activity especially related to enforcement.

Page 1-17,
First sentence in Section 1.7.2 :Change cultural to culture, probably meant to say, " NWRs are important to the culture of the Makah..."

Other agencies - Change structure to structures in the sentence, " Inventory of archaeological and historical materials and structure ..." Bring the last bullet up so it appears right after the archaeological bullet. Add bullet, "To document ethnographic resources and potentially eligible Traditional Cultural Properties."

Page 1-19
What is the Service's jurisdiction over Ozette Island?

Page 1-20
Section 1.7.3 - Issue 1 mentions the plan for a "future interpretive site at Kalaloch Park Service Ranger Station". It is actually an inter-agency, or multi partner (whatever ONPs final General Management Plan language will be) facility there. FWS and NPS should ensure the same concept/idea is in place in both documents.

Page 1-21
Paragraph 4 - Spiritually significant sites. An ethnographic study should be proposed to identify the important ethnographic resources and identify those eligible to the National Register as Traditional Cultural Properties. Study could address indigenous place names, oral histories relating to islands, traditional bird egg harvest, seal and sea otter hunting history, Native reserve wardens, as well as the spiritually significant sites.

Chapter 2: Alternatives, Goals, and Objectives and Strategies.
Page 2-2

First paragraph: ONP has agreement for fire protection, should be mentioned and cited accordingly.

Page 2-3, Management Themes
Recommend the addition of a Cultural Resources Management Theme. Possible Goals could include:
1. Develop a comprehensive Cultural Resource Management strategy
2. Develop a preservation program for the identification, evaluation and nomination to the National Register of Historic Places of historic properties as
per Section 110 of the National Historic Preservation Act.
3. Re-evaluate and update archeological site records for all known archeological resources within the Washington Island NWRs. Include condition
assessment for each site and updated management recommendations.
4. Review previous cultural resource inventories
5. Document ethnographic resources within the Washington Island NWRs.
6. Document Historic Resources within the Washington Island NWRs.
7. Establish cultural resource monitoring protocols for archeological sites and Historic Structures.

Page 2-4
Objective WH2, C - We would support the placement of a mission capable rescue tug boat at Neah Bay as a key to reducing oil spill impacts on refuge islands, within the OCNMS and on the coastal portion of ONP.

Page 2-10
Objective CP3- The park supports a coordinated effort for the protection and coordination of the intertidal and subtidal zones. We are currently developing the ONP General Management Plan (GMP) which will address options within the intertidal areas of the park. This document is expected to be completed in 2006.

Headings are different on the table on page 2-21. Should use the same terms, i.e. Cooperative Programs vs. Interagency and Tribal Coordination.

Also- Treaty is mentioned in Table 2-21 but not in text bullets 2-10. Suggest keep the language conforming to page 2-10, remove mention treaty in Table.

Page 2-11
First bullet under CP5 - comma missing between "trespass, law enforcement..."

Add achievement strategy on Page 2-11, Objective CP5 - to reiterate the importance of maintaining the NPS radio facility at Destruction Island to park emergency communications.

General comment - consider some Homeland security type funding for coastal areas.

Page 2-12
Objective CP7 - How will they be addressing the ongoing research flights? Will research flights be restricted to the 2,000-foot flight free ceiling? This seems to be a missing component in the document - the existing and future planned research -related flights and the related impacts on wildlife and wilderness of the Islands and adjacent OCNMS and ONP administered lands.

See also "Affected Environment" and recommend including a table of on-going and future planned research, methodologies (flights, frequencies, altitude). How are they evaluated?

See also, "Environmental Consequences" this should be part of the cumulative impacts discussion (page 4-7 addresses it somewhat but doesn't go into the details of disturbance impacts from flights, and at the bottom of 4-8 it is addressed , but again, only focuses on the beneficial aspects of research and not on disturbance impacts associated with flights).

And Section 4.4.3 "Effects to Species with Special Status"- The FWS has provided a disturbance zone related to aerial operations and impacts to bald eagles and marbled murrelets. Flights that are within one mile of a bald eagle use area have the potential to adversely affect bald eagles and require section 7 consultation. WDFW and ONP coordinate the bald eagle surveys on the coast and an provide you with information on nest locations and foraging areas to assist you in your analysis of effects.

See also Page 4-14, Section 4.7 - Wilderness Resources - would all flights be reduced, including research flights? Or would there continue to be flights over wilderness related to the increased research?

Page 2-14 Section 2.3.5 Research and Monitoring Activity Management
There is no mention of monitoring of archeological resources. Documented archeological sites within the three refuges need to be monitored on a regular basis to determine if there has been any damage or changes in condition due to human causes (vandalism, unauthorized uses, or operations, etc) or natural causes (erosion, animal burrowing–birds and rabbits).

Page 2-17 and 2-18
Objectives PE3 A - The NPS would support the concept of an interagency interpretive center somewhere on the coast, but does not recommend designating Kalaloch as the preferred location at this time since there are many options within and outside the park for such a facility.

Page 2-17
Consider making a stronger argument for education/interpretation given that the refuges are closed to the public. In the discussion paragraph under PE1 editing...should be "are" instead of "as" in first line.

Chapter 3: Affected Environment
Page 3-19
First paragraph - Is the Hoh River a "favored spot" as hundreds of pelicans are seen there on the sand bars?

Page 3-22
Third paragraph referencing European rabbits - seems like there should be a stronger emphasis to eradicate the rabbits mentioned.

Page 3-27
3.5 Cultural Resources - there are two listed archaeological sites on Destruction Island , documented by Berglund.

Page 3-28
Third paragraph- The point between the Hoh and the Queets River is called Steamboat Creek.

No ethnographic study has been done specifically for the Wildlife Refuge. One should be scheduled. Such as an overview outlining the early history of bird reserve management, tribal traditional use of these islands, egg harvest, seal hunting, other resource uses, spiritual relationship, place names - utilizing oral history, archival review, current interviews, early photos, maps, and other ethnographic studies.

Page 3-29
The Makah plan to nominate Ozette tot he NHL - it has not been done.

Page 3-30
First paragraph - Ozette is not part of the Makah Reservation. It is still the Ozette Reservation. It is held in trust for the Makah tribe.

Third paragraph - a one-mile square "reservation" is missing from this sentence.

Page 3-32
First paragraph - Mike Girling's name is spelled incorrectly, it is spelled "Gurling"

Third paragraph - Commercial fishing in Marine Sanctuary waters.

Page 3-34
The Quileute and Hoh "tribes" do not have allotments on the Quinault Reservation; some individual tribal members have allotments.

Chapter 4 - Environmental Consequences
Page 4-1
Second paragraph is one sentence on Tribal access and it seems stuck here. Perhaps incorporate where necessary in each section or elaborate on the context of this statement and prepare a larger statement or paragraph.

Page 4-8
Specifically mention rabbits as an example of invasive species.

Page 4-12
Is this the first mention of TCPs? Should be mentioned earlier on -as above and define- should also include in the glossary. Give example.

Page G-2 Project number 05NNN speaks to their "share" of the construction and operation of a visitor center on the Washington Coast ($327,000). Don't know where the figure came from but expect its low. As noted above, we might all want to be consistent in calling this the same thing. Doubt dollars matter much at this point.

General Comment - Throughout the document there is reference to aerial surveying of species yet this, other than oil spills, is the item that is articulated again and again to be a major disturbance to breeding birds and pullouts for marine mammals. Maybe some information about time of year surveying is done would be helpful to give for general public reading. It was handled very well in terms of making sure that proposed research was relevant and minimally intrusive.

U.S. Department of Homeland Security
United States Coast Guard

Commander
Thirteenth Coast Guard District

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U.S. FISH & WILDLIFE SERVICE
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WASHINGTON MARITIME NWRC
PORT ANGELES, WA 98362

16475
1 July 2005

MEMORANDUM

From: N. J. STAGLIANO, CDR
CGD THIRTEEN (r)

Reply to Attn of: D13(rs)
Mr. Gary Greene
(206) 220-7029

To: Refuge Manager
Washington Islands National Wildlife Refuge

Subj: WASHINGTON ISLANDS NATIONAL WILDLIFE REFUGES DRAFT COMPREHENSIVE PLAN AND ENVIRONMENTAL ASSESSMENT

1. Thank you for your letter of May 23, 2005 requesting Coast Guard review of the Washington Islands National Wildlife Refuges Draft Comprehensive Conservation Plan and Environmental Assessment (Draft CCP/EA) dated May 2005. The Coast Guard welcomes this opportunity to help establish the alternatives, goals, objectives and strategies that will guide the management of these valuable national assets for the next fifteen years.

2. In principal the Coast Guard supports Alternative B, the preferred alternative, of the Draft CCP/EA. I offer the following specific comments on those portions of the document that either directly impacts the Coast Guard, or for which the Coast Guard has jurisdiction.

a. **Wildlife and Habitat Protection and Management Objective #2: Support regional efforts to reduce the risk of oil spills near refuge islands.** Numerous Achievement Strategies are listed including the placement of a mission capable rescue tug boat at Neah Bay.

The Coast Guard is not opposed to any initiative that has the potential to reduce the risk of pollution. In previous years, the rescue tug at Neah Bay has been a valuable measure to help mitigate environmental and safety risk within the region. During the past few years the Captain of the Port, Puget Sound has issued dozens of orders to various large commercial vessels within Washington water experiencing some degree of mechanical problems to acquire rescue/stand-by tug service. In only a small number of those cases, vessels were ordered to acquire Neah Bay tug services as the closest available and capable tug. However, a significant majority of instances noted where tug assistance was required was not in the vicinity of Neah Bay.

The Coast Guard conducted a cost-benefit study that showed a tug at Neah Bay was an expensive measure in comparison to the risk mitigation value. The rescue tug provides a measure of benefit and safety for a specific area of the waterway, whereas there may be alternatives that would benefit the entire waterway. Rather than focusing exclusively on the Neah Bay Rescue Tug, I encourage you to also explore alternatives that would benefit the entire region such as improving the Vessel Traffic Service (VTS), weather prediction sensors, improved decision making tools for dealing with vessel controls, and broader standby tug availability.

b. **Wildlife and Habitat Protection and Management Objective #3: Coordinate with the USCG to remove all remaining debris on Destruction Island by 2019.** The stated

Achievement Strategy is to initiate cooperative clean-up of debris from Destruction Island by 2009.

The Coast Guard fully supports the removal of garbage and hazardous waste that has the potential to damage the environment. However, in various sections of the Draft CCP/EA it is implied that removal of "debris" includes removal of the remaining buildings and structures at Destruction Island. Complete removal of all man-made improvements on the island would require the expenditure of significant resources. Further, the negative impacts of removal in terms of industrial activity including the need to remove the large amount of debris by helicopter sorties, may exceed the benefit of removal. There may also be historicity issues that will require close consultation with the State Historic Preservation Officer. Prior to agreeing to participate in this significant effort, a thorough assessment should be conducted to assure ourselves that this is the correct course of action. Even if it is determined to be beneficial, this will be an extremely resource intensive endeavor that will have to compete with the other funding priorities of the Coast Guard.

c. **Wilderness Protection Objective #1: Preserve and enhance the wilderness character of the Refuges by removing human generated debris from Refuge Island, where feasible, on an ongoing basis.** The Achievement Strategies are to remove debris during scheduled visits and to seek clean-up assistance from the Navy, Coast Guard, volunteers groups, Tribes, and other agencies.

We support this reasonable approach to enhance the wilderness character of the Refuges. Our Aids to Navigation servicing crews routinely remove all debris generated during their periodic visits to the Island and will continue to do so.

d. **Cooperative Program Objective # 4: Coordinate with the USCG to update the existing MOU for Destruction Island, which will clarify the roles of the two agencies on the island and thereby aid in the conservation of refuge resources by 2008.** The Achievement Strategy is to revise the existing joint agency MOU to address the Refuge concerns about wildlife disturbances and debris impacts caused by Coast Guard activity.

The Coast Guard is willing to discuss changes to the MOU. However, it is our position that our activities at Destruction Island do not significantly affect the wildlife. Enclosed for your consideration are two Biological Assessments completed for the Coast Guard by an independent contractor. They conclude in part that, "…. USCG helicopter flights and maintenance activities do not significantly impact the seabirds and other wildlife species at Destruction Island".

The Draft CCP/EA properly points out that a reliable aid to navigation on Destruction Island contributes to safe navigation and marine safety, thus reducing the threat of oil spills.
We do not believe we can reduce the frequency of Coast Guard Aids to Navigation servicing visits without jeopardizing the reliability of this critical navigational aid. We currently conduct four routine service visits per year. Each lasting approximately 2-3 hours. Even with quarterly scheduled maintenance, we had 4 unscheduled maintenance trips to Destruction Island during the past two years. Two visits were for the light and two for the fog signal. With the recent decommissioning of the fog signal, the number of unscheduled visits should go down on average.

Subj: WASHINGTON ISLANDS NATIONAL WILDLIFE REFUGES DRAFT COMPREHENSIVE PLAN AND ENVIRONMENTAL ASSESSMENT 16475

The quarterly visits can be scheduled in advance to avoid bird nesting periods, and other sensitive times. If we reduce routine preventative maintenance, the probability of an unscheduled emergency outage increases. When responding to an emergency outage, we will not necessarily be able to avoid sensitive time periods. We may also be forced to place our crews at risk by flying during adverse weather conditions.

3. Again, thank you for the opportunity to comment on this important document. My point of contact for this initiative is Mr. Gary Greene at 206-220-7029.

#

Encl: (1) Biological Assessment of Destruction Island prepared by TETRA TECH, Inc, 1997.
(2) Biological Report on the Effects to Seabirds from United States Coast Guard Activities at Destruction Island, WA prepared by TETRA TECH, Inc 1998.

Copy (w/o encl): CG D13(o, oan, m)
CG GP/AS Astoria
CG GP/AS Port Angeles
CG COTP Puget Sound
CG COTP Portland
CG ANT Astoria

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U.S. FISH & WILDLIFE SERVICE
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WASHINGTON MARITIME NWRC
PORT ANGELES, WA 98362

State of Washington
DEPARTMENT OF FISH AND WILDLIFE

Mailing Address: 600 Capitol Way N • Olympia, WA 98501-1091 • (360) 902-2200, TDD (360) 902-2207
Main Office Location: Natural Resources Building • 1111 Washington Street SE • Olympia, WA

June 30, 2005

Mr. Kevin Ryan, Refuge Manager
U.S. Fish and Wildlife Service
Washington Maritime National Wildlife Refuge Complex
33 South Barr Road
Port Angeles, Washington 98362

Dear Mr. Ryan:

Thank you for the opportunity to comment on the Washington Islands National Wildlife Refuges Draft Comprehensive Conservation Plan and Environmental Assessment (Draft CCP/EA).

Washington Department of Fish and Wildlife (WDFW) strongly supports U.S. Fish and Wildlife's (USFWS) efforts to:

- Promote interactive research with state, federal, tribal, and non-governmental organizations.
- Work collaboratively with the Washington Department of Fish and Wildlife to monitor marine mammal and seabird populations.
- Minimize disturbance to breeding and resting marine mammals and seabirds that is not directly linked to approved research or monitoring.
- Work collaboratively with Washington State on oil spill readiness, response and monitoring efforts.
- Control invasive species that threaten native wildlife of the State.

We would like to point out an inconsistency in the plan regarding objectives. One objective calls for accurate and effective wildlife management by establishing mapped data, updated regularly to reflect current resource status. Another objective calls for a 2000-foot minimum flight altitude over the refuge. Surveys that WDFW and USFWS conduct to keep mapped data current and accurate are all below 2000-foot elevation. There are many entities involved in approval of aerial surveys on the coast, including the national park, marine sanctuary, refuge, tribes, and others. To resolve this inconsistency, we believe that it would be beneficial to outline a system in the plan to evaluate and streamline the permit process for collecting data necessary for management of wildlife resources on the coast.

WDFW is responsible for the sound stewardship of the State's fish and wildlife. To accomplish this goal, we value partnerships with agencies like USFWS that share responsibility for fish and wildlife management. Working collaboratively with the refuge on wildlife monitoring and research is critical to our mission, and we welcome the emphasis on collaboration in the preferred alternative. We look forward to continuing ongoing coordination on specific areas of wildlife management, monitoring, and research on the Washington Islands National Wildlife Refuges.

Sincerely,

Dave Brittell, Assistant Director
Wildlife Program

DB:kaj

cc: Sue Patnude
Jack Smith
John Pierce

WASHINGTON STATE DEPARTMENT OF
Natural Resources

DOUG SUTHERLAND
Commissioner of Public Lands

July 15, 2005

United States Fish and Wildlife Service
Washington Maritime NWR Complex
33 South Barr Road
Port Angeles, Washington 98362

Attention: Kevin Ryan, project leader

Subject: Washington Islands National Wildlife Refuges - Draft Comprehensive Conservation Plan and Environmental Assessment: Clallam, Jefferson, and Grays Harbor Counties

Mr. Ryan:

Thank you for the opportunity to provide comments on the draft Federal comprehensive conservation plan for the Washington Islands National Wildlife Refuges (NWRs): Flattery Rocks NWR, Quillayute Needles NWR, and Copalis NWR. Located along the outer coast of Washington States Olympic Peninsula, these three national wildlife refuges are collectively called the Washington Islands NWRs or Refuges.

The Washington Department of Natural Resources (WDNR) manages over 2.4 million acres of state-owned aquatic lands, which includes some of the aquatic lands addressed in the proposed conservation plan. These lands include shorelands, tidelands, and bedlands in Puget Sound, along the Pacific Coast, and in navigable rivers and lakes throughout Washington State. WDNR's management authority derives from the State Constitution. As proprietary manager of state-owned aquatic lands, WDNR has been directed to manage the lands for the benefit of the public in a manner that provides a balance of public benefits for all citizens of the state. These public benefits include encouraging direct public use and access, fostering water-dependant uses, ensuring environmental protection, utilizing renewable resources, and generating revenue consistent with the other benefits.

As stewards and managers of state-owned aquatic lands, WDNR has the authority to partner with other entities for purposes of ensuring environmental protection, and/or sustainable levels of renewable resources on state-owned aquatic lands. There are a number of pathways such relationships could take, and WDNR looks forward to working with United States Fish and Wildlife Service (USFWS) to determine the best route. For purposes of this plan, these options include entering into a conservation lease or cooperative agreement with WDNR involving the

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designation of an area as an aquatic reserve. Under a lease, USFWS would have control over an area according to the terms and conditions of the lease, and would have long-term assurances that the area would be protected for conservation purposes. Under a cooperative agreement, WDNR could withdraw certain areas from leasing in order to prevent uses that may conflict with the conservation objectives of a refuge. The latter would not, however, provide the assurances of long-term protection afforded by a conservation lease. USFWS should explore these options with WDNR as the plan moves toward implementation.

As to the specific components of the plan, as the plan is currently strategic in nature, WDNR offers the following general comments:

- **Objective WH1: Continue to promote an undisturbed, natural environment across the Refuges by prohibiting public access on an ongoing basis (p. 2-4)**

Comment: This Wildlife and Habitat Protection and Management goal may require a "…200-yard tideland lease area around islands with major seabird colonies." As indicated above, too achieve this goal, USFWS will need to coordinate with DNR. A contact table has been created (see attachment).

- **Objective CP3: Coordinate with the Tribes, the OCNMS, ONP, and WDNR in managing for the protection and conservation of intertidal and subtidal zones surrounding the refuge islands by fall 2006 (p. 2-10)**

Comment: To achieve this goal, coordination with our Orca-Straits District (Flattery Rocks NWR, Quillayute Needles NWR) and Rivers District (Copalis NWR) is absolutely necessary. Please see attachment for a contact.

- **Objective WH5: Promote accurate and effective management of wildlife resources through establishing a system for managing mapped data for the Washington Islands Refuges by winter of 2008.**

Comment: WDNR has extensive GIS data, which can be provided to support the needs of this conservation plan. WDNR Aquatic Resources Program Scientific Support Section can provide USFWS with GIS data sets for kelp and eelgrass distribution and other intertidal resources, as well as relevant documents and publications. Please see attachment for a contact.

Conclusion: The Washington Island refuges provide critical nesting and roosting seabird habitat. Protection of seabird populations is a primary refuge goal, and is clearly emphasized throughout this conservation plan. State-owned aquatic land, as sand or mud flats, eelgrass or kelp beds, provides nesting and feeding grounds for shorebirds. The next step is to identify the location of state-owned aquatic lands in relation to the Refuges, and define the role DNR would effectively play in this conservation plan.

DNR staff looks forward to expanding partnerships with the USFWS in the management and protection of aquatic environments in Washington State. Past and present experience with partnerships between DNR and USFWS in areas such as Dungeness Bay and Protection Island

will help to guide and ensure the successful management of the Washington Islands National Wildlife Refuge.

Thank you for the opportunity to comment on this draft guidance. If you have any questions or need further information, please do not hesitate to contact Elizabeth Ellis, Environmental Planner, at (360) 902-1074 or via e-mail at Elizabeth.ellis@wadnr.gov

Sincerely,

Loren J. Stern, Manager
Aquatic Resources Program

CC: Elizabeth Ellis, WDNR
Tom Mumford, WDNR
Matt Niles, WDNR
Martha Hurd, WDNR
Nancy Lopez, WDNR

Attachment

Attachment: Contact table – Aquatic Resources Program, Washington State Department of Natural Resources

Name	Title	email	Reason to Contact
Martha Hurd	Land Manager, Orca-Straits District	martha.hurd@wadnr.gov	Flattery Rocks NWR, Quillayute Needles NWR
Nancy Lopez	Natural Resource Program Specialist, Rivers District	Nancy.lopez@wadnr.gov	Copalis NWR
Matthew Niles	Environmental Planner, Aquatic Resources Division	Matthew.niles@wadnr.gov	Conservation Leasing

"Dan Leinan" <danl.forks@centurytel.net>
To: <FW1PlanningComments@fws.gov>
cc: "hedra reed" <nree.forks@centurytel.net>, <rodf.forks@centurytel.net>
Subject: comments on draft CCP/EA

06/14/2005 07:46 AM

Dear Mr. Ryan;

The Forks City Council voted unanimously at their regular meeting last night to send the following comments regarding the alternatives for the CCP/EA for the coastal Wildlife sanctuaries.

1. We are opposed to the 200 yard boat free zone. This will have a tremendous adverse impact on fishing and tourism in our area.

2. We feel the invasive species removal program should be expanded to the California Sea Lion population, as their rapid population increases may be at the heart of the Steller Sea Lions decline. These species need to be closely managed in order to provide optimum opportunity for Tribal,Commercial and Sport fishing harvests.

3. We feel strongly that much more information needs to be provided to the public regarding these proposed regulations and that Public hearings need to be held in the Forks area to give local citizens the opportunity to comment.

4. By these comments to you we are Officially requesting that an Economic Impact Study be completed as part of your rule making process.

Thank you.

Sincerely,

R. Daniel Leinan
Clerk- Treasurer
City of Forks
500 East Division St.
Forks, Wa. 98331
(360) 374-5412 Ext. 240

Audubon WASHINGTON

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June 30, 2005

Kevin Ryan, Refuge Manager
Washington Maritime NWR Complex
33 South Barr Rd.
Port Angeles, WA 98362

RE: Washington Islands National Wildlife Refuges Draft Comprehensive Conservation Plan and Environmental Assessment

Dear Mr. Ryan,

On behalf of our 26 local chapters and 20,000 members in our state, the Washington State Office of the National Audubon Society (Audubon Washington) respectfully submits the following comments on the Draft Comprehensive Conservation Plan (CCP) and Environmental Assessment for the Washington Islands National Wildlife Refuges.

Audubon is pleased to support your proposal to implement Alternative B in managing the Washington Islands Refuges over the next 15 years. With increasing human populations and the resulting loss of wildlife habitat along Washington's coasts, the Refuges will play an increasingly important role in national and global bird conservation. The CCP's emphasis on reducing disturbance, improving interagency cooperation, enhancing research and monitoring, and increasing public outreach and education demonstrates that the U.S. Fish and Wildlife Service is prepared to meet the challenges of the next 15 years. Audubon fully supports the proposal to prohibit public access to the islands, and your efforts to enforce that prohibition.

The comments below pertain mostly to the goals and objectives laid out in chapter 2 of the CCP, and are organized according to "Management Themes." We hope you will consider making the clarifications and improvements we suggest in the final CCP.

Wildlife and Habitat Protection and Management

Invasive Species:
Note that no management action to control invasive species is explicitly stated in Objective WH4 (Page 2-5). Actions proposed are to survey, coordinate, and monitor, but the CCP does not actually propose to *implement* control measures, although it is implied. We recommend making this more explicit. We suspect that the authors intended to say this in Objective WH4B, and that the strategy statement was inadvertently left as an incomplete sentence, probably due to an editing error. (I.e. is the sentence really supposed to read "Survey islands for invasive species, and when information exists

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regarding potential infestations, *implement control measures to reduce or eliminate invasive species."*?) Also, the objective WH4 statement should read "…develop *and implement* control measures on an ongoing basis…"

Overflight impacts awareness (WH6):
To be consistent with the next strategy statement, (WH7) this item should read "…develop *and implement* an aircraft impacts awareness program…"

It is unclear in the text whether or not it is legal for a pilot for fly over the refuge at less than 2,000 feet. The use of the term "promote" [the 2,000-foot minimum] in WH6B, rather than a stronger word such as "implement," "adopt," or "enforce," suggests that the 2,000-foot minimum altitude limit is voluntary. But in the discussion paragraph, the 2,000-foot limit is described as "OCNMS-regulated." This suggests it is mandatory. The final CCP should clarify this.

It is also not clear whether the Fish and Wildlife Service has the legal authority to regulate overflights, either through laws pertaining to refuge management, the Wilderness Act, or the Endangered Species Act. If not it would be helpful if the final CCP would explain under what authority the Olympic Coast National Marine Sanctuary (OCNMS) is able to regulate overflights. If the Fish and Wildlife Service *does* have the legal authority to regulate overflights, then the entry of airspace below 2,000 feet should be considered "public access," and overflights should be prohibited outright under Objective WH1 Achievement Strategies.

Furthermore the final CCP should clarify what is meant by "over the islands" (page 2-6, WH6B). As currently stated, this might be interpreted to mean that the minimum altitude restriction applies only to the airspace directly above the islands. If so, this is insufficient. The restriction should also apply to the 200-yard buffer zones surrounding the islands.

Sensitive Species Protection

It should be noted that several species with special status may be missing from the list in Table 3-2. Although we do not know for certain that they have ever been documented, the Western Grebe (state candidate) and Common Loon (state sensitive) occupy intertidal habitats, especially in winter, and are almost certain to occur on the refuges at least part of the year. The Washington Department of Fish and Wildlife (WDFW) also still considers the gray whale a sensitive species. Gray whales inhabit the intertidal zone around the refuge islands, particularly during migration.

Cooperative Programs and Research/Monitoring

Two of the stated concerns for the Washington Islands Refuges are "the need to improve coordination with other managing agencies and the Tribes," and "the need for additional scientific research, surveys, and monitoring" (page 1-3, section 1.2.2). While the first need is adequately addressed by the CCP for some management strategies, such as law enforcement and protecting intertidal zones, strategies for coordinating research and monitoring do not appear to be fully developed.

Objectives CP2, CP9, RA1, and RA3 all address, at least in part, the need for coordination, cooperation, and communication in wildlife surveying, monitoring, and research. All of these are commendable objectives, but in sum they do not fully address all the needs. Each has its own limitations: CP2 applies only to WDFW, and does not address coordination with other potential partners. CP9 is a welcome improvement over current procedures, but it allows information to flow only one direction—from the Service to other agencies. The same applies to RA3. A more effective process would be one that allows information to flow both ways. RA1 applies to research, but not to routine surveys and monitoring efforts.

Perhaps these should be combined into an additional CCP objective that will establish a process for multi-agency coordination of research and monitoring efforts, and for sharing the data and results. Olympic National Park, OCNMS, Washington DNR, tribes, and other agencies (e.g. Minerals Management Service, Corps of Engineers) all have interests in fish and wildlife resources along the Olympic Coast, and may be able to make staff scientists available to participate in coordinated efforts. The Service may be able to leverage resources for surveys, monitoring, and research by seeking partnerships across a broader spectrum of potential cooperators.

Perhaps developing this wider research and monitoring coordination effort is beyond the scope of the CCP, but the CCP should at least acknowledge that a need for a comprehensive coordination process exists, and should leave the door open for staff participation in such an effort. At a minimum, the Service might be able to create a forum where the relevant agencies and stakeholders could come together to share data about wildlife populations, address mutual research and monitoring needs, and frame questions for future cooperative research.

A third stated concern for the refuges is "a lack of public awareness of the Refuges' valuable and sensitive wildlife resources." A number of strategies are proposed to address this need, such as interpretive facilities and programs, and a website. Audubon urges the Service not to overlook the value of the Annual Narrative Report and research and monitoring publications in raising public awareness. Although these reports may not be able to reach a wide audience, they should be easily accessible to sectors of the public who request them. The annual reports should provide the most up-to-date estimates of bird populations and distributions, and the importance of these populations in from a global and regional perspective. Audubon's education and conservation efforts are often hampered by our inability to obtain reliable data about bird populations in Washington. Making the above information readily available to groups like Audubon would allow information about the value of the Refuges' wildlife resources to trickle down to a broad cross section of the public.

Environmental Consequences

Finally, in the environmental consequences section, p. 4-13: Audubon does not agree that restrictions on public access will have neutral or negative impacts on recreation and

tourism. On the contrary, restrictions on access, boats, and overflights will actually have a positive effect on recreation. Such restrictions will protects and enhance bird populations, and allow birds to behave in a more natural manner. This will create a positive impact for wildlife viewing from the mainland.

Respectfully submitted,

Tim Cullinan

Tim Cullinan
Director of Science and Bird Conservation

June 30, 2005

Kevin Ryan
Refuge Manager
Washington Maritime NWR Complex
33 South Barr Rd.
Port Angeles, WA 98362

RE: Washington Islands National Wildlife Refuges Draft Comprehensive Conservation Plan and Environmental Assessment

Dear Mr. Ryan,

Thank you for the opportunity to comment on the Draft Comprehensive Conservation Plan and Environmental Assessment for the Washington Islands National Wildlife Refuges. Defenders of Wildlife is a non-profit, public interest institution with nearly 500,000 members nationwide. Defenders believes that all wildlife has intrinsic value, and that the conservation of all native species should be the primary goal of wildlife conservation programs. Defenders has been a long-time advocate for the Refuge System and continues to take a special interest in the Refuge System planning process.

We feel that the Washington Islands Refuges Draft CCP and EA puts forth numerous management objectives that will improve the wildlife resources and cooperative management efforts existing on the refuges. The Fish and Wildlife Service (Service) has for the most part observed the relevant federal legislation as well as refuge mission and goals. Specifically, continued prohibition of public access, enhanced invasive species surveying and management, boating and aircraft awareness programs, updating of the seabird monitoring plan, coordination with the US Coast Guard and Department of Defense on island clean-up, improved GIS mapping management and research library, prohibition of visually intrusive alterations on refuge islands, continued cooperative efforts with federal, state, and Tribal agencies, and creation of an annual summary report are some examples of the constructive developments outlined in the new plan. Defenders praises the Service for advancing the benefits to wildlife and the Washington Islands Refuges through its commitment to wilderness preservation, public service, and inter-agency collaboration. However, we are concerned that several activities which directly affect the refuge are excluded from the CCP/EA and that restricted or harmful activities are not being properly addressed. Defenders feels that the National Wildlife Refuge System is the best chance for preserving our nation's biological integrity and we encourage the Service to observe its legal and ethical mandate as the stewards of this uniquely American system.

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Defenders has the following comments and concerns:

Low-flying aircraft:

As stated in the Olympic Coast National Marine Sanctuary (OCNMS) Management Plan, which is administered by the National Oceanic and Atmospheric Administration (NOAA) and encompasses "the entire area surrounding the islands and rocks of all three refuges", low-flying aircraft (under 2,000 feet [610 m]) is restricted. Currently, this restriction is not being enforced by the Federal Aviation Administration (FAA), despite the fact that the FAA-published Aeronautical Information Manual also states in Section 7-4-6b:

> "Pilots are requested to maintain a minimum altitude of 2,000 feet above the surface of the following: National Parks, Monuments, Seashores, Lakeshores, Recreation Areas and Scenic Riverways administered by the National Park Service, National Wildlife Refuges, Big Game Refuges, Game Ranges and Wildlife Ranges administered by the U.S. Fish and Wildlife Service, and Wilderness and Primitive areas administered by the U.S. Forest Service."

Low-flying aircraft have been shown to disrupt seabird and marine mammal breeding and resting activities, which include threatened and endangered species (CCP pg 1-21). For example, the brown pelican is a federally and state endangered species that often uses refuge islands for roosting. According to the CCP, low-flying aircraft are the primary disturbance to roosting pelicans and "human disturbances at roost sites, as represented at the Washington Islands, may affect distribution patterns and age structure of pelicans using sites during the non-breeding season." Steller sea lions, a federally threatened species, directly utilize the refuge for hauling out and possibly breeding. Human activity around haul-out sites has been found to lower the use of the sites and sometimes leads to site abandonment if disturbance is high enough; the CCP mentions "humans, boats, and aircraft" as the causes of these disturbances. Other species that use the refuge for breeding and are particularly sensitive to human disturbance include the harbor seal, Cassin's auklet, and fork-tailed storm petrel.

The priority of all three refuges is to protect wildlife on their lands above all else and the Service must do all it can to promote and enforce this restriction. Both the 1997 National Wildlife Refuge Improvement Act and the Endangered Species Act (ESA) require the refuge to make this enforcement a top priority. The refuges should work with the USFWS Division of Ecological Services to exert ESA protections beyond their boundaries. In addition, the Service should work cooperatively with the National Park Service and NOAA to engage the FAA to enforce a minimum 2,000 foot altitude over refuge islands, the national marine sanctuary, and the national park and inform pilots from surrounding airfields of these restrictions. Defenders believes this is an unacceptable and incompatible activity that must be restricted.

Commercial and recreational fish, invertebrate, and marine plant harvesting:

This activity is allowed and is managed by the OCNMS and NOAA, however the CCP does not discuss it at all. Even though the use is not controlled by the Service, it does significantly affect the birds and mammals that are under the refuges' jurisdictions. Excluding this information leaves a huge gap in the knowledge that is needed to properly manage the refuge and for the public to fully understand the scope of the situation. The National Environmental Policy Act (NEPA) requires the Service to analyze the direct, indirect, and cumulative effects of both the Service's proposed actions, as well as the activities that affect and are affected by those actions

In addition, the National Wildlife Refuge System Improvement Act specifically states that in the refuge comprehensive conservation planning process, the Service identify:

> "significant problems that may adversely affect the populations and habitats of fish, wildlife, and plants within the planning unit and the actions necessary to correct or mitigate such problems"

There are several species on the refuges which are experiencing population declines due to fishing and harvesting activities. Bull kelp forests, which support marine mammals, marine invertebrates, algae (some of which are commercially valuable), and the early life stages of some fish species, are threatened by commercial harvesting. Kelp also forms a unique food web with sea urchins and sea otters, with each species keeping the other species' population in check and remaining healthy. Forage fish such as Pacific herring, surf smelt, and northern anchovy, which are an important dietary component of marine mammals, seabirds, and large predatory fish, are thought to be negatively affected by recreational and commercial fishing.

Sea otters are a state endangered species that utilizes the refuge for feeding and breeding, with most of WA State's population being found in or near the refuges. This species is vulnerable to drowning in fishing nets and has been noted to get caught in commercial nets in WA and CA. The harvest of sea urchins is feared to begin competing with foraging sea otters, putting further pressure on the species. According to the CCP, harbor seals, which utilize the refuge for pupping and hauling out, are affected by "fishing operation entrapment" and "declines in forage fish" populations. The marbled murrelet is a state and federally threatened species which forages on the refuge year-round and for which gillnet entrapment and prey availability are cited as being a top threat. The tufted puffin, California sea lion, and Pacific harbor porpoise are also negatively affected by entrapment and entanglement in fishing gear.

That being said, the CCP should describe these activities and their impacts to refuge lands and resources. A compatibility determination should be considered for these activities due to the potential for serious impacts to refuge wildlife and resources. Defenders supports the refuges working with NOAA and Tribal agencies to ensure that the activities do not harm refuge resources.

Human-generated debris:

Under Objective WP1, it is said that human-generated debris will be removed from refuge islands on an ongoing basis, sometimes with the assistance of other agencies, Tribes, or volunteers. This is an admirable activity, however, Defenders believes that a public education campaign discussing the problems associated with marine debris would help to lessen the clean-up work. By educating the public about the harm done to marine mammals, birds, and invertebrates due to marine debris, the generation of this debris may be reduced in the immediate area of the refuge. This goes back to the topic of fishing around refuge islands because gill nets and other fishing gear is a large portion of this debris and has significant effects on wildlife as mentioned above. Reaching out to the fishing community and educating them about these issues while asking them to refrain from leaving unused fishing equipment in the water will be beneficial to the refuge.

Oil spills:

Defenders commends the refuges' involvement in oil spill reduction efforts and participation in periodic updates of the Outer Coast Geographic Response Plan.
However, we encourage the continued development and participation in regional cooperative plans regarding oil spills and the development of a refuge plan. A refuge complex-specific oil spill plan would clearly define the precautionary and mitigation activities that should be undertaken and would help to fully protect the resources of the refuges.

A great number of species found on or around the refuges are sensitive to oil spills and would benefit greatly from a comprehensive management and action plan. These species, some of which are threatened or endangered, include the Steller sea lion, California sea lion, sea otter, fork-tailed storm petrel, Cassin's auklet, black oystercatcher, and marbled murrelet. The tufted puffin is "particularly susceptible to oil pollution because of their aquatic habits and the flightless period in winter for some individuals that undergo a complete molt (Alaska Dept of Fish and Game 2005, http://www.adfg.state.ak.us/pubs/notebook/bird/puffins.php). This species makes the Washington coast the site of one of their 2 largest colonies and over 50% of the contiguous population is found in this area.

Boat-free zone:

We fully support the establishment of a 200 yard boat-free zone around the refuge islands to protect nesting seabirds and marine mammals that use the islands. As the incidence of boating and ecotourism increases, the need for this protection will be critical to the wildlife occupying the islands. The CCP states that "the islands and rocks in this area provide habitat for over 72% of Washington's nesting seabirds and are among the largest colonies in the continental US" and "nesting seabirds and marine mammals have been documented in scientific literature to be particularly vulnerable to disturbances."

The black oystercatcher is considered a species of concern by the US Shorebird Conservation Plan, the Northern Pacific Coast Regional Shorebird Management Plan, and the Federal list of Birds of Conservation Concern 2002. The Audubon Society notes this species as being "extremely sensitive to the presence of humans on potential nesting islands." Cassin's auklet is the most abundant seabird in WA and the coastal area is thought to support over 50% of the West

Coast's breeding populations in the continental US. The refuges are considered an important wintering area for the species although they are particularly sensitive to disturbance, especially during nesting. "Disturbance is the worst threat. Each pair of auklets lays only one egg a year and disturbance by a curious tourist will cause the adult to abandon the egg completely, out of fear of a more dangerous predator" (Hinterland Who's Who 2005, http://www.hww.ca/hww2.asp?id=37). The CCP notes that the harbor seal is easily scared from haul-out areas and "human disturbance is one of the major causes of pup mortality due to desertion by the mother." They are also vulnerable to propeller wounds and other human-related incidents.

According to the refuge manager, ecotourism activity is very low at this time due to the dangerous boating conditions and highly variable weather. However, the manager expects that ecotourism will increase within the next 15 years. A boat-free zone would promote the pristine wilderness aspect of the islands which are designated Wilderness Areas and further protect the unique wildlife resources found on the refuges. It is crucial that the refuges fully promote this restriction and work with NOAA and other relevant agencies to gain cooperation and enforcement capabilities.

Sincerely,

Noah Matson

Noah Matson
Director, Federal Lands Program

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Kevin Ryan, Refuge Manager
Washington Maritime NWR Complex
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Port Angeles, WA 98362

22 June 2005

Dear Mr. Ryan,

Thank you for the opportunity to comment on the Washington Islands National Wildlife Refuge Draft Comprehensive Conservation Plan and Environmental Assessment. While we support the Preferred Action Alternative, we are sorry to only be able to comment on a portion of the document due to the beginning of the field season and the minimum time allotted for review.

We would like to particularly support and enhance Object WH2, protecting seabirds from the risk of oil spills. We agree with your assessment that oil spills are the largest threat to refuge resources. This is not a theoretical concern but rather one documented by the largest spills in State waters (General Meiggs, 2,300,000 gallons in 1972; Nestucca, 231,000 gallons in 1988, Tenyo Maru, 400,000 gallons in 1991). This point should be included in the historic context of the refuge, along with a brief account of the numerous naval airplanes and other shipwrecks surrounding the refuges. More importantly, there is plenty of room to enhance our ability to prevent and respond to spills in this region where we have the least protection and the most to lose.

In addition to the Achievement Strategies listed under Objective WH2 the following efforts are encouraged:

1) Request the State Department of Ecology and the Coast Guard conduct no-notice oil spill drills requiring gear deployment to test the existing response capacity off the refuges. This has yet to be done anywhere off the Olympic Coast;
2) Coordinate comments with the Makah Tribe, Olympic Coast Sanctuary and Park's Service on the State's Oil Spill Contingency Plan Rule;
3) Support a full tool kit of response capacity including:
   - Long term funding for multi-mission capabilities of rescue tug (salvage, fire fighting, skimming).
   - Pre-staged high seas boom and skimming capability along the coast.
   - Documented insitu burning and dispersants application capacity.
4) Review aids to navigation markings of refuge and non-refuge rocks.
5) Produce an information sheet for the public and other agencies on the vulnerabilities of the refuges.

Thank you for your efforts to protect one of the most wonderful places in the world.

Sincerely,

Fred Felleman, MSc.
NW Director

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June 29, 2005

Kevin Ryan, Project Leader
Washington Maritime NWR Complex
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Port Angeles, WA 98362

Dear Mr. Ryan:

Olympic Coast Alliance [OCA] has reviewed the Draft Comprehensive Conservation Plan and Environmental Assessment for the Washington Islands National Wildlife Refuges of Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges. Olympic Coast Alliance supports Alternative B, for a Comprehensive Conservation Plan in the Environmental Assessment prepared by the U. S. Fish and Wildlife Service.

OCA agrees with Section 2.2. Goals, Objectives, and Strategies, with its eight objectives. In particular, with respect to Objective WH2, to "Support regional efforts to reduce risk of oil spills near refuge islands....", OCA could incorporate your Comprehensive Conservation Plan's goals in our program, supported by a recent grant. OCA is just getting underway with its program of education and outreach to a broader public, focusing on preventing oil spills and protecting the natural environment.

2.3.2 Sensitive Species Protection is well thought out. OCA supports this program.

2.3.3 Wilderness Protection is paramount for the Washington Islands Wilderness Areas. OCA supports.

2.3.4 Cooperative Programs. All of your goals are laudatory. CP 1: OCA concurs. Its Board of Directors includes members from the Quinault Indian Nation, and the Quileute and Makah Indian Tribes.

OCA finds the other CP Objectives to be pretty well thought out. It might be appropriate to include in CP 9, or, add a CP 10: This would provide for "Cooperation with ecological conservation nonprofit citizen organizations."

2.3.5 Research and Monitoring Activity Management. All five of the RA's appear to be both desirable and essential programs.

2.3.6 Public Education Management. We have suggested including cooperation with ecological conservation nonprofit citizen groups within your Conservation Objectives. This may also fit in your Objective PE 3, "Promote refuge conservation awareness by coordinating with other agencies, Tribes, and organizations to develop off-site interpretive facilities by 2008."

2.4 Common Features Among the Goals, Objectives, and Strategies. These paragraphs seem to succinctly address the Common Features. However, in the second paragraph, in the first sentence, it might be inferred that "Groups of organized associations or entities..." may include citizen nonprofit ecologically-oriented citizen groups. However, in the second sentence, the focus appears to relate only to "...cooperation among Federal, State, and tribal agencies...." Should the USFWS accept our proposal to add ecologically-oriented nonprofit citizen organizations in CP 9, or by adding a CP 10, then 2.4 could encompass such citizen organizations.

Chapter 3, Affected Environment, and Chapter 4, Environmental Consequences, appear to cover most, if not all, anticipated effects and consequences.

We commend you on a comprehensive set of Appendices. It is interesting to see in these photocopies of the Executive Orders establishing Flattery Rocks, Copalis Rock, and Quillayute Needles Reservations (later re-named "Refuges") "*For Protection of Native Birds*." Does history reveal who brought this proposal to the attention of President Theodore Roosevelt in 1907?

One other thought: Olympic Coast Alliance believes your agency's concerns should extend to the waters surrounding the Refuge's islands and rocks. It is not 100% clear that the Comprehensive Conservation Plan addresses this as well as it might – although Figures 1-1, 1-2, 1-3, and 1-4 show the Refuges' boundaries include the surrounding Pacific Ocean, well off shore from the islands.

Thus, it occurs to us that what has been termed by Canadians as "The Big Eddy: Juan de Fuca Eddy International Marine Ecosystem" can be of interest and possible concern with respect to marine mammals en route to the Washington Islands National Wildlife Refuges. From the maps, this eddy appears to overlap the waters within the Flattery Rocks National Wildlife Refuge

Thank you for proposing Alternative B in the Comprehensive Conservation Plan and Environmental Assessment for the Washington Islands National Wildlife Refuges of Flattery Rocks, Quillayute Neeles, and Copalis National Wildlife Refuges.

It is gratifying to know your agency will be increasing its oversight and protection of these ecologically sensitive islands and rocks – for all indigenous creatures – mammals as well as "For Protection of Native Birds," as provided for in 1907.

Sincerely,

POLLY DYER, President
OLYMPIC COAST ALLIANCE

Olympic Peninsula Audubon Society
P.O. Box 502, Sequim, WA 98382
360/681-4076

To Promote Birding and Conservation as Community Educators, Volunteers, and Stewards

June 9, 2005

Kevin Ryan, Refuge Manager
Washington Maritime NWR Complex
33 S. Barr Road
Port Angeles, WA 98362
FW1PlanningComments@fws.gov

Subject: Draft Comprehensive Conservation Plan Environmental Assessment

Dear Mr. Ryan,

On behalf of the more than 600 members of Clallam County's Olympic Peninsula Audubon Society (OPAS), I'd like to thank you for the opportunity to comment on the subject Plan. We are in support of Alternative B, the preferred, proposed action.

Taking further steps to protect the fragile rocks and islands for wildlife is responsible, sound management. We are particularly pleased with the USFWS's (Service) proposal to enhance oil spill preparedness; clean-up contaminants on Destruction Island and other islands; establish a 200-yard boat-free zone and a 2,000-foot minimum flight altitude; develop greater seabird conservation plans; and increase public information about wildlife.

We support the plan's proposal to develop a new local USFWS headquarters that includes a library and an interpretive exhibit component. Please suggest to your Service's leaders incorporating "green building" design criteria that more efficiently uses water, energy (solar?), and materials. This would be a great model for our community. We also support the proposal to enhance facilities in the Kalaloch area.

Our Chapter would be pleased to meet with you and your staff to discuss our presenting bird, environmental, and conservation talks in your exhibit space. We could also discuss sharing traveling displays and library materials from our Audubon Center.

Thanks to you and your staff for your efforts in developing a sound, protective plan.

Sincerely,

Original signed by:

Sue Chickman
Conservation Committee Chair

Pacific Seabird Group

DEDICATED TO THE STUDY AND CONSERVATION OF PACIFIC SEABIRDS AND THEIR ENVIRONMENT

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June 30, 2005

Kevin Ryan
Refuge Manager
Washington Maritime NWR Complex
3 South Barr Road
Port Angeles, WA 98362

Re: Comments on Draft Comprehensive Conservation Plan and Environmental Assessment for Washington Islands Refuges

Dear Mr. Ryan:

On behalf of the Pacific Seabird Group (PSG), we offer the following comments on the Draft Comprehensive Conservation Plan and Environmental Assessment for Washington Islands Refuges ("Conservation Plan") that was issued in May 2005. We understand that the Conservation Plan affects Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges and is intended to guide the U.S. Fish & Wildlife Service's management of these three refuges for the next fifteen years. PSG is an international, non-profit organization that was founded in 1972 to promote the knowledge, study, and conservation of Pacific seabirds. It has a membership drawn from the entire Pacific basin, including Canada, Mexico, Peru, Chile, Russia, Japan, South Korea, China, Australia, New Zealand, and the USA. Among PSG's members are biologists who have research interests in Pacific seabirds, government officials who manage seabird refuges and populations, and individuals who are interested in marine conservation. PSG has been involved with the types of issues outlined in the Conservation Plan since PSG's inception over 30 years ago.

In general, PSG is very supportive of the preferred alternative. We understand that Fork-tailed Storm-Petrels, Leach's Storm-Petrels, Brandt's Cormorants, Double-crested Cormorants, Pelagic Cormorants, Western Gulls, Glaucous-winged Gulls, Common Murres, Pigeon Guillemots, Ancient Murrelets, Cassin's Auklets, Rhinoceros Auklets, and Tufted Puffins breed on these refuge islands. While PSG endorses the following goals in the preferred alternative, it is most supportive of the first and fifth goals:

- Protect migratory birds and other native wildlife and their associated habitats, with special emphasis on seabirds;
- Protect and support the recovery of federally threatened and endangered species and Washington State special status species and their associated habitats;
- Promote and manage the Washington Islands Wilderness Area to maintain its wilderness character and values;
- Through effective coordination and cooperation with others, promote conservation of refuge resources, with special emphasis on governmental agencies and tribes with adjoining ownership and/or jurisdiction;
- Continue and enhance long-term monitoring and sustain applied research; and
- Increase public interpretation and awareness programs to enhance appreciation, understanding, and enjoyment of refuge resources.

PSG has long supported the FWS' Regional Marine Bird Policy that was adopted by the Regional Director on November 15, 1985, especially the policy to "remove all introduced predators from marine bird colonies on all National Wildlife Refuges." In this regard, alien rabbits should be removed from Destruction Island (Quillayute Needles NWR), and any other alien creatures that may have been introduced to any of the refuge islands (especially rodents or carnivores) should also be removed. We agree that oil-spill-response training is very important for refuge staff and other state and federal agencies, but urge you also to include training to contain immediately and remove rodents that might be introduced by shipwrecks. The refuge also should acquire and stock equipment that can be used to contain any rodents that escape from shipwrecks and consider seeking technical assistance on these issues from the Alaska Maritime NWR, Homer, Alaska.

PSG generally agrees that access to the refuge islands should be restricted, especially during the birds' breeding season. If FWS determines that access to some refuge islands will not pose threats to the mission of the refuges, we believe that such access should be open to PSG members and the general public as well, not just members of certain tribes as implied in the Conservation Plan (p. 2-10). The Conservation Plan makes an important point that airplane over-flights and ships containing oil or other products pose significant threats to the health and safety of the wildlife resources on these islands. We urge you to continue to work with the Federal Aviation Administration and NOAA to create legal buffer zones around the islands, and to have these legal restrictions placed on all official navigation charts (e.g., restricted passage closer than 5 or 10 nautical miles) and aeronautical charts (e.g., maintain altitudes of at least 2,000 feet within one mile of a colony) covering these refuges. We appreciate that enforcement is always a problem on remote refuge islands. We understand that the U.S. Navy is working to develop unmanned drones at a reasonable price that might be used in the future to monitor compliance with regulations that forbid landing on the islands or coming too close to them. PSG hopes that refuge staff will make use of such opportunities when they become available.

Finally, we all live in a world where we cannot afford everything that we might wish to have. In terms of setting priorities, we believe that having an excellent web site for the refuge will ultimately provide more and better information to the public at a far smaller cost than will a permanent visitor center. We believe that financially supporting monitoring and applied research on the refuge resources, including full GIS capabilities, will ultimately better serve the conservation of seabirds than will building a new (and surely very expensive) refuge headquarters. We recognize that senators and congressmen are often more willing to fund construction projects (which are supported by the construction industry) than to fund healthy operation budgets. PSG hopes that FWS sets an appropriate tone in its budget requests so that the activities that truly make a difference for seabird conservation and management are the highest priorities.

Thank you for the opportunity to comment on the Conservation Plan. These are important islands for seabird conservation, and we wish you well in managing them. We will gladly provide additional comments or expertise at your request.

Sincerely,

/s/ *Craig S. Harrison*

Craig S. Harrison
Vice Chair for Conservation

Kevin Ryan
Refuge Manager
Washington Maritime NWR Complex
33 South Barr Road
Port Angeles, WA 98362

Dear Mr. Ryan,

Please accept these comments on the Washington Islands National Wildlife Refuges Draft Comprehensive Conservation Plan and Environmental Assessment (Draft CCP/EA) provided by The Nature Conservancy Washington Operating Unit Marine Program.

Overall we find the Draft CCP/EA or "Alternative B" an improvement over the existing management or no action alternative. The strongest part of the Draft CCP/EA, is the move towards better coordination with other government agencies and Tribes that have jurisdiction in the areas covered by the refuges, and the recommendation that the 200 yd. buffer zone should be enforced around seabird and marine mammal colonies to protect wildlife from disturbance. Coordination between organizations is also an area where we think there is room for the most improvement, namely with respect to identifying specific strategies related to inventorying, monitoring and managing the marine fish and other resources that seabirds and marine mammals depend on for food. These actions are not explicitly called out in the Draft CCP/EA, but are necessary to ensure the long term viability of bird and mammal populations living in the refuges.

Below we provide specific comments on selected sections of the Draft CCP/EA that we think would improve the document and the approach. New or added text has been underlined to distinguish it from existing text taken from the Draft CCP/EA. Please feel free to contact me with comments or questions, and I look forward to working with the Fish and Wildlife Service to help support and/or implement the final CCP.

2.3 Management Themes

2.3.1 Wildlife and Habitat Protection and Management (WH),

Objective WH1: Achievement Strategies D. "Continue to enhance efforts to establish a 200-yard (183 m) boat free zone…" and E. "Work with WDNR, the OCNMS and tribes to secure a 200-yard (183 m) tideland lease area around islands with major seabird colonies." These are probably the most important actions that could be taken wrt improved management of the refuges as buffers would have the effect of helping to protect both the animals living in the colonies on shore, and also in waters adjacent to the colonies as well.

Objective WH2: Achievement Strategies A. and C. In addition to participation in planning activities, funding should be requested for the Service to provide staff support for response actions should there be a spill in the area of the refuges (perhaps list this action as a new Achievement Strategy "F."). Also, the service should provide cost share for the expense of a rescue tug at Neah Bay along with NOAA, the Coast Guard, the State of Washington and local Tribes.

Objective WH6: Achievement Strategy B. The strategy to "Promote the 2,000-foot (610 m) minimum flight altitude over the islands" is one of the most important components of the Draft CCP/EA.

Objective WH7: Achievement Strategy B. Again, the strategy to "Promote establishing a 200-yard … boat free zone around islands" is critical to successful protection of wildlife within the refuges.

It will also be critical to work with fisheries managers to educate the fishing public about respecting the buffer zones around islands.

2.3.4 Cooperative Programs (CP),

Objective CP2 is a key to success. Recommend changing Achievement Strategy C. to read "Coordinate with WDFW law enforcement to protect refuge wildlife and the resources on which they depend".

Objective CP3 is a key to success. "Coordinate with Tribes, the OCNMS, ONP, and WDNR in managing for protection and conservation of intertidal and subtidal zones…"

ObjectiveCP6: "Coordinate with OCNMS…" Suggest changing Achievement Strategy A. to read: "The MOU will address trespass law enforcement, oil spill response planning and action, overflight restrictions…" and so on. Key notion here is that the Service would participate materially in oil spill response, not just planning.

In general, some coordination of planning and control over marine resource and fish populations occurring throughout the OCNMS should be done by the appropriate and authorized agencies and Tribes, working in cooperation with the Service, in order to recognize and address long term seabird and marine mammal food requirements.

Objective CP7: Again, it is important to work with the FAA to restrict low flying aircraft in the area of the refuges.

2.3.5 Research and Monitoring Activity Management (RA)

Objective RA1: Achievement Strategy B. suggest amending this to read " Encourage research organizations to perform cooperative research projects that explore factors affecting refuge wildlife, especially the effects of overflight and boater disturbance on seabirds and marine mammals, gillnet impacts on sea otters and seabirds, and food requirements of seabirds and marine mammal populations in relation to fish and other marine resources surrounding or within reasonable foraging distance from refuges."

Objective RA2: "Update the refuge seabird monitoring plan…" Suggest adding new Achievement Strategy "K. Coordinate with NOAA, WDFW and Tribes to estimate foraging ranges of seabirds and to inventory or estimate available marine food resources."

Thank you for the opportunity to provide comments,

Jacques White, Ph.D.
Manager, Marine Conservation Program
The Nature Conservancy of Washington

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U.S. Fish & Wildlife Service
http://www.fws.gov

National Wildlife Refuge System Information
1 800/344 WILD

June 2007

