Pacific Region
Partners for Fish and Wildlife and Coastal Program Strategic Plan

U.S. Fish and Wildlife Service

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Executive Summary

Region 1 encompasses extraordinary ecological diversity with habitats ranging from tropical forest and coral reefs in Micronesia, to old-growth rainforests west of the Cascade mountain range of Oregon and Washington, to glacial lakes and streams in Washington's Northern Cascades, to arid shrub-steppe habitat in southern Idaho. These habitats support over 400 endangered and threatened species, many unique and endemic plant and animal communities, and a variety of economic and land-use considerations. Our partners are varied—agricultural and natural resource dependent communities, rural landowners, Native American tribal governments and indigenous island communities, watershed councils, coral reef advisory groups, universities, land trusts, State and Federal agencies, and many others.

Our Partners for Fish and Wildlife Program (Partners Program) and Coastal Program Team recognize that this diversity in habitats, landowner needs, and partnerships presents many opportunities for us. This abundance of opportunity in Region 1 requires program focus to ensure our limited staffing and project dollars are allocated to benefit the highest priority resources and achieve the highest quality results for our Federal trust species.

The Region 1 Partners and Coastal Program Team has developed a reputation for having the ability to effectively deliver technical assistance and habitat restoration projects in a timely, efficient, and cooperative manner. In order to remain within our capacity and to meet our partners' expectations, Partners and Coastal Programs biologists carefully evaluate project proposals to assess which sites best meet the Focus Area objectives. We seek to leverage limited program funds by providing needed technical assistance to complementary restoration programs in a watershed or ecoregion. Ultimately, through collaborative partnerships with other agencies and programs, our Partners and Coastal Programs' limited funds are leveraged to restore habitat and conserve our valued natural resources.

In this Plan, we describe how we will improve the overall effectiveness of our Partners and Coastal Team to:

- conserve habitat,
- broaden and strengthen partnerships,
- improve communication,
- enhance our workforce, and
- increase accountability.

We will improve our efficiency and increase results by focusing our partnership building and habitat improvement actions within 40 Partners Program and 14 Coastal Program Focus Areas.

Conserve Habitat

Region 1's diversity in ecoregion and habitat types, their associated threats, and extensive partnership opportunities call for creative and energetic efforts to conserve habitat. To meet this challenge, our Partners and Coastal Team will improve our efficiency and increase results by focusing our partnership building and habitat improvement actions within 54 Focus Areas (40 Partners Program Focus Areas and 14 Coastal Program Focus Areas). The Focus Areas represent landscapes where broad fish and wildlife conservation goals could best be met, and are consistent with our program's voluntary approach. Some question how voluntary conservation efforts can be strategic as they are by nature opportunistic and shaped by landowner interest and funding availability. However, opportunistic conservation is not necessarily random. By targeting our actions within the Focus Areas described in this Plan, our actions will strategically create conservation opportunities.

The Partners and Coastal Team efforts in Region 1 will focus on the restoration of wetland, coral reef, grassland, savanna, tropical and temperate forest, upland bog, shrub-steppe, stream, and riparian habitats within these Focus Areas. These Focus Areas overlap with high concentrations of listed and candidate species, with key migratory bird corridors, National Wildlife Refuge (NWR) lands, and with priority State-led conservation efforts for species at risk.

Over the next 5 years, we anticipate our Partners Team will improve habitat on approximately 4,300 acres of wetland habitat, 7,960 acres of upland habitat, 114 miles of riparian habitat, 25 miles of instream habitat, and remove 83 fish passage barriers. We anticipate our Coastal Team will improve habitat on approximately 1,233 acres of wetland and coral reef habitat, 604 acres of upland habitat, 4 miles of riparian habitat, 6 miles of instream habitat, 10 miles of coastal shoreline and nearshore habitats, and remove 22 fish passage barriers. In addition, we will work with our partners to improve our effectiveness monitoring and adaptive management efforts and describe the anticipated outcomes, or biological responses, of our habitat restoration and conservation efforts.

Broaden and Strengthen Partnerships
We will continue to serve as conservation problem-solvers by maintaining, developing and improving long-term partnerships with private landowners, States, Tribes, indigenous island communities in the Pacific, other island Governments, other Federal agencies, non-governmental organizations (NGOs), and other Service Programs. Through these partnerships, we will develop and implement collaborative species and habitat conservation strategies.

Improve Information Sharing and Communication
Through specific steps described in this Plan, we will improve and expand our communication and information sharing capabilities with all stakeholders and partners to maximize our conservation results.

Enhance Our Workforce
We will maintain and support an adequately-sized, strategically positioned workforce with state-of-the-art training in habitat restoration, conservation techniques, and partnership activities.

Increase Accountability
We will measure, assess, and report on the effectiveness, efficiency, and fiscal integrity of our habitat conservation programs and activities.

Introduction

This document is the Region 1 Step-Down Plan for the national Partners and Coastal Programs strategic planning process. The national Partners and Coastal Strategic Plan consists of three parts:

This document is the Regional Step-Down Plan for the national Partners and Coastal Programs national strategic plan.

Part 1 consists of two separate but related vision documents: one for the Partners Program and one for the Coastal Program. These vision documents were completed in 2006 (U.S. Fish and Wildlife Service, 2006a and 2006b), and provide a national overview of the Partners and Coastal Programs and the five Program goals that will be comprehensively addressed in Parts 2 and 3;
Part 2 consists of regional strategic plans that "step-down" the national vision to the regional level; and
Part 3 will be the national summary document.
This document is the Partners and Coastal Programs Strategic Plan for the Pacific Region, (FY 2007 through FY 2011), and will be referred to as the Plan for the remainder of this chapter. This Plan addresses each of the five Program goals established in the Vision Documents:

- **Goal 1**: Conserve Habitat
- **Goal 2**: Broaden and Strengthen Partnerships
- **Goal 3**: Improve Information Sharing and Communication
- **Goal 4**: Enhance Our Workforce
- **Goal 5**: Increase Accountability

For each of the five Program goals, we describe regional goals, regional objectives, and identify the strategies, performance measures, and corresponding accomplishment targets that we will pursue to meet those objectives. For Goal 1 (Conserve Habitat), we also describe the geographic Focus Areas and associated priority habitats where we will focus most of our partnership efforts over the next 5 years (FY 2007-2011). These Focus Areas are also where we will accomplish our estimated 5-year performance outputs (e.g., acres and miles of habitat enhanced) based on the FY 2006 funding levels. Complete descriptions of each Focus Area are provided in Appendices A thru E.

How to Use This Plan

Many of the objectives identified in this Plan can be addressed with existing resources and authority; others cannot be accomplished without additional funding, staff, training, authority, or cooperation with partners. This Plan establishes broad goals and objectives, and identifies specific strategies that will guide the Region 1 Partners and Coastal Programs efforts over the next 5 years. This Plan is a living document and will be reviewed periodically. Elements of the Plan may change as milestones are reached or as unforeseen circumstances or new opportunities arise; however, the overall goals and objectives are expected to remain stable throughout the planning cycle.

Each fall, the State or Ecoregion Partners and Coastal Coordinators will review the objectives and strategies identified in this Plan and will recommend which can be initiated or accomplished in the upcoming fiscal year considering expected budget and workforce scenarios. This information will then be provided to the respective Ecological Services, Refuge, and Fisheries Project Leaders. The Project Leaders will work with State or Ecoregion Coordinators and the Regional Office Program Coordinators to incorporate those items in the field stations' annual Work Assignment Guidance, as appropriate

Summary of Stakeholder Input

When we initiated the national strategic planning process in 2004, information was gathered from a variety of internal (Service programs) and external stakeholders through mailed questionnaires, meetings, and personal interviews. Stakeholder input was used to help the Service identify the species and habitat conservation issues and challenges facing us over the next 5 years. Stakeholders were asked to provide their opinions about the direction of the Partners and Coastal Programs and how the programs can best work with landowners. This internal and external stakeholder feedback, coupled with scientific reports and conservation plans, were used to draft part one of the National Strategic Plan, the Vision Documents (U.S. Fish and Wildlife Service, 2006a and 2006b).

For this Plan, we worked with many of the same and some additional stakeholders to identify biological objectives and geographic Focus Areas in each State. In addition to hosting individual meetings, we posted Focus Area maps on our field station websites, explained the process and intentions of our Strategic Planning effort, and invited stakeholders to review and comment. A complete list of the stakeholders that we contacted and worked with in this process is provided in Appendix F.

Stakeholder input on these Focus Areas is vital to the success of our mission. The Partners and Coastal Programs have always worked closely with our partners and stakeholders to develop high-quality projects. The same holds true for the development of this Plan. Stakeholder involvement improved the quality of this Plan and we also expect stakeholder involvement will improve our implementation of this Plan. Stakeholder input in the development of the Plan enhances their understanding of this Plan, which in turn may enhance our collaboration opportunities over the next 5 years.

As described later, we relied extensively on existing Federal, State and regional resource management, conservation, and recovery plans to develop our Focus Areas. Those plans were also based on extensive stakeholder input. We believe the multiple opportunities for stakeholder review and comment helped generate support and critically important baseline information for the development of our Focus Area

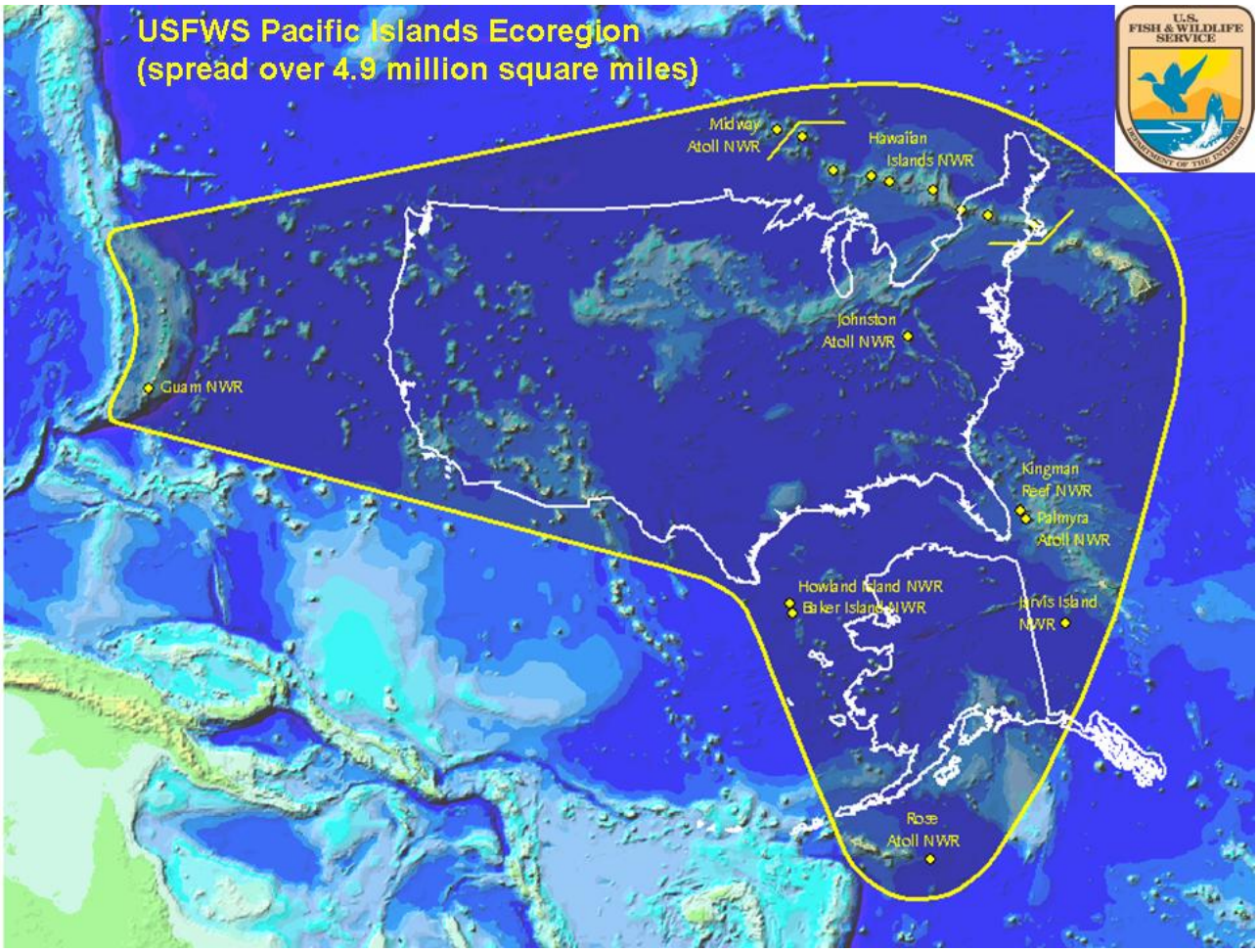
proposals. Early and consistent coordination with our counterparts within the Service and the resource conservation community resulted in majority support for the Focus Area proposals.

We are grateful for the information our many partners and stakeholders provided. Their input will help maximize our program efficiencies to provide the greatest good for Federal trust resources. We continue to welcome stakeholder input as we implement this Plan and will continue to seek new and innovative ideas for reaching our mutual conservation goals and objectives.

Overview of Region 1

Region 1 includes over 158 million acres (almost 247,000 square miles) of land base in the States of Idaho, Oregon, Washington, Hawai'i, and other Pacific Islands. Not only is this land base large, it also spread over an even larger area of marine habitat. The Hawai'i and Pacific Islands area of Region 1 covers nearly 4.9 million miles (Figure 1), spanning 5 time zones and the International Date Line. The Pacific Islands Ecoregion includes the State of Hawai'i, the Commonwealth of the Northern Mariana Islands, the territories of American Samoa and Guam, unincorporated U.S. possessions like Palmyra Atoll and Midway Atoll, and independent nations with Compacts of Free Association with the U.S.—the Republic of Palau, the Federated States of Micronesia, and the Republic of the Marshall Islands.

Figure 1: U.S. Fish and Wildlife Service Pacific Islands Ecosystem



Region 1 is also one of the most ecologically diverse regions in the United States. Landscapes range from coral reef, broadleaf tropical forests and tropical savannahs in the Pacific Islands, to glacial streams and lakes, lush old-growth rainforests, inland fjords and coastal shoreline, and shrub-steppe desert in the Pacific Northwest. Similarly, the people of the different landscapes perceive, value, and manage their natural resources in ways unique to their respective regions and cultures. We work with a variety of partners in Region 1 including landowners, watershed councils, land trusts, Soil and Water Conservation Districts, non-governmental organizations, Tribal governments, Native Hawaiian organizations, and local, State and Federal Agencies. In addition, our Pacific Island programs work with people from many Pacific Island cultures who live in several political jurisdictions. The Region's landownership patterns are also diverse and range from the Federal-private checkerboard ownership patterns in Oregon, Washington, and Idaho, to the unique land tenure systems in the Pacific Island territories, to other important areas of biological diversity such as the Willamette Valley in Oregon with 96 percent private ownership.

Because of the differences between the ecoregions, habitat types, species assemblages, and partnership opportunities, we often discuss the Pacific Northwest separately from the Pacific Islands. For purposes of this Plan, "Pacific Northwest" refers to the States of Idaho, Washington, and Oregon (excluding the Klamath Basin, which is under the jurisdiction of the California/Nevada Operations Office), and "Pacific Islands" refers to the State of Hawai'i, the Territories of Guam and American Samoa, the Commonwealth of the Northern Mariana Islands, and the former trust territories of the United States described earlier in this section.

Ecological Diversity

The Pacific Northwest contains diverse ecoregions. Ecoregions are generally defined as relatively large areas of land and water that contain geographically distinct assemblages of natural communities. These communities share a large majority of their species, dynamics, and environmental conditions and function together effectively as a conservation unit on global and continental scales.

Over 20 percent of the EPA Level III Ecoregions are found in the Pacific Northwest, and the habitat diversity in the Pacific Islands is almost unparalleled globally.

In this Plan, we display the Environmental Protection Agency (EPA) Level III Ecoregion delineations that were used by the States of Oregon, Washington, and Idaho in their State Wildlife Comprehensive Wildlife Conservation Strategies to help illustrate the diversity of landscapes in the Pacific Northwest. Seventeen of the 84 (or 22 percent) Level III Ecoregions developed by EPA (US EPA 2007) occur within the Pacific Northwest (Figure 2.). Oregon, Idaho, and Washington contain most of the major ecosystem types found in the western United States, including two that are found nowhere else in the world—the channeled scablands of eastern Washington, and the Olympic rainforest in western Washington.

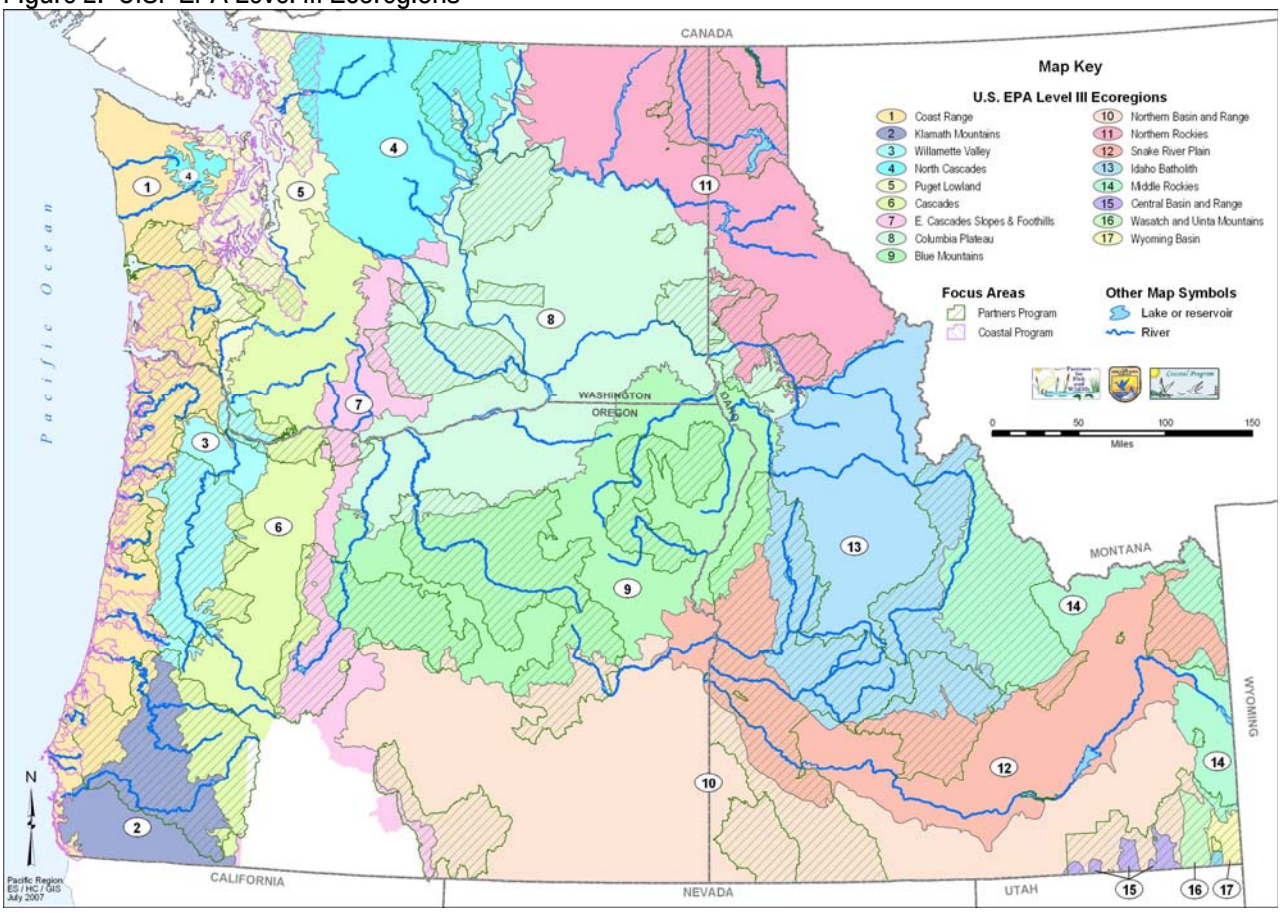
Other unique areas include the Klamath-Siskiyou region in western Oregon that was included in World Wildlife Fund's assessment of the 200 most diverse areas for species worldwide, and was noted as an area of Global Botanical Significance by The Nature Conservancy (Oregon Department of Fish and Wildlife 2005). In addition, Puget Sound is the second largest estuary in the United States and has been identified as an Estuary of National Significance under the National Estuary Program (Washington Department of Fish and Wildlife 2005). The Columbia River salmon and steelhead runs were once the largest runs in the world, and the Columbia River Estuary is also a nationally significant estuary and one of the largest in the west coast. The Salmon River in Idaho is the largest undammed river system in the lower 48 United States, and the John Day River in Oregon is the second longest free-flowing river in the United States (Idaho Department of Fish and Game 2005, Oregon Department of Fish and Wildlife 2005).

The habitat diversity in the Pacific Islands is almost unparalleled globally. Over a few miles and due to rapid elevation change typical of volcanic island chains, the habitats range from coastal and lowland wetland communities (including swamps, bogs, and marshes), to grasslands, wet cliff communities, dry and

wet lowland and montane forests, and alpine rocklands. EPA has not delineated ecoregions for the Pacific Islands. However, The Nature Conservancy and Nature Serve have developed ecoregion delineations for the Hawaiian Islands, and the World Wildlife Federation recognizes 24 ecoregions for the Oceania Region (The Nature Conservancy 2006, World Wildlife Federation 2001). The immense diversity of habitat types in the Pacific Island ecoregions expectedly supports a broad range of endemic plants and animals. Of all the native species present in Hawai'i, roughly 85 percent of the birds, 89 percent of flowering plants, 99 percent of snails and insects, 23 percent of marine fishes, and 20 percent of marine invertebrates are endemic. Because these endemics have small ranges and did not evolve defenses against the many invasive, alien species that arrived with humans, they suffered high rates of extinction when people introduced alien species to the islands. Nearly 1,000 (primarily terrestrial) species have gone extinct over the last 200 years and over 325 species are now listed as threatened or endangered.

In Region 1, over 400 species are listed as threatened or endangered, 136 are formally identified as candidate species, and over a thousand other species are considered special status species and are identified as Species of Concern (SOC), Convention on International Trade in Endangered Species (CITES) and International Union for the Conservation of Nature (IUCN) Red list, or listed under State legislative authorities.

Figure 2: U.S. EPA Level III Ecoregions



Landownership Patterns

Of the 158 million acres in Region 1, approximately 75 million are privately owned. Oregon contains approximately 53 percent Federal lands, Washington contains approximately 40 percent public lands, Idaho contains approximately 64 percent Federal lands, and Hawai'i contains approximately 8 percent Federal lands. Land ownership patterns play an important role in both the selection of our Focus Areas and the development of our conservation objectives within those Focus Areas. Federal and State lands are not eligible for Partners Program funding, but are eligible for Coastal program funding. In addition, in many landscapes throughout the Pacific Northwest and the Pacific Islands, the upper elevation portions of the watersheds are owned by the State, U.S. Forest Service, or Bureau of Land Management whereas the lower elevation or valley bottom portions are privately owned. The lower elevation areas often contain the riparian and/or wetland habitats critical for breeding, over-wintering, or migratory components of many species lifecycles. It is these lower elevation areas that often experienced the most significant anthropogenic impacts. For example, more than 85 percent of low elevation wetlands have been lost in Idaho, placing them on the list of endangered ecosystems in the United States (Noss et al. 1995).

Restoration of private lands within a public land matrix is essential for the long-term survival of many species.

Even though Federal lands are not eligible for Partners Program funding, some Focus Areas such as the Methow River Focus Area in Eastern Washington contain a significant amount of public lands. Focus Areas that contain or are adjacent to large blocks of public land or contain public-private checkerboard areas provide excellent opportunities for the Service to provide leadership in the development of broad conservation agreements, and restoration on a watershed scale. By working with key private landowners in a Federal land matrix, we have the opportunity to coordinate land use and management activities for both private and public landowners and increase our effectiveness in conserving ecological and economic interests. However, species totally dependent on late success ional forest habitats with ranges that include large blocks of Federal ownership, such as the northern spotted owl, are not included as focal species for our Partners and Coastal Team efforts because the needs of these species are best addressed through management of Federal lands and Northwest Forest Plan actions.

Threats

Pacific Northwest

The primary factor impacting Service trust species in the Pacific Northwest is habitat loss through conversion, fragmentation, and degradation. In Oregon, nearly 70 percent of estuarine and 40 percent of freshwater wetlands have been lost, and in most areas of the State, as much as 80 percent of the riparian habitat has been lost. In the Willamette Valley, for instance, over 80 percent of oak savanna habitat has been converted for agriculture and urban uses, river channel complexity has been reduced by up to 80 percent through channel confinement and removal of large woody debris, and less than 1 percent of the historic wet and dry prairie habitats remain (Oregon Department of Fish and Wildlife 2005). Approximately 70 percent of estuarine wetlands, 50-90 percent of riparian habitat, 90 percent of old growth forest, 70 percent of arid grasslands, and more than 50 percent of the shrub steppe habitat in the State of Washington has been lost. About 75 percent of Puget Sound's estuaries and their adjacent habitats, such as grasslands, mixed woodlands and floodplain forests, have been modified so significantly that they no longer provide original functions (Washington Department of Fish and Wildlife 2005). Water diversions have diminished fish habitat in streams. Dams for water storage, hydroelectric power, irrigation, or flood control blocked fish access to many watersheds. Streams and rivers were channelized, reducing diversity and quantity of habitats within floodplains. Water quality has been degraded by the input of agricultural chemicals and sediments into the streams. Other contaminant inputs from industry, mining, and urban runoff also affect water quality in the Pacific Northwest. A large percentage of surface waters do not meet State water quality criteria and many miles of streams have fish consumption advisories for a variety of

pollutants. Throughout the Pacific Northwest, working farms, ranches, and private forests have long provided homes for fish and wildlife; however many of these areas are being converted into residential and commercial developments.

Loss of habitat has been compounded by increased fragmentation and introduction of non-native plant species which alter the native species composition and structure. These changes have significantly impacted fish and wildlife resources with resulting declines in listed plants and butterflies, migratory birds, anadromous fish, and other species. Invasive plant species such as non-native knotweeds and knapweeds, reed canary grass, Himalayan blackberry, melaleuca, cheat grass, English ivy, Eurasian water milfoil, purple loosestrife, yellow star thistle, non-native marine algae, and non-native submerged aquatic vegetation are causing significant impacts to Federal trust species. Cheat grass is the dominant species on at least 50 million hectares in the western United States and Canada. It out-competes over 10 species of Pacific Northwest native grasses. It dramatically impacts the plant communities it invades by changing the frequency of wildfires from every few decades to every 3 to 5 years. Cheat grass also costs farmers hundreds of millions of dollars in lost yields and control expenses.

The primary factor impacting Service trust species in the Pacific Northwest is habitat loss through conversion, fragmentation, and degradation.

Bohemian, giant, and Japanese knotweeds have invaded many areas in Washington and Oregon, and are beginning to colonize Idaho. Knotweeds quickly colonize large areas and out-compete native plants for light and soil resources. They often invade riparian and instream gravel bar areas first, taking advantage of regular flooding disturbance and ultimately displacing native shrubs and trees that provide important wildlife habitat and erosion control. Knotweed invasion on gravel bars prevents natural streambed movements, and the tall dense growth of knotweeds restricts public access along riverbanks for recreation. Reed canary grass can create large dense monocultures that effectively exclude almost all other plant species, displacing wildlife due to its limited habitat value and altering sedimentation, hydrology, and nutrient cycling in wetland and riparian areas. It is widespread in low-elevation wetlands west of the Cascades. Existing invasive animals such as bullfrogs, nutria, European green crabs, carp and starlings also impose major negative impacts. Dozens of other invasive plants and animals lurk on the horizon, such as the infamous zebra mussel, Chinese mitten crabs, and the aquatic weed *Hydrilla,* with the potential to cause even greater damage.

Pacific Islands

Invasive species such as feral ungulates, habitat-modifying weeds, mammalian predators, invertebrate pests, and disease agents are the greatest, most pervasive threat to Pacific Island terrestrial and aquatic ecosystems. This continuing invasion of non-native weeds, predators, herbivores, pathogens, and competitors into native ecosystems is the engine that currently drives the Hawaiian extinction crisis. Effects from invasive non-native species, more-so than direct habitat destruction by humans, have been the dominant threat to native species and ecosystems in the Hawaiian Islands. Hawai'i, like other Pacific Islands, is extraordinarily vulnerable to human-accelerated alien species invasions due to the fact that its native species evolved in the absence of many taxonomic groups found in continental areas. These island ecosystems developed as a result of a slow rate of natural species introductions and an exceptional range of hospitable habitats for invaders to occupy. The estimated rate for successful, new colonization of the islands by a plant or animal species before human arrival was once every 25,000 to 50,000 years. In contrast, over the past 30 years, newly established species have been recorded in Hawai'i at the rate of once every 18 days. The same conditions that lead to the evolution of island species (vacant ecological niches and hospitable habitat) now allow invasive species to become established. The existing profusion of established invasive non-native species has the capacity to overwhelm most remaining native habitat if left unchecked.

Over human history in the islands, several major groups of non-native species have emerged as the most damaging to native ecosystems and species:

Ungulates - Lacking any large native herbivorous mammals, the Hawaiian flora is not adapted to ungulate browsing or trampling. Feral pigs, goats, sheep, deer, and cattle were responsible for destruction of lowland ecosystems, and continue to degrade remaining native ecological systems. For example, one of the Pacific Island Partners Focus Areas, the East Maui Watershed, contains the largest intact native forest area on the island of Maui, and is habitat for the world's greatest concentration of endangered birds, as well as several plant and invertebrate species found nowhere else on the planet. One of two primary threats facing these species is destruction and degradation of habitats by feral animals. Disturbance of the habitat then encourages invasions of non-native plant species, the second primary threat to native ecosystems. In addition, avian diseases affecting native forest bird concentrations are spread by mosquitoes, and spread of mosquitoes into forest bird habitat is tied to wallows of feral pigs that create mosquito breeding sites where none otherwise exist.

Conservation of Federal Trust species in the Pacific Islands is dependent on keeping remaining relatively uninvaded native areas intact, stemming establishment of new invasive species, and devising practical strategies to limit the impact of widely-established invasive species.

lnvasive weeds - Through a history of increasing introduction of alien plants, there are now more species of naturalized non-native vascular plants in the wilds of Hawai'i than there are native species. Approximately 200 of these are extremely aggressive, habitat-modifying noxious weeds. Freshwater and marine habitats have also been subjected to invasion by non-native aquatic plants.

Predators - There are no native terrestrial mammalian predators (e.g., rodents, cats, dogs, rabbits, mongoose) in Hawai'i, and the ecological effects of herbivorous, omnivorous, or predatory small mammals has lead to the reduction of native species, sometimes to extinction. Rodents are implicated in damage to lowland forests and native herbaceous vegetation via seed predation, as well as on both ground-nesting seabirds and forest birds. Feral cats and dogs, as well as mongooses take a heavy toll on nesting bird populations.

Brown Treesnake – The Island of Guam has lost virtually all of its native birds due to the brown treesnake. A similar fate awaits the neighboring Commonwealth of the Northern Mariana Islands, as well as Hawai'i and other Pacific Islands, if interdiction efforts are not continued. Control of the brown treesnake will be required to recover Guam's native bird species like the Mariana Common Moorhen and swifllet (Guam Division of Aquatic Wildlife and Resources 2005). Interdiction efforts to control its spread from Guam to outlying islands, including other Pacific Islands, are currently underway.

Additional threats to coastal and marine species in the Pacific Islands come from coastal development and recreational impacts, soil erosion into the marine environment, overfishing, poaching, water pollution, wetland filling, unshielded coastal lighting, military training impacts, incidental fisheries bycatch, marine debris ingestion, entanglement in abandoned fishing nets, ship groundings, coral bleaching and disease, global climate change, and sea level rise.

In Hawai'i, many important wetland and coastal habitats are threatened by development. The limited amount of shoreline and the constant demand for beach-front development has resulted in the conversion of formerly open coastal areas to buildings, roadways, and residential landscaping. Shoreline alterations, including the building or expansion of harbors, seawalls, and other structures, damages marine habitats for corals and other species directly or indirectly by changing water flows or sediment deposition (Mitchell et al. 2005).

Region 1 Conservation Initiatives

Cross Program Results

Cross Program Results (CPR) is a Region 1 initiative that consolidates the habitat priorities of Refuges, Fisheries, Migratory Birds, State Programs, and Ecological Services into strategic, geographically focused habitat protection and restoration programs. Our Partners and Coastal Team are key participants in the Region 1 CPR initiative. Through the CPR initiative, the Region 1 programs share resources and expertise to implement practical on-the-ground actions that will help guard against future endangered species listings, promote the recovery of currently listed species, and allow the Service to better function as conservation problem solvers. CPR emphasizes a landscape rather than program approach for protecting and restoring species, populations, and habitat in specific Focus Areas. CPR is implemented via results-based Focal Area plans that are developed and implemented by cross-program teams to achieve specific biological objectives for each Focal Area. We first started CPR in 2002 in the Willamette Valley of Oregon, and added the Lower Columbia River Estuary area of Oregon and Washington in 2004.

The Partners and Coastal Programs Focus Areas in this Plan are important components of our CPR efforts.

Our Willamette Valley CPR effort has achieved significant results by combining Refuge staff and equipment, with Partners Program funding, ESA Recovery program funding and technical expertise, and Natural Resource Conservation Service Farm Bill programs. Together, these programs create a $2.5 million synergistic effort to restore native prairie and associated candidate and listed species.

CPR emphasizes a landscape rather than program approach for protecting and restoring species.

As a result of our Willamette Valley CPR effort, the Service has entered into more than 250 projects with private landowners, restoring several thousand acres of wetlands, wet and dry prairie, and oak savannah habitats. Nelson's checkermallow, a threatened plant, could be recovered within 5 years. The Oregon chub, an endangered endemic minnow, is now found in 33 locations—up from 10 locations less than a decade ago. Further, two species of native birds—the western meadowlark and the western bluebird nested at Baskett Slough NWR in 2004 for the first time in recent memory.

Because our CPR efforts have been so successful in the Willamette Valley, we are exporting this approach to other geographically focused areas within Region 1. We used the Partners and Coastal Focus Areas in this Plan as a base layer for selecting CPR focal areas, and as a result, each CPR Focal Area contains one or more of the Partners or Coastal Focus Areas described in this Plan. We will continue to prioritize our Partners Program contributions to the CPR effort in the Willamette Valley, and will prioritize our Partners and Coastal Programs' contributions to the recently initiated CPR efforts for the Oregon and southwest Washington Coast and the Hawaiian Native Birds Focal Areas. We will also continue to support Partners and Coastal Program projects as appropriate in the five other CPR focal areas, and continue to support their development.

Region 1 CPR Focal Area	Status
Willamette Valley, Oregon	Initiated in 2002
Hawai'i Native Birds	Initiated in 2007
Coastal Oregon and southwest Washington	Estuary portion initiated in 2004, expanded in 2007
Lower Columbia River Estuary	Initiated in 2004
Puget Sound, Washington	In early development stages
Eastern Idaho	In early development stages
Yakima Basin, south central Washington	In early development stages
High Desert, south central Oregon	In early development stages

Region 1 fully supports Strategic Habitat Conservation (SHC) which is an adaptive management approach to conservation planning, implementation, and evaluation with our partners. SHC follows four basic steps: 1) biological planning by establishing population objectives and identifying limiting factors; 2) conservation design by developing habitat objectives for desired conditions; 3) delivery of conservation actions on the ground; and 4) monitoring and research to evaluate relative success. The SHC and CPR are similar in most respects, and Region 1 will focus our initial SHC efforts in the CPR focal areas identified above.

Candidate Conservation

Our Partners and Coastal Team is working in a cross-program manner with many State, Federal, Tribal, local agency partners, and private landowners to conserve candidate and potential candidate species throughout Region 1. Our Partners and Coastal Team works closely with our other partners to conserve species such as the potential candidate species that are also part of the National Fish Habitat and/or Western Native Trout Initiative (lamprey, coastal cutthroat trout, redband trout, Bonneville cutthroat trout, Yellowstone cutthroat trout, and westslope cutthroat trout); potential candidate species that are high priority for the States/Territories/Commonwealth as identified in their State Wildlife Action Plans (including Greater sage grouse, Oregon coastal coho, Columbian sharp-tailed grouse); and the many candidate and potential candidate species within our Focus Areas (including Mardon skipper, Taylor's checkerspot, trumpeter swans, Umtanum desert buckwheat, and Palouse goldenweed). We believe the work we are currently accomplishing with our partners will go a long way toward keeping these species off the threatened and endangered species list.

In addition, our Partners and Coastal Team is prioritizing our restoration efforts with the goal of precluding the need to list five Candidate or potential candidate species, as our contribution to the FY 2007 President's Budget Candidate Conservation Pilot Project. The criteria we used to select these species for incorporation into the Pilot Project were that threats to the species could be removed through Partners Program habitat improvement activities and that removal of these threats would likely lead to removal from Candidate status by the year 2010. The species are:

- *Bidens conjuncta* (Ko'oko'olau) - formal candidate
- *Geranium hillebrandii* (Nohoanu) - formal candidate
- *Myrsine vaccinioides* (Kolea) - formal candidate
- *Argyroxiphium caliginis* (Eke Silversword, ahinahina) - potential candidate
- Oregon Coastal coho salmon *(Oncorhynchus kisutch)* - potential candidate

Bidens conjuncta, Geranium hillebrandii, Myrsine vaccinioides, and *Argyroxiphium caliginis* are plants that are all currently found in the Pacific Island West Maui Watershed Partnership Focus Area. They occur at similar elevations, in wet forests and/or in bogs, and on lands under the same or similar management and ownership, and are narrow endemics. They also experience the same threats from feral pigs, which are highly destructive to the plants' habitat and act as vectors for invasive non-native plant species that out-compete the native plants for space, light, water, and/or nutrients. Because of the similarities in land ownership, habitat, and threats, all four of these species can easily benefit from implementation of the same conservation activities (pig fencing and removal of invasive non-native plant species) and monitoring procedures. Therefore, we are confident that the Partners Program will play an important role in the conservation of these Candidate species, and together with the long-term monitoring and maintenance efforts by our partners, we will achieve our goal of precluding the need to list them.

Oregon coastal coho salmon were formerly listed by NOAA Fisheries as a threatened species, and approximately 56 percent of its range is in private ownership. The species is not currently federally listed, but many partnerships and efforts are underway to reduce threats and preclude a potential re-listing. The

Partners and Coastal Team will continue to work with the State of Oregon and other partners to implement the coastal coho conservation programs in place including the Oregon Plan for Salmon, which was a factor in the recent decision not to list coastal coho salmon and highlights the need for private landowners to restore and improve aquatic habitat. The Partners and Coastal Team has established partnerships and generated enthusiasm with local watershed councils to continue or develop restoration programs for the benefit of Oregon coastal coho salmon. The Partners Program efforts in the Lower Columbia Focus Area, and the Coastal program efforts in the Lower Columbia River, Estuary, and Key Watershed Focus Areas will all contribute toward this high priority conservation objective.

Organizational Structure of the Region 1 Partners and Coastal Team

Region 1 has a successful history of implementing five State and/or Ecoregion Partners Programs and three Coastal programs. The geographic locations of Partners and Coastal Programs offices in the Pacific Northwest are shown in Figure 3a, and for the Pacific Islands in Figure 3b. At the end of fiscal year 2006, the Region 1 Partners and Coastal Programs fully funded 10 full-time positions, and partially funded 19 positions at these locations. Positions that are partially funded with Partners or Coastal program funds are typically full-time permanent Service employees that divide their duties between Partners and Coastal projects and other Service functions such as ESA recovery implementation or NWR management. Our Region 1 Partners and Coastal Team currently consists of a Regional Partners Coordinator, a Regional Coastal Coordinator, an Archaeologist, an Engineer, 5 State and/or Ecoregion Partners Coordinators, 3 Coastal Program Coordinators, and 17 biologists. It is important to note that the Partners and Coastal Program Team is functionally much larger than the 29 funded positions as administrative or managerial support is often provided by the organizational units that house the Partners and Coastal Team members, and many other Service biologists routinely assist the Partners and Coastal Programs with the initiation, selection, implementation, and monitoring of Partners and Coastal Programs projects.

Most of the Partners Program and all of the Coastal team members are within the Ecological Services Program; however, some Partners Program biologists are co-funded and located in our Refuge or Fisheries Programs (Figure 4). The Partners and Coastal Regional Coordinators provide guidance and direction for the program, but do not directly supervise the other members of the Partners and Coastal Team. The Regional Coordinators report to the Chief of the Natural Resource Conservation Division, who in turn, reports to the Assistant Regional Director for Ecological Services. The Archaeologist reports to the Refuge Chief, and the Engineer reports to the Chief of Engineering and the Assistant Regional Director for Budget and Administration. State and Ecoregion Coordinators report to their immediate supervisors, who in turn report to their Ecological Service Fish and Wildlife Office (FWO) Project Leaders. All other field staff positions are supervised by the Service Project Leader at the station where they are assigned. Positions stationed at a Refuge office are supervised by the Refuge Manager and those stationed at a Fisheries office are supervised by the Fisheries Project Leader.

The Regional Coordinators are responsible for implementing the programs at the regional level by developing annual Work Activity Guidance (WAGs), recommending Partners and Coastal Programs field station budget allocation, preparing regional level guidance, policy, and procedures as needed, and conducting management control reviews. In most cases, the Partners Program State and/or Ecoregion Coordinators report all Partners Program activities across all Service program areas and coordinate with other agencies and partners within their State on Partners Program issues. Partners and Coastal Coordinators also provide technical assistance to private landowners and other partners to develop, implement, and manage habitat improvement projects. The primary responsibility of the Partners and Coastal biologists is to develop partnerships and deliver their programs on the ground.

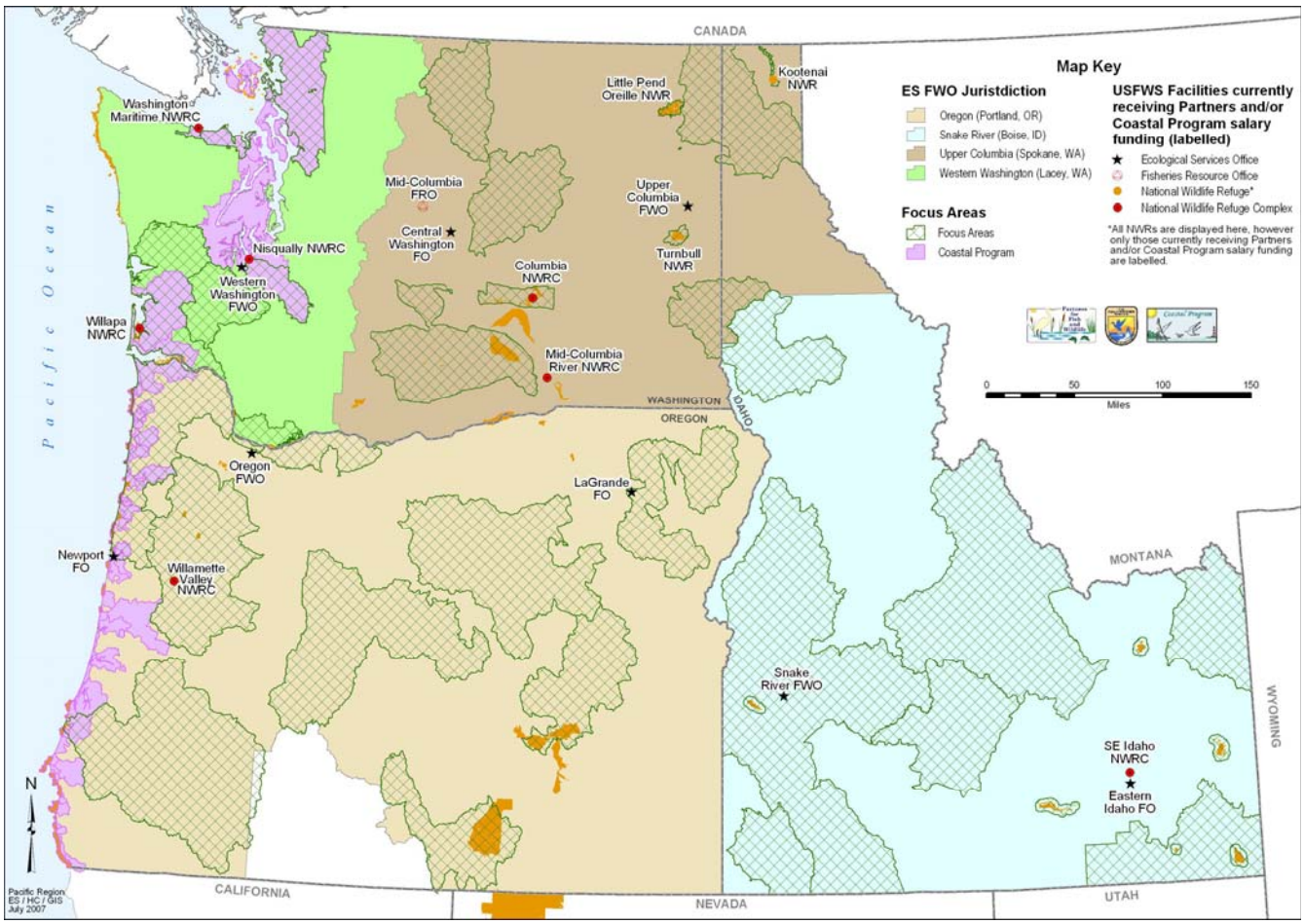


Figure 3a. Locations of Region 1 Partners and Coastal Programs Field Stations and Focus Areas in the Pacific Northwest. (Note that Service Field stations currently not receiving Partners or Coastal Program funding are not labeled on this figure. All Field stations are identified on the Figures in Appendices A – E.)

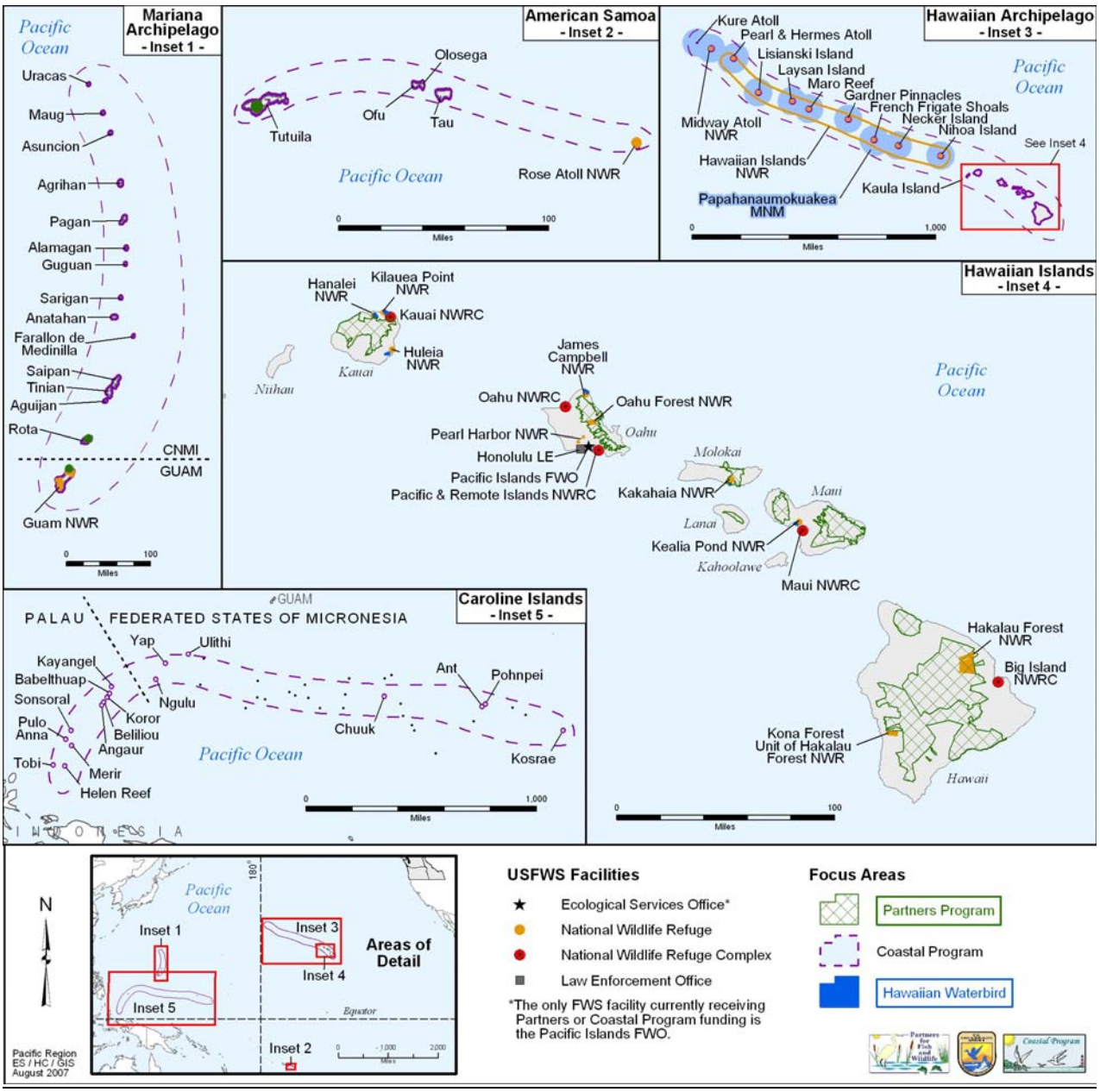


Figure 3b. Locations of Region 1 Service Field Stations and Focus Areas in the Pacific Northwest Islands.

Oregon Partners Program

The State Coordinator is located in Portland, Oregon. Our Oregon Partners Program is implemented through the combined efforts of biologists located at the Portland, Oregon FWO, the LaGrande, Oregon FWO suboffice, and the Willamette Valley NWR Complex.

Oregon Coastal Program

The Oregon Coastal Program is co-located with the Oregon Coast NWR Complex Manager in Newport, Oregon (on Oregon's mid-coast). The program is implemented by a program manager/biologist in the Newport Office that reports through the supervisory chain to the Portland, Oregon FWO.

Western Washington Partners Program

Our Western Washington Ecoregion Coordinator is located in Lacey, Washington. Our Western Washington Partners Program team includes biologists working in our Western Washington FWO in Lacey, the Willapa NWR Complex, the Nisqually NWR, and the Washington Maritime NWR.

Puget Sound Coastal Program

Washington's Puget Sound Coastal Program also includes habitats on the Washington Coast, Hood Canal, and Islands within the Sound and the Northwest Straits. This Coastal Program operates out of the Western Washington Fish and Wildlife Office in Lacey, Washington, and is co-located with the Fisheries Program.

Upper Columbia Basin Partners Program

The Upper Columbia Basin ecoregion includes eastern Washington and Northern Idaho. Our Upper Columbia Basin Ecoregion Coordinator is located in Spokane, Washington. Our Upper Columbia Basin Partners Team consists of part-time biologists working out of Spokane; the Central Washington Field Office in Wenatchee, Washington; the Turnbull NWR, the Columbia NWR, the Little Pend Oreille NWR, Mid-Columbia River NWRC, the Kootenai NWR, and the Mid-Columbia Fisheries Resource Office.

Snake River Basin Partners Program

The Snake River Basin Ecoregion in Idaho includes eastern and central Idaho (Idaho south of, and including the Clearwater River Watershed). Our Snake River Basin Partners Program Ecoregion Coordinator is located in Boise, Idaho. The Snake River Basin Partners Program is implemented through the combined efforts of Ecological Service and NWR biologists working out of our Upper Snake River Basin FWO in Boise, the Eastern Idaho sub-office in Chubbuck, Idaho, and the Southeast Idaho NWRC in Chubbuck, specifically the Bear Lake NWR.

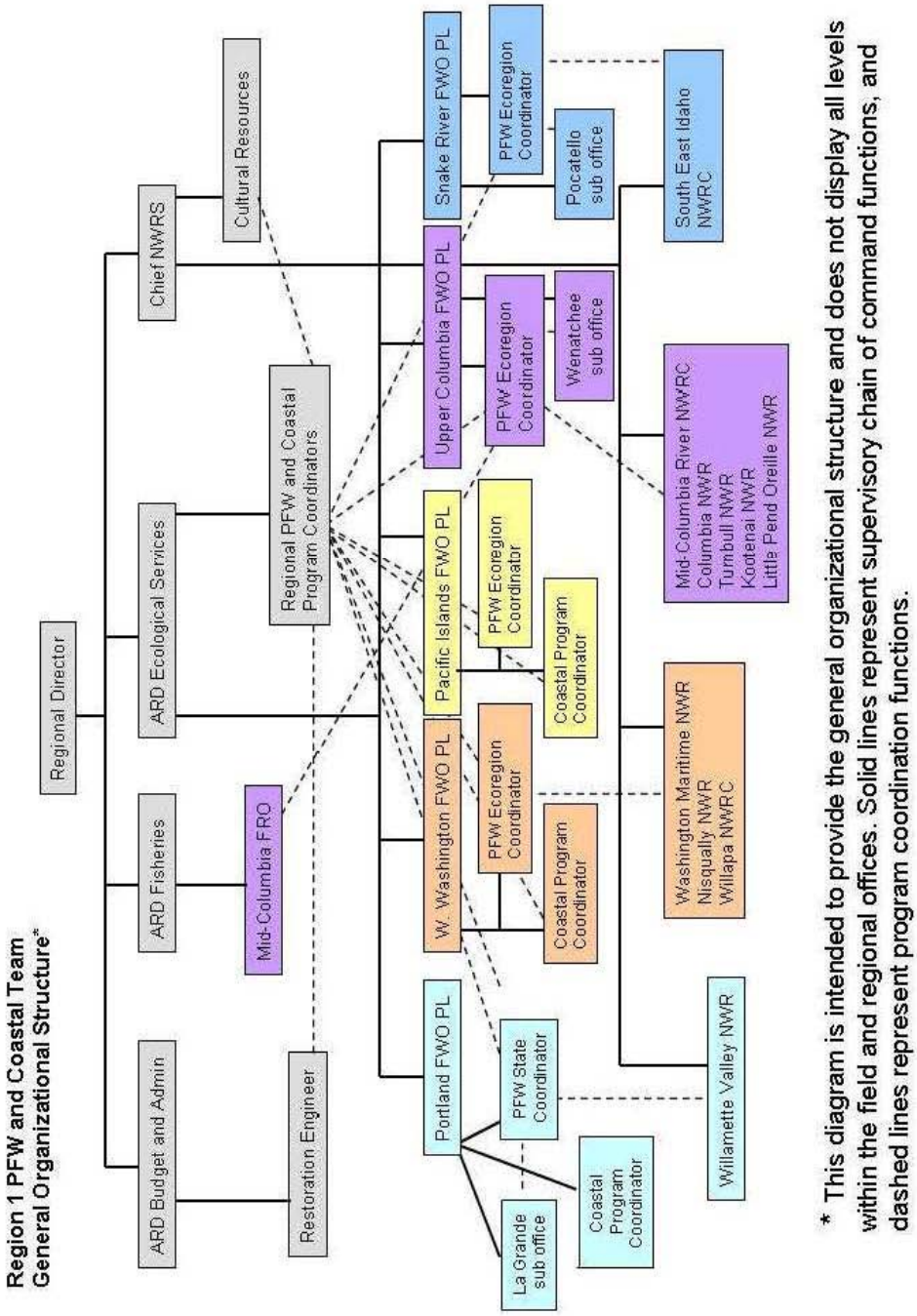
Pacific Islands Partners Program

The Pacific Islands Ecoregion includes the State of Hawai'i, the Commonwealth of the Northern Mariana Islands, the territories of American Samoa and Guam, unincorporated U.S. possessions like Palmyra Atoll and Midway Atoll, and independent nations with Compacts of Free Association with the U.S.—the Republic of Palau, the Federated States of Micronesia, and the Republic of the Marshall Islands. The Pacific Islands Partners Coordinator is located in Honolulu FWO. The Pacific Islands Partners Program receives support from the Pacific Island Conservation Partnerships Coordinator (in Honolulu) and Ecological Services biologists located in Honolulu and Hilo (Hakalau Forest NWR).

Pacific Islands Coastal Program

The Ecoregion area for the Coastal Program is the same as for the Partners Program. The Coastal Program Coordinator is also located in the Honolulu FWO. The Pacific Islands Coastal Program receives support from the Pacific Island Conservation Partnerships Coordinator (in Honolulu) and Ecological Services biologists located in Honolulu and Hilo (Hakalau Forest NWR).

Figure 4. General Organizational Structure of the Region 1 Partners and Coastal Team.



* This diagram is intended to provide the general organizational structure and does not display all levels within the field and regional offices. Solid lines represent supervisory chain of command functions, and dashed lines represent program coordination functions.

Five Program Goals from the Service Vision Document

Goal 1: Conserve Habitat

Focus Area Development

This Plan acknowledges the Region 1 Partners and Coastal Programs do not have the resources needed to address all conservation opportunities in all places; therefore our efforts must be strategic. To focus our efforts and maximize habitat conservation results, we developed a list of priorities (what we intend to do), and established Focus Areas (where we intend to do it).

Regional Goal: Prioritize workload and maximize conservation results by concentrating Partners and Coastal Programs funds and resources in the 54 Focus Areas identified in this Plan.

Our recognized priorities include:

- Contributing to the recovery of listed species,
- Precluding the need to list candidate and other at-risk species such as Birds of Conservation Concern,
- Protecting the environmental integrity of the National Wildlife Refuges,
- Contributing to the implementation of the State Comprehensive Wildlife Conservation Strategies and the Western Native Trout Initiative, and
- Helping to achieve the objectives of the North American Waterfowl Management Plan, the North American Landbird, Hawaiian Waterbird and U.S. Pacific Island Shorebird Conservation Plans, Northern Pacific Regional and Intermountain West Shorebird Conservation Plans, and other regionally based bird conservation plans.

Some of the criteria used to develop these Focus Areas include:

- Ability to address needs of multiple trust resources and habitats,
- Diversity, rarity, uniqueness, and health of the species and habitats present,
- State, national, and international designations (e.g. National Estuary Program, Wilderness, Biosphere Reserve, Western Hemisphere Shorebird Reserve Network),
- Imminence of threat (e.g., due to development, extinction, invasive species),
- "Recoverability" of ecosystem (can the threats be addressed?),
- Ability of the Service and willing partners to successfully address the resource needs (partners have capacity to deliver projects and landowners are willing to participate),
- Presence of Service offices, biologists, and trust resources, and
- Importance of the area from a landscape ecology perspective (e.g., does the Focus Area link or connect important habitat types and reduce fragmentation of habitat?)

The Focus Areas included in this Plan were developed using the best professional judgment of the Partners and Coastal biologists, through a participatory process that included all levels and programs in Region 1 and our partners. The biologists used the priorities and criteria above, reviewed existing conservation plans, and assimilated stakeholder input to develop the Focus Areas. Many of the plans that were driving forces in the development of Focus Areas, goals, objectives, and strategies in this Plan were the result of structured analytical processes with formal peer review. For example, we used State Comprehensive Wildlife Conservation Strategies, Endangered Species Recovery Plans, Joint Venture Implementation Plans, National Wildlife Refuge Comprehensive Conservation Plans, and several other existing planning documents to delineate our Focus Areas (see list of references).

Appendices A thru E identify and describe the 54 geographic Focus Areas within the Pacific Northwest and Pacific Islands where we will direct most of our assistance efforts through the Partners for Fish and Wildlife and Coastal Programs for the next 5 years. See Figures 3a and 3b, for regional maps of these 54 Focus Areas, and refer to Appendices A – E for detailed maps of each State and/or Ecoregion. It is important to note that the size of several of the Focus Areas are misleading on the maps, as they appear larger than the actual areas that the Partners and Coastal Programs will concentrate their efforts. For example, the Pacific Island Coastal Focus Areas encompass island archipelagos rather than watershed boundaries. This is necessary because most potential projects are on small dispersed islets, atolls, coral reefs, and seabird colonies located offshore from main islands and outside of traditional watershed boundaries, and mapping Focus Areas on an island-by-island basis would render them invisible to readers attempting to locate them on a map of the Pacific Ocean. Another example is the Salmon/Lost River Focus Area in Idaho which appears to encompass a large area. However, the Partners Program will only fund restoration efforts on the relatively small amount of privately owned land within that Federal land matrix.

Conservation Objectives

Each Focus Area narrative describes the conservation priorities and objectives for our programs over the next 5 years.

The primary objectives of our Partners and Coastal Programs are to build partnerships, restore habitats, and provide technical advice to our partners for the benefit of at-risk species across the region. As described in the Overview of Region 1 section, the Region 1 Partners and Coastal Programs team works in one of the most ecologically diverse regions in the United States. The 54 Focus Areas identified in this Plan include portions of all 41 ecoregions identified by US EPA for the Pacific Northwest and The Nature Conservancy for the Pacific Islands. The habitat types and species assemblies associated with each of those ecoregions are often unique; however, the conservation strategies that will be applied are often similar. Each Focus Area narrative describes the conservation strategy that will be applied in that landscape and the reader is encouraged to review the Focus Area Narratives for additional information.

Example Focus Area Objectives for the Pacific Islands:

- Identify and conserve coral reefs, offshore islets, coastal wetlands, and coastal strand habitats with high biodiversity and/or high species endemism.
- Prevent the introduction of new potentially invasive plant species.
- Remove feral cattle, pigs, sheep, and goats from watershed partnership areas.
- Implement pig control measures to minimize loss of watershed vegetation cover, watershed soil erosion, and human health risks associated with animal-borne diseases.
- Control priority invasive aquatic species in streams of watershed partnerships.
- Build capacity of community-based conservation groups and local resource agencies committed to long-term coastal resource management and monitoring.
- Develop and implement methods to remove alien mammals, particularly rats, mongoose, and cats which prey upon both ground and tree nesting birds.
- Restore wetland habitat to assist in coral reef recovery and help recovery of endangered wetland birds.

Example Focus Area Objectives for the Pacific Northwest:

- Eliminate passage barriers for focus aquatic species (including bull trout, steelhead, redband trout, Chinook salmon, Warner sucker, coastal cutthroat trout, chum salmon, coho salmon, and westslope cutthroat trout) and open entire systems to passage.
- Address key instream and riparian habitat limiting factors for listed bull trout, steelhead, and native trout species to contribute toward recovery.

- Develop and implement restoration actions within key Warner sucker and interior redband trout habitats to achieve instream fish passage and screening in particular to restore connectivity between adfluvial (lake) and fluvial (stream) habitat conditions to maximize diversity and abundance of fish representing the various life history strategies.
- Enhance sagebrush steppe habitat through juniper removal and upland seeding to provide cost effective benefits to greater sage grouse brood rearing and nesting habitats.
- Increase populations of migratory birds such as trumpeter swans, greater sandhill cranes, white-faced ibis, and long-billed curlew by improving habitat quality and quantity.
- Restore coastal floodplain wetland complexes by removing tidegates, breaching levees, restoring tidal channels, and replanting native trees and shrubs along tidally-influenced rivers.
- Protect and restore natural processes, conditions, and functions to coastal dune habitat, by removing, and controlling non-native invasive vegetation to support recovery for listed western snowy plover, Oregon silverspot butterfly, and other species of concern.
- Enhance native upland prairie, oak savanna, and wetland prairie habitats by reducing invasive understory composition, and improving native species composition.

Habitat Improvement Targets

The result of achieving, or striving to achieve, the habitat conservation objectives above will be reflected in tangible benefits such as the number of acres of uplands protected or miles of stream restored, and intangible benefits such as the goodwill engendered from successful projects that encourage neighbors to conserve habitat, help connect children with nature, or the trickle down conservation that habitat protection has for numerous species or other environmental issues such as water quality.

In Table 1 and Table 2, we estimate our habitat improvement targets for the 5-year time frame, 2007 - 2011. These targets are similar, but not identical to, our Coastal and Partners Operational Plan Performance targets (see Appendix G for an explanation of how these two types of targets are different). The habitat improvement targets below represent the estimated acres and/or habitat types (wetland, upland, in-stream, riparian, and shoreline habitat) where we expect to achieve our nationally defined accomplishment types (restore, enhance, create, maintain, or protect) over the next 5 years using our Partners and Coastal Programs funding; accomplishments that will result from effective leveraging of our partners resources are not included within these projections.

Conservation actions can not always be measured or quantified by acres and miles. Many projects implemented by the Partners and Coastal Programs Team indirectly benefit habitat, trust resources, or natural resource dependent communities (working landscapes, commercial or recreational fisheries, ecotourism and other recreational use) by providing technical assistance, initiating educational outreach, catalyzing or promoting natural resource stewardship, or otherwise participating in or influencing the planning and policy development processes of others. These types of benefits and accomplishments are not adequately captured in our current reporting metrics under the Service-wide Operational Plan or the habitat targets in this Plan. In addition, the majority of our work to control invasive species requires a long-term commitment. Invasive species control often requires a multi-year removal effort, followed up with additional years of monitoring, maintenance, and adaptive management in order to be effective. This is a significant work effort that is not adequately captured in the Service-wide Operational Plan.

In addition, we have chosen to emphasize quality over quantity with our Region 1 Partners and Coastal on-the-ground projects. Most Region 1 Partners and Coastal Programs projects directly benefit listed and/or candidate species. We select projects based on the expected benefits for at-risk species and the likelihood of restoring natural habitat functions and processes. We consider Operational Plan metrics and Focus Area Habitat Targets such as the number of acres and miles that will be restored, but rarely select projects based on quantity of acres and miles alone. Targeting projects for at-risk species often requires more project dollars and compliance resources than would be required for projects designed for more common species.

As we restore habitats to recover species, we have experienced a trend toward increased costs for fewer acres/miles. For example:

- Strategic fencing in the West Maui Watershed Focus Area costs $50,000 to $140,000 a mile. Once fencing is completed, we will continue to work with our partners to remove feral ungulates, and encourage regeneration of the native vegetation. This will benefit 20 listed species, 6 candidate species, and 73 species of concern. Construction costs (labor and material) for a mile of woven wire fence on the mainland is approximately $8,500 a mile.

- Native upland prairie restoration in the Willamette Valley for one listed butterfly and three listed plants (Fender's blue butterfly, Willamette daisy, Kincaid's lupine, and golden paintbrush) is expensive but worthwhile. Restoring remnant Oak savannah prairie to help recover listed Kincaid's lupine and Fender's blue butterfly costs an average of $1,100/acre, whereas restoring the same habitat type for migratory bird use only costs an average of $300/acre. The increased expenses result from the need to use special seed that is 3 times more costly than other native cover seed, mechanically treat invasive plant species instead of chemically treating them, and conduct additional survey and evaluation efforts to ensure compliance with our ESA section 7 authorities.

- This trend is also true for restoring off-channel habitats for the Oregon chub, an endemic listed fish. This species currently inhabits less than two dozen sites, the vast majority of which are less than 2 acres in size. Constructing Oregon chub ponds costs approximately $12,500 for a one-acre pond, whereas a one-acre waterfowl pond can be constructed for approximately $700. Chub ponds must hold at least 12 feet of water and be designed to prevent/minimize colonization by invasive predators (bullfrogs, gambeson, sunfish, etc.). In comparison, waterfowl ponds are typically shallow, dry up in early summer, and are relatively inexpensive to construct. In addition, we need to have two different reintroduction sites at each location prior to reintroduction. If one of the reintroduction sites fails or if invasive predators move in, it is critical that we have a relocation site nearby. Because two ponds are needed for every reintroduction effort, the minimum cost for Oregon chub recovery is approximately $25,000 per project.

- Stream restoration projects in Western Washington and Western Oregon are key for species and ecosystem recovery. Due to the presence of listed salmonids, there is a small window of work and competition for contractors is high. In addition, the State fish and wildlife agencies' fish passage project criteria are some of the most protective in the nation. To meet these State standards, typical costs to replace a culvert with a bridge and allow passage of large wood and streambed materials ranges from $90,000 to $150,000. As an example, one of the FY 07 projects being considered only reopens 1.3 miles of upstream habitat; however, four species of salmonids, including a local population of listed bull trout would significantly benefit. The total project cost is about $90,000.

The habitat targets (Tables 1 and 2) are based on the assumption of stable program budgets with no increases or decreases in the FY 2006 funding levels for salary and projects. Successful implementation of projects is also dependent on other conditions beyond our control such as reductions in partner funding; catastrophic changes to the environment (e.g., hurricanes, typhoons, fire, new invasive species), additional regulatory compliance requirements; increased costs of materials (such as fencing in the Pacific Islands, and concrete and steel for fish screens in the Pacific Northwest); and increased costs of fuel.

Table 1. Region 1 Partners Program Focus Areas and Five-Year Performance Targets (FY 2007-2011)					
Partners Program Focus Areas	**Five-year Habitat Target***				
	Wetland/ coral reef	**Upland**	**Riparian**	**Instream**	**Structures fish or aq. sp. passage**
	(acres)	**(acres)**	**(miles)**	**(miles)**	**(number)**
Pacific Islands					
1. ʻŌlaʻa Kīlauea Partnership		225.00			
2. Kohala Watershed Partnership		113.00	0.25		
3. Mauna Kea Watershed Partnership		56.00			
4. East Maui Watershed Partnership		225.00			
5. West Maui Watershed Partnership	5.00	150.00	1.00		
6. Leeward Haleakalā Restoration Watershed Partnership		300.00	0.25		
7. East Molokaʻi Watershed Partnership		75.00			
8. Lānaʻi Forest and Watershed Partnership		75.00			
9. Koʻolau Mountains Watershed Partnership		150.00	0.25		
10. Kauaʻi Watershed Alliance		75.00	0.25		
11. Hawaiian Waterbird	10.00				
12. Guam	5.00				
13. Commonwealth of the Northern Mariana Islands		5.00			
14. American Samoa		5.00			
Oregon					
15. Willamette Valley	2,500.00	600.00	2.00		4.00
16. Lower Columbia River-Northern Coast	25.00		5.00	7.00	20.00
17. John Day Basin			6.00	2.00	15.00
18. Rogue, Umpqua, Coquille		400.00	4.00	1.00	5.00
19. Upper Deschutes			3.00	2.00	3.00
20. Closed Basin (Warner and Chewaucan)		600.00	4.00		2.00
21. Wallowa Mountains Region	10.00	300.00	1.00	3.00	3.00
22. Malheur River/Harney Basin				2.00	1.00
Snake River Basin					
23. Bear River/Bear Lake	75.00	300.00	1.00		
24. Weiser/Lower Snake River	50.00	300.00	1.00	1.00	
25. Wood Rivers/Silver Creek/Camas Prairie	75.00	600.00	1.00	1.00	
26. Teton/Henry's Fork	100.00	300.00	1.00		
27. Salmon/Lost Rivers			1.00		
28. Clearwater River			1.00		
29. Snake River Basin Refuges	10.00				
30. Duck Valley	5.00		0.00		
31. Other Native American Tribal (future focus area)					
Upper Columbia Basin					
32. Columbia Plateau	10.00	200.00	1.00	0.00	1.00
33. Methow	0.00	0.00	2.00	0.50	3.00
34. Palouse Prairie	0.00	400.00	0.00	0.00	0.00
35. Pend Oreille	5.00	0.00	2.00	0.50	5.00
36. Upper Columbia Basin Refuges	200.00	1,240.00	1.00	0.00	0.00
37. Yakima	10.00	200.00	4.00	4.00	7.00
Western Washington					
38. Puget Trough	960.00	800.00	64.00	1.00	11.00
39. Southwest Washington	230.00	220.00	5.00		2.00
40. Strait of Juan de Fuca	20.00	50.00	2.00		1.00
Totals	**4,305.00**	**7,964.00**	**114.00**	**25.00**	**83.00**

Table 2. Region 1 Coastal Program Focus Areas and Five-Year Performance Targets (FY 2007-2011)						
Coastal Program Focus Areas	**Five-year Habitat Target**					
	Wetland/ coral reef	**Upland**	**Riparian**	**Instream**	**Structures fish or aqu. sp. passage**	**Shoreline (coastal)**
	(acres)	**(acres)**	**(miles)**	**(miles)**	**(number)**	**(miles)**
Pacific Islands						
1. Hawaii	150.00	300.00				5.00
2. American Samoa	10.00					
3. Mariana Archipelago	10.00	20.00				5.00
4. Caroline Islands	20.00	20.00				5.00
Oregon						
5. Lower Columbia River	42.00		1.00	2.00	2.00	1.00
6. Estuary	43.00		1.00	1.00	1.00	
7. Coastal Strand		160.00				1.00
8. Coastal Meadow		55.00				
9. Coastal Bog	10.00					
10. Key Watersheds	10.00		1.00	2.00	2.00	
11. Coastal Rocks and Islands		10.00				1.00
Washington						
12. North Puget Sound & Eastern Straits of Juan de Fuca	541.00	0.00	0.80	0.40	1.00	3.50
13. South Puget Sound & Hood Canal	397.00	0.00	0.70	0.50	4.00	0.30
14. Willapa Bay	0.00	39.00	0.00			
Totals	**1233.00**	**604.00**	**4.50**	**5.90**	**10.00**	**21.80**

Monitoring and Adaptive Management

Monitoring and adaptive management are important elements of many Service programs, including the Partners and Coastal programs. The "learning by doing" concept inherent to adaptive management reflects the scientific foundation central to our work. Monitoring provides the information needed to make informed decisions for adapting management. Opportunity exists throughout our Region to use monitoring and adaptive management to enhance our partnerships and achieve better conservation results for our investment. For purposes of this Plan, we will discuss two types of monitoring as defined below:

1. Effectiveness Monitoring: Evaluates whether the project had the desired effect on the selected resource indicators. For example, a post-project review documents that changes from the baseline condition in the stream pool depth occurred after placement of large, woody debris in the stream.
2. Biological Response Monitoring: Attempts to establish a cause-and-effect relationship between the implementation of the project and specific habitat practices, and the selected biological responses and indicators. For example, did a specific native trout population increase following specific in-stream restoration actions? Did the removal of junipers in sagebrush steppe habitat increase the number of sage grouse leks?

Effectiveness monitoring is a required component of the Partners and Coastal Programs; however staff availability and program funding for monitoring efforts is often not emphasized as strongly as project development and delivery. We acknowledge the need to improve this component of our Partners and Coastal Programs and will seek ways to make those improvements, including potentially reducing the number of projects delivered each year in order to monitor existing projects and ensure they are functioning as expected. In addition, our Partners and Coastal Team will work together to develop an effectiveness monitoring protocol that is designed to achieve the following five goals:

- Improve Partners and Coastal Programs delivery, customer satisfaction, and overall accountability;
- Improve project implementation and assess whether projects are carried out according to the habitat improvement plan;
- Document and demonstrate success of Partners and Coastal Programs projects based on defined habitat factors;
- Evaluate the effectiveness of specific habitat improvement practices, and enable the Partners and Coastal Team to learn from each project relative to implementing changes in future projects; and
- Identify long-term information and research needs.

Regional Goal: Ensure that our habitat restoration and conservation efforts are producing measurable contributions for Federal Trust Species through monitoring and adaptive management.

Effectiveness monitoring is important for ensuring the outputs we report as program accomplishments in terms of acres/miles restored, enhanced, or protected are functioning as we expect. Recent guidance from OMB directs the programs to move beyond effectiveness monitoring, and strive to describe the anticipated outcomes, or biological responses, of our habitat restoration and conservation projects. However, biological response monitoring is complex, tends to be more "research" oriented, and often requires extended periods of data collection and analysis to address cause-and-effect relationships. This data collection and analysis is usually beyond the scope of the Partners and Coastal Programs, such as effects from hunter harvest levels and stochastic events. Biological response monitoring that would involve extensive and long-term data collection and analysis will not be unilaterally conducted by the Region 1 Partners and Coastal Programs.

However, we recognize the importance of, and the need for biological response monitoring. We will therefore actively support partnerships to conduct this type of monitoring by participating in regional cross-program SHC efforts, especially those in the Region 1 CPR areas. The decision-support models and the detailed monitoring and research efforts that would be needed to document the achievement of specific biological response objectives will be developed by the specific Service programs that are charged with this responsibility (e.g., Threatened and Endangered Species, Fisheries, Migratory Birds, Refuges), and our partners (e.g., USGS, State fish and wildlife agencies, universities, etc.). The Partners and Coastal Programs can contribute to these SHC efforts through project delivery, and integrating our effectiveness monitoring within the larger SHC framework for the CPR focal areas.

In addition, in all of our Focus Areas, we will rely on site-visit observations and references to other published scientific literature to support our assumptions regarding biological responses of our projects. We will use the HabITS database to link Focus Area projects with the species that will benefit from the project, and to identify the guiding document(s) that specify the projects needed to achieve a stated population objective. This linkage will provide the Partners and Coastal Programs the ability to link our contributions (acres/miles) to the outcome (biological response) objectives.

Objectives, Strategies, Performance Measures, and Accomplishment Targets For Goal 1: Conserve Habitat	**Relevant Program or Field Office**	**Timeline**
Objective 1.1: Working with our partners, protect, restore, and enhance key habitats for the benefit of our priority, Federal trust species identified in the Focus Area narratives in Appendices A-E.		
1.1.1: Within the 40 Partners Program Focus Areas, carry out habitat improvement projects on approximately 4,300 acres of wetland habitat, 7,960 acres of upland habitat, 114 miles of riparian habitat, 25 miles of instream habitat, and remove 83 fish passage barriers, assuming a minimum of fiscal year 2006 funding levels (Table 1.).	All 5 Partners Programs	2007-2011

1.1.2: Within these the 14 Coastal Program Focus Areas, carry out habitat improvement projects on approximately 1,230 acres of wetland and coral reef habitat, 600 acres of upland habitat, 4 miles of riparian habitat, 6 miles of instream habitat, 22 miles of coastal shoreline habitat, and remove 10 fish passage barriers, assuming a minimum of fiscal year 2006 funding levels (Table 2.).	All 3 Coastal Programs	2007-2011
Objective 1.2: Working with our partners, strive to eradicate, control, prevent introduction, or reduce impacts from non-native, invasive aquatic and terrestrial plants and animals in our Pacific Island Focus Areas.		
1.2.1: Complete and implement rodent eradication and ecosystem restoration plans on Lehua and Mokapu islets in HI, and on the Kayangel Atoll in Palau.	PIFWO Coastal Program	2007-2011
1.2.2: Construct ungulate proof fences to exclude pigs, goats, sheep and deer from core native ecosystems.	PIFWO Partners Program	2007-2011
1.2.3: Support State Comprehensive Wildlife Conservation Plan goal to eradicate priority alien plant species within fenced management units and prevent reintroduction.	PIFWO Partners Program	2007-2011
1.2.4: Support small, alien mammalian predator control program for rats, cats, and mongoose, that impact native vegetation and prey upon both ground and tree nesting birds.	PIFWO Partners Program	2007-2011
Objective 1.3: Working with our Partners, strive to prevent introduction, and if already present, contain and eliminate non-native invasive aquatic and terrestrial plants and animals in our Pacific Northwest Focus Areas.		
1.3.1: Conduct mechanical, chemical, biological, and cultural, invasive plant control projects while protecting existing native vegetation.	All PNW Programs	2007-2011
1.3.2: Focus invasive species control in project areas that compliment recovery efforts, protect existing populations of candidate or listed species and result in cooperative control efforts with local agencies, weed control districts, Conservation Districts, and landowners.	All PNW programs	2007-2011
Objective 1.4: Ensure that effectiveness monitoring is an integral component of our Partners and Coastal Programs, participate in SHC, and collaborate with partners to correlate and link our conservation efforts with the population objectives of existing conservation plans for biological response monitoring.		
1.4.1: Work with all 8 programs to develop an effectiveness monitoring protocol that will meet the five goals described above.	RO Program Leads	2008
1.4.2: Work with other Service programs and make use of voluntary partner monitoring efforts to work toward biological response monitoring within the SHC framework.	All 8 Programs	ongoing
1.4.3: Ensure that all HabITS project accomplishments are linked to the appropriate guiding documents that identify the population objectives for the Federal trust species that will benefit from the project implementation.	All 8 Programs	ongoing

Goal 2: Broaden and Strengthen Partnerships

Regional Goal: Serve as conservation problem-solvers by maintaining, developing and improving long-term partnerships to develop and implement collaborative species and habitat conservation strategies with private landowners, States, Tribes, indigenous island communities in the Pacific, other Island Governments, other Federal agencies, non-governmental organizations (NGOs), and other Service Programs.

The Region 1 Partners and Coastal Programs have always exemplified the Service mission "to work with others." We will continue to do so and seek new ways to improve our effectiveness in this element, especially as our Regional Director has made it a priority for all Service biologists to be "Conservation Problem Solvers." Partnerships give us the opportunity to seek solutions to shared problems, leverage limited resources, and work together to understand and appreciate other perceptions and to dispel misperceptions. Partnerships are based on trust, transparency, and clearly identified roles for all. Effective partnerships are synergistic so that the whole is greater than the sum of its parts.

Strengthening existing partnerships and forming new ones are core components of our Partners and Coastal Programs' success. As our programs focus more on fostering landscape-level planning approaches that seek to link many individual actions to a broader landscape, and which necessarily involve multiple stakeholders and processes, effective partnerships will be even more important. In addition, as we become more focused in specific geographic areas, we may need to establish new partnerships in areas we have not worked before. However, it would be inappropriate to use the number of new partners as a measure of success for this goal: sustaining existing partnerships and maintaining landowner relationships in existing Focus Areas is equally, if not more important, than developing new ones.

The Partners and Coastal Programs in Region 1 have developed a reputation for having the ability to effectively deliver technical assistance and habitat restoration projects to private landowners in a timely, efficient, and cooperative manner. We have more requests for technical and financial assistance in many of our Focus Areas than our budgets or staff can deliver. To remain within our capacity to meet our partners' expectations, we carefully evaluate project proposals using a structured approach and assess which proposals or sites best meet our Focus Area objectives. In many of our Focus Areas, one of our primary challenges will be to maintain our ability to provide assistance to a growing list of interested landowners and organizations.

Many of our restoration actions occur in listed or candidate species habitat, including listed species and ESA critical habitat under the jurisdiction of NOAA-Fisheries. We have developed programmatic internal ESA compliance documents and inter-Service ESA compliance documents with NOAA-Fisheries that are valuable streamlining tools for our Partners and Coastal Team projects. Further, our programmatic biological opinions cover multiple projects over multiple years, which greatly streamlines the ESA compliance workload associated with individual projects.

Our efforts to streamline Federal compliance under ESA and maintain up-to-date biological opinions reflecting state-of-the-art restoration techniques have been valuable for providing increased leverage for projects funded by other State and Federal agencies. Our ability to ensure that Federal compliance issues are appropriately addressed in an efficient manner increases the attractiveness of our projects to other funding sources, and is another example of how we function as conservation problem solvers.

Objectives, Strategies, Performance Measures, and Accomplishment Targets For Goal 2: Broaden and Strengthen Partnerships	Relevant Program or Field Office	Timeline
Objective 2.1: Continue to engage in collaborative, multi-party planning efforts to broaden and strengthen both traditional and non-traditional partnerships to better restore and enhance habitat for Federal trust species.		
2.1.1: Meet with our key partners (e.g., other Federal agencies, State fish and wildlife agencies, Tribal governments, non-governmental organizations, private industry, private landowners) to discuss ideas for enhancing and creating partnerships and collaborative conservation problem solving.	All 8 Programs	Annually
Objective 2.2: Continue to function as local conservation problem solvers by providing valuable science-based expertise and technical assistance to better restore, enhance, and/or protect habitat and achieve biological objectives in Focus Areas.		
2.2.1: Complete a minimum of one technical assistance project per year that will likely result in on the ground habitat improvements or increased funding for a partner that helps meet a Focus Area biological objective.	All 8 Programs	Annually
2.2.2: Provide assistance with watershed assessment or other landscape level planning efforts, and project design development to improve local capacity to effectively identify and address key limiting factors.	All 8 Programs	Annually
Objective 2.3: Actively support formal Region 1 Cross-Program Results (CPR) efforts and informal cross program collaboration opportunities.		
2.3.1: Continue to implement the Willamette Valley CPR efforts.	OR Partners	Ongoing
2.3.2: Continue to assist in the development and implementation of other CPR efforts.	All 8 Programs	Ongoing
2.3.3: Participate in other opportunities for cross-program collaboration.	All 8 Programs	Ongoing
Objective 2.4: Work across programs with other Service biologists and other agency staff to enhance existing or to develop or update environmental compliance streamlining tools to address high priority actions in Focus Areas.		
2.4.1: Complete the Safe Harbor Agreement for the Willamette Valley	OR FWO	2011
2.4.2: Complete environmental review and analysis for uninhabited islet restoration using aerial rodenticide broadcast.	PI Coastal	2008
2.4.3: Complete the revised WWFWO Service Biological Opinion for Habitat Restoration Activities.	WWFWO	2007
2.4.4: Complete the revised update of NOAA Fisheries' Biological Opinion for WWFWO Habitat Restoration Activities.	WWFWO	2007
2.4.5: Complete the Programmatic Section 106 National Historic Preservation Act (NHPA) agreement with State Historic Preservation Office (SHPO) Agreement for PIFWO	PIFWO Partners Program	2010
2.4.6: Complete the programmatic Safe Harbor Agreement for Hawai'i waterbirds	PIFWO	2008

Objective 2.5: Maximize on-the-ground habitat enhancement, restoration, and protection results by effectively negotiating and leveraging partnership contributions and maximizing funding opportunities.		
2.5.1: Continue to leverage resources of other government agencies, private conservation organizations, corporations, local agencies, educational institutions, and private individuals who have the interest and/or responsibility of working to improve and protect fish and wildlife habitat. Each program would achieve an overall goal of no greater than an average 50 percent cost share for Partners and Coastal Program funded projects. Cost share may include in-kind contributions (e.g., personnel, materials, services) from partners.	All 8 Programs	Annually
2.5.2: Investigate new opportunities for increasing our leveraging opportunities for on the ground work, consistent with the 70/30 Partners Program Policy for habitat restoration funds (70 percent is for actual on-the-ground project work and 30 percent is for administrative or salary expenses).	RO Partners Program	2008

Goal 3: Improve Information Sharing and Communication

As discussed under Goal 2, habitat conservation and restoration for Federal trust resources is best accomplished by working collaboratively. Effective partnerships rely on trust and respect that is based on open communication and information sharing.

Regional Goal: Improve and expand our communication and information sharing with all stakeholders and partners to maximize our conservation results.

The most effective strategy for enhancing communication and information sharing is frequent and consistent personal interaction with our partners. Ideally, this interaction would occur as a result of Partners and Coastal biologists living within and being part of a community. However, personal interaction with partners can also occur by taking initiative to reach out to our conservation collaborators through meetings and written correspondence. In this Plan, we address communication strategies for all stakeholders and also within the Service.

Objectives, Strategies, Performance Measures, and Accomplishment Targets For Goal 3: Improve Information Sharing and Communication	**Relevant Program or Field Office**	**Timeline**
Objective 3.1: Ensure effective communication occurs with all stakeholders in order to engage, recruit, and enlist the many partners and decision makers required for successful conservation.		
3.1.1: Explore and pursue opportunities for Partners and Coastal Program biologists to become more closely involved with the local community within or adjacent to Focus Areas (this could range from exploring co-location opportunities to regularly attending local watershed council or Soil and Water Conservation District meetings).	All 8 Programs	Annually
3.1.2: Meet periodically with key partners to share information and discuss collaboration opportunities. These meetings can be accomplished informally with ongoing communication and coordination opportunities provided at general meetings, special task forces, conferences, rank and review committees, or other venues.	A1l 8 Programs	2007 - 2011
3.1.3: Participate in scheduled State Farm Bill Technical Committee meetings, and develop and carry out field trips and on-the-ground demonstrations targeted to specific audiences when appropriate.	All 5 Partners Programs	Annually

Objective 3.2: Promote and increase the public's awareness and understanding of our stewardship vision to encourage participation in conservation programs through written materials.		
3.2.1: Develop an easy-to-use document template for the purpose of highlighting successful partnership initiatives and project activities and summarizing end of year accomplishment reports.	RO Program Leads	2008
3.2.2: Use the template developed in 3.2.1 to create annual accomplishment reports that will be broadly distributed as in- and out-reach materials.	All 8 Programs	2008 - 2011
3.2.3: Use the Internet as a communication and information-sharing tool by establishing, maintaining, and periodically updating a Region 1 Partners and Coastal website. *(within first year, and then annually)*	RO Program Leads	2008 - 2011
Objective 3.3: Ensure effective communication occurs within the Service between all Service programs to maximize program synergy and effectiveness.		
3.3.1: Implement CPR as described in previous sections.	All 8 Programs	Ongoing
3.3.2: Promote effective communication and coordination with the Partners and Coastal Programs by holding joint conference calls every other month between Regional Coordinators and State/Ecoregion Coordinators.	RO Program Leads	Every other month
3.3.3: Continue hosting Regional Partners and Coastal Programs Workshops to exchange success stories and share ideas and experiences. Invite Endangered Species, Contaminants, Cultural Resources, and other programs *(annually or as travel budgets allow)*	RO Program Leads	Annually

Goal 4: Enhance Our Workforce

The most important asset to Region 1 is our people. The Region 1 Partners and Coastal Team is comprised of professionals highly skilled in partnering and restoration techniques, and dedicated to public service and the fulfillment of the agency's mission. In this goal, we address how to maximize the effectiveness of our workforce capabilities within our current budgetary limitations, and how to maximize on-the-ground accomplishments that our workforce can deliver by enhancing their technical and partnering skills.

Regional Goal: Develop, maintain, and support an adequately-sized, strategically positioned workforce with state-of the art training in habitat restoration, conservation techniques, and partnership activities.

Some of the Region 1 Partners and Coastal Programs are adequately staffed and able to operate successfully within the Focus Areas, primarily as a result of effective leveraging of internal and external funds. However, most of our State/Ecoregion programs are below operational capacity for truly effective program delivery due to limited availability of staff and funding. In addition, as described in the Overview of Region 1, most Partners and Coastal Program biologists cover large areas of responsibility and few are located near our Focus Areas. As a result, many Focus Areas will not receive the support they need. In addition, we have made progress to enhance our hydrology and fluvial geomorphology technical capability in some field stations; however, we are continuing to exceed the capabilities of our engineering support for habitat restoration projects. This is a critical shortage that needs to be addressed in many, but not all, Focus Areas.

Partners and Coastal Programs function most effectively with strong local leadership in our State/Ecoregion Coordinator positions. State/Ecoregion Partners and Coastal Coordinators implement the program at the field level and coordinate the actions of other Partners and Coastal biologists located within their State/Ecoregion. The coordination function they provide is vital to the overall success or

our mission. In Region 1, State/Ecoregion Coordinators rarely supervise other Partners and Coastal Program biologists, but provide program leadership by planning and coordinating the work of other Partners and Coastal biologists within their State/Ecoregion. State/Ecoregion Coordinators also serve as the program spokesperson when working with other organizations at the State or ecoregion level. State/Ecoregion Coordinators work with the appropriate Project Leaders to establish priorities, work schedules, methods, and techniques to accomplish both project and program goals

Our investment in people (e.g., training, participation in scientific organizations and conferences) increases our technical capabilities, enhancing our opportunity for success. Training will continue to be a requirement for all employees with the Partners and Coastal Programs. Leadership and guidance will be provided by supervisors to encourage Individual Development Plans that provide a vision for each Partners and Coastal Program employee.

Objectives, Strategies, Performance Measures, and Accomplishment Targets For Goal 4: Enhance Our Workforce	**Relevant Program or Field Office**	**Timeline**
Objective 4.1: Identify the critical staff and functions needed to support the Partners and Coastal Program Focus Area objectives, and develop a plan to fill those gaps in the current workforce.		
4.1.1: Establish a Cross-Program Regional Management Team to review current Partners and Coastal Programs funding and staffing levels, prioritize Regional expertise needs, and develop recommendations for improving the workforce management and project accomplishments in the Focus Areas.	RO Program Leads	2008
4.1.2: Propose recommendations from 4.1.1 to senior managers for approval and implement appropriate action items.	RO Program Leads	2009
4.1.3: Investigate and identify opportunities for outside funding sources to supplement the Partners and Coastal budgets.	All programs	Ongoing
Objective 4.2: Ensure the Partners and Coastal Team acquires, and maintains thorough knowledge of habitat conservation and restoration techniques, team building strategies, and partnership skills.		
4.2.1: Hold annual Partners and Coastal Program workshops to help orient new employees and reinvigorate experienced employees. Workshop topics may include grant writing skills, restoration techniques, and partnership skills. (Key element of 3.3.3).	RO Program Leads	Annually
4.2.2: Establish methods to maintain the institutional knowledge of the Partners and Coastal Programs and build on leadership by facilitating mentoring and cross-program detail opportunities throughout the Region.	RO Program Leads	Ongoing

Goal 5: Increase Accountability

Accountability is an important responsibility for the Service and an important element of this Plan. For the Partners and Coastal Programs, we will ensure accountability by:

- ensuring transparency through sharing information and open communication with internal and external partners (as described in Goal 2 and Goal 3 - *Broadening and Strengthening Partnerships and Improving Information Sharing and Communication*),

Regional Goal: Measure, assess, and report on the effectiveness, efficiency, and fiscal integrity of our habitat conservation programs and activities.

- ensuring consistency with national policies, and
- reporting activities and accomplishments in a timely and accurate manner.

As described in the section, Organizational Structure of Region1, Partners and Coastal biologists report to their immediate supervisors, through Ecological Services, Refuge, or Fisheries Project Leaders. Regional Coordinators provide guidance and direction for the programs, but do not directly supervise the field teams. Regional Coordinators, together with Project Leaders, are responsible for ensuring program activities are consistent with regional and national program policy and guidance. Therefore, the strategies identified in this section will generally be applied at the program management level.

Periodic management control reviews of field stations receiving Partners Program funds are required by the national policy and are important tool for Region 1. Our intent is to use these reviews as a forum for ensuring compliance with national policies and the Partners for Fish and Wildlife Act (P.L. 109-294), recognizing staff, sharing information, and proactively resolving potential issues.

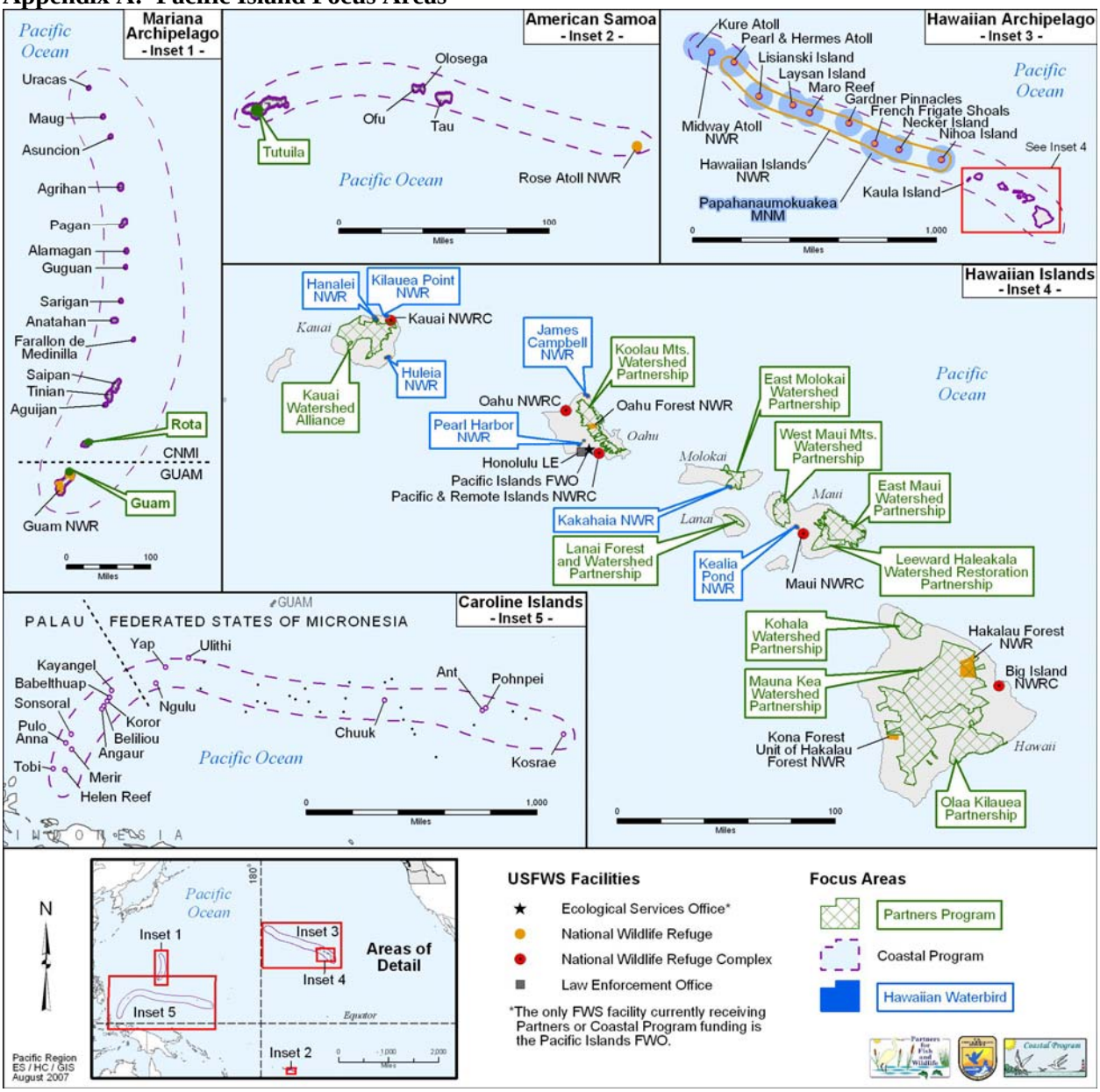
We will continue to report our accomplishments as required with annual GPRA and Operational Plan reports, and use the individual Focus Area action plans described under Goal 1 as an internal tool to both plan our actions, and assess progress. We will also improve the quality of accomplishment data entered into the HabITS database used for GPRA and Operational Plan reporting.

In addition, the Region 1 Partners Program is delivered through the combined efforts of the Ecological Services, Refuges, Fisheries, Engineering, and Cultural Resource programs. This results in a functional organizational structure that is different from the chain of command (Figure 4). Partners Program staff are often supervised by other Service Program supervisors. To ensure that this structure is effective and that the necessary program coordination, funding integrity, accomplishment reporting, and general accountability is in place among all staff working to deliver the Partners Program, we will ensure that all Project Leaders responsible for implementation of the Partners Program will have Partners Program specific performance standards in the performance plans for all staff that help deliver the Partners Program.

Objectives, Strategies, Performance Measures, and Accomplishment Targets For Goal 5: Increase Accountability	**Relevant Program or Field Office**	**Timeline**
Objective 5.1: Establish annual measures for assessing the Coastal and Partners Programs' progress toward meeting Focus Area objectives.		
5.1.1: Review annual field station Work Activity Guidance (WAGs) and Operational Plan targets for consistency with the objectives of this Plan. See section on *How to Use this Plan* (Page 1).	RO Program Leads	Annually
5.1.2: Assess cumulative progress and accomplishments within identified Focus Areas relative to meeting habitat targets in Tables 1 and 2, and Focus Area objectives identified in the Focus Area narratives (Appendices A - E). These assessments would be used to possibly adjust or modify Focus Area boundaries. Focus Areas may be added, expand, de-emphasized, or eliminated. The assessments would also be used to evaluate adequacy or challenges related to levels of staff time and investment in program implementation within these Focus Areas.	All programs	Annually
Objective 5.2: Ensure consistency with regional and national Partners and Coastal Programs guidance and policies.		

5.2.1: Establish a cross-program Regional Review Team to develop oversight review approach, format, and materials that will be used when conducting management control reviews of field stations receiving Partners and Coastal Program funds. Conduct one prototype review and adjust format and method as needed.	RO Program Leads	2007
5.2.2: Conduct management control reviews of 2 field stations each year using the approach, format, and materials developed in 5.2.1.	RO Program Leads	Annually
Objective 5.3: Ensure that all Partners and Coastal technical assistance and habitat improvement projects are entered into the HabITS database according to technical guidance and quality standards.		
5.3.1: Provide training for Partners and Coastal Program Field staff and Regional Office coordinators on the HabITS database. This training will be provided in 2007, and as needed depending on changes to database and/or staff turnover.	RO Program Leads	2007
5.3.2: Designate a lead person for providing expertise on the HabITS database. This lead person would answer questions from other staff and provide technical assistance as needed.	All programs	2008
5.3.3: Ensure each station certifies on an annual basis that data entered into HabITS is complete and correct, especially project descriptions available to the public. *(no later than September 1 each year)*	All programs	Annually
5.3.4: Ensure HabITS database references and links are included and functioning, and that a minimum of one photo image, report or other visual aid is included in each project accomplishment entry.	All programs	Annually
5.3.5: Continue active participation on the National HabITS Working Group.	RO Program Leads	Ongoing
5.3.6: Provide leadership role by working with all staff that enter data into HabITS to ensure consistent interpretation of the data entry guidelines.	RO Program Leads	Ongoing
Objective 5.4: Ensure that Partners Program coordination, funding integrity, accomplishment reporting, and general accountability are included in employee performance reviews.		
5.4.1: Ensure that all staff working to deliver the Partners Program have employee performance plan standards that address all components of objective 5.4 in their individual performance plan.	All Partners Program Staff and Project Leaders	2008, then annually

Appendix A: Pacific Island Focus Areas



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Partners Program Focus Areas

1) ‘Ōla‘a Kīlauea Partnership Priorities

Objectives: The objective of the ‘Ōla‘a Kīlauea Partnership (OKP) is the protection and recovery of native ecosystems to the point that they are self-sustaining, native-dominated communities with secure populations of native plant, invertebrate and forest bird species. The Partners Program will work with the OKP on private lands projects to remove or reduce impacts from feral animals, alien plants, and non-native predators, and to restore native habitat and species to enhance diversity and stability of native ecosystems.

The ‘Ōla‘a Kīlauea Partnership (OKP) is a cooperative land management effort encompassing 418,000 acres of State, Federal, and private land on the island of Hawai‘i. The original Partnership area (1994) was 32,000 acres, and included the State owned Kūlani Correctional Facility and Pu'u Maka'ala Natural Area Reserve, Kīlauea Forest (privately owned by Kamehameha Schools), and the ‘Ōla‘a tract of Hawai'i Volcanoes National Park. This core area has been the focus of projects jointly planned and implemented by the partnership because it contains one of the best remaining native forest ecosystems in Hawai‘i. This area is essential habitat for four species of endangered forest birds, and also supports the endangered nēnē, Hawaiian bat, and twenty-two rare and/or endangered plant species. The partnership goal for this area was to implement projects to protect and restore ecosystems with high biological value where there was not any ongoing management. Most joint management work to date has been done in Kūlani, Kīlauea Forest and in portions of the Natural Area Reserve.

Key Resource Summary:
The OKP is expanding watershed protection and management to over 800,000 acres across Mauna Loa, Kīlauea, and Hualālai as part of a new partnership, known as the Three Mountain Alliance (TMA). ‘Ōla‘a Kīlauea Partnership members have agreed there is a compelling need to collaborate on a wide variety of land management issues in forested watersheds across this TMA landscape. Coordinated management of these watershed lands is critical to sustain adequate quality and quantity of water. In addition, these lands provide important habitat for a wide diversity of native plants and animals.

Focus Habitats: Wet ‘Ōhi‘a/Hāpu‘u (*Metrosideros*/*Cibotium*) Forest, Wet Koa/‘Ōhi‘a (*Acacia*/*Metrosideros*) Forest, Mesic Koa/‘Ōhi‘a Forest, Mixed Koa Forest, Mesic ‘Ōhia Forest, Dry Native Shrub with scattered ‘Ōhi‘a, Dry ‘Ōhia Forest, Māmane/Naio, (*Sophora*/*Myoporum*) Woodland, Pūkiawe/‘A‘ali‘i (*Styphelia*/*Dodonaea*) Shrubland Grassland Community

Focus Species: Rare and Listed Endangered Wildlife: *Lasiurus cinereus semotus* (Hawaian bat, ‘ōpe‘ape‘a), *Corvus Hawaiiensis* (Hawaiian crow, ‘alalā), *Buteo solitarius,* (Hawaiian Hawk, ‘io), *Oreomystis mana* (Hawai‘i creeper), *Hemignathus munroi* (akiapōlā‘au), *Loxops coccineus* (‘ākepa), *Pterodroma phaeopygia sandwichensis* (dark rumped petrel, ‘ua‘u), *Asio flammeus sandwichensis* (pueo), *Loxioides bailleui* (palila), *Branta sandvicensis* (nēnē); Listed Plants (partial list): *Argyroxiphium kauense* (‘āhinahina), *Cyanea shipmanii* (‘ōhāwa), *Cyanea stictophylla* (‘ōhāwai), *Neraudia ovata* (ma'aloa), *Nothocestrum breviflorum* (‘aiea), *Plantago hawaiensis* (laukahi kuahiwi), *Phyllostegia racemosa* (kīponapona), *Portulaca sclerocarpa* (po‘e), *Solanum incompletum* (pōpolo kū mai), *Stenogyne angustifolia* (No Common Name-NCN), *Vicia menziesii* (NCN); Invertebrate Species of Concern (partial list): *Agrotis melanoneura* (Black veined agrotis noctuid moth), *Omiodes monogona* (Hawaiian damselfly), *Omiodes anastrepta* (Hawaiian damselfly), *Plagithmysus greenwelli* (long horn beetle).

	Endangered	Threatened	Candidate	Species of Concern
Plants	18	1	3	11
Animals	13	1	-	5

Major Threats
Feral ungulates (primarily pigs, goats, mouflon, sheep); a variety of invasive alien plants, including fountain grass (*Pennisetum*), *Miconia*, Koster's curse (*Clidemia*), and guava (*Psidium*); wildfire at montane and subalpine dry and mesic settings; logging and ranching.

Important Factors
The PIFWO has been a supporter of the OKP since 1994. With this support the OKP completed numerous projects, including the construction of the 6.5 mile Upper Keauhou boundary fence, and has reduced ungulates at Keauhou to remnant levels. This 20,000 acre unit is linked to existing fenced units, of which 10,600 acres are ungulate free, and another 4,300 acres have an active feral ungulate management program. These actively managed areas total over 50,000 acres and include some of the best quality native forest in Hawai'i.

The highest priority projects include completing the lower Keauhou fence, initiating the North Kona habitat restoration project (fencing and animal control), both of which are supported by the Partners Program and the Private Stewardship Grants Program.

Guiding Documents and Plans:
- Hawai'i State Comprehensive Wildlife Conservation Strategy
- 'Ōlaa Kīlauea Management Area Natural Resources Management Plan
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds
- USFWS Draft Revised Recovery Plan for the 'Alalā
- USFWS Draft Revised Recovery Plan for the Nēnē
- USFWS Recovery Plan for the Hawaiian Hoary Bat
- USFWS Recovery Plan for the Hawaiian Hawk
- USFWS Recovery Plan for Hawaiian Dark-rumped Petrel and Newell's Manx Shearwater
- USFWS Recovery Plan for Blackburn's Sphinx Moth
- USFWS Plant Recovery Plan for *Caesalpinia kavaiensis* and *Kokia drynarioidesi*
- USFWS Plant Recovery Plan for the Four Hawaiian Ferns
- USFWS Plant Recovery Plan for Ka'ū Silversword
- USFWS Plant Recovery Plan for *Vicia menziesii*
- USFWS Plant Recovery Plan for Big Island Plant Cluster
- USFWS Plant Recovery Plan for Big Island Plant Cluster II
- USFWS Proposal to Protect Hawaiian Forest Bird Habitat for the Kīlauea Forest
- USFWS Plant Recovery Plan for Multi Island Plants

Partnership Opportunities: This partnership is made up of private landowners, land managers, and associated agencies including the State of Hawai'i Kūlani Correctional Facility, State of Hawai'i Natural Area Reserve System, Hawai'i Volcanoes National Park, Kamehameha Schools, U.S.G.S. Biological Resources Discipline, U.S.D.A. Forest Service, and The Nature Conservancy. The Partners Program will continue its support for habitat restoration on Kamehameha Schools lands in North Kona as well as at Keauhou Ranch. Additionally, the Partners Program will continue its support of forest restoration at Kona Hema on lands owned by the Nature Conservancy.

2) Kohala Watershed Partnership

Objectives: The Partners Program will work with the Kohala Watershed Partnership on private lands to:

- Prevent new introductions and effectively control existing invasive plant species
- Control non-native animal populations within designated areas
- Protect unique biological communities and rare species
- Prevent and minimize wildfire.

The goal of the Kohala Watershed Partnership (KWP) is to improve water and environmental quality by enabling comprehensive and sustainable watershed management projects that address the current threats, and maintain its integrity and protect its economic, socio-cultural, and ecological resources. The area addressed by the plan includes approximately 68,000 acres of forest and grasslands on the slopes of the Kohala Volcano on the island of Hawai‘i.

Key Resource Summary:
Focus Habitats (adapted from Gagne and Cuddihy 1990): Mixed Grass and Sedge Montane Bog, ‘Ōhi‘a (*Metrosideros*) Mixed Montane Bog, Montane Wet Grasslands, Mixed Fern/Shrub Montane Wet Cliffs, ‘Ōhi‘a /‘Ōlapa (*Metrosideros*/*Cheirodendron*) Montane Wet Forest, ‘Ōhi‘a (*Metrosideros*) Mixed Shrub Montane Wet Forest, and ‘Ōhi‘a /‘Uluhe (*Metrosideros*/*Dicranopteris*) Montane Wet Forest

Focus Species: Federally Listed: *Buteo solitarius* (‘Io), *Branta sandvicensis* (nēnē), and *Anas wyvilliana* (kōloa), *Trematalobelia grandiflora* (kōli‘i), *T. grandiflora, Pritchardia lanigera, Clermontia drepanomorpha* (‘ōhā wai)

In 1992, researchers found *Partulina physa*, a native snail species previously not recorded since 1946, on forested leeward slopes on Kohala Mountain. Other snails observed within the KWP include succinids and minute tornatellinids (DLNR 1989; Hadway and Hadfield 1998).

	Endangered	**Threatened**	**Candidate**	**Species of Concern**
Plants	36	-	2	2
Animals	3	1	1	-

Important Factors
The Partners Program has been supporting restoration projects on private lands within the Kohala Mountains since 2000. The newly formed KWP will facilitate coordinated restoration efforts within this northern region of Hawai’i Island. Upon finalization of the management plan, the Partners Program intends to provide support for fencing projects, alien plant control, and native species restoration.

Guiding Documents and Plans:

- Hawai‘i State Comprehensive Wildlife Conservation Strategy
- Kohala Mountain Watershed Management Plan
- USFWS Draft Revised Recovery Plan for the Nēnē
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds
- USFWS Recovery Plan for the Hawaiian Hawk
- USFWS Recovery Plan for the Hawaiian Hoary Bat
- USFWS Recovery Plan for Blackburn’s Sphinx Moth
- USFWS Recovery Plan for Hawaiian Dark-rumped Petrel and Newell’s Manx Shearwater
- USFWS Plant Recovery Plan for the Four Hawaiian Ferns
- USFWS Plant Recovery Plan for *Lipochaeta venosa* and *Isodendrion hosakae*
- USFWS Plant Recovery Plan for Big Island Plant Cluster
- USFWS Plant Recovery Plan for Big Island Plant Cluster II
- USFWS Plant Recovery Plan for Multi Island Plants

Partnership Opportunities: This partnership is comprised of landowners and land managers, including the State of Hawai‘i Department of Land and Natural Resources, State of Hawai’i Department of Hawaiian Homelands, Hawai‘i County Department of Water Supply, Parker Ranch, Kahuā Ranch, Ponoholo Ranch, The Queen Emma Land Management Company, Kamehameha Schools, Laupāhoehoenui LLC, and the Nature Conservancy. With this newly formed partnership, the Partners Program has the opportunity to support restoration projects on private ranch lands (e.g., Parker, Kahuā, and Ponoholo ranches) to protect habitat of candidate and other rare species.

3) Mauna Kea Watershed Partnership

Objectives: The main objectives of the Partners Program in the Mauna Kea Watershed Partnership Forcus Area are:

- Prevent new introductions and effectively control existing invasive plant species
- Control non-native animal populations within designated areas
- Protect unique biological communities and rare species
- Prevent and minimize wildfire.

The goal of the Mauna Kea Watershed Partnership (MKWP) is to improve water and environmental quality by enabling comprehensive and sustainable watershed management projects that address current threats, and maintain its integrity and protect its economic, socio-cultural, and ecological resources. Funding was secured for the development of the MKWP in 2006. A management plan will be drafted to describe the watershed resources and associated values, to identify threats to the resources, and direct the activities of the MKWP toward their protection. Once finalized, the land area of the MKWP will likely include over 50,000 acres of forest and grasslands that includes tracts of privately owned land, three State Forest Reserves, two State Natural Area Reserves, the Hakalau National Wildlife Refuge, the federally owned Pōhakuloa Training Area, and a proposed U.S. Forest Service Experimental Forest.

Key Resource Summary:
Much of the mountain supports native forest and animals, including particularly extensive regions of wet ‘ōhi‘a (*Metrosideros polymorpha*) forest. The drier upper elevations of Mauna Kea are dominated by koa and māmane (*Sophora chrysophylla*) forests, and sub-alpine and aeolian communities.

<u>*Focus Habitats* (adapted from Gagne and Cuddihy 1990)</u>: Alpine Dry shrublands, Subalpine dry forest (*Sophora/Myoporum*), ‘Ōhia/‘A ‘ali ‘i montane shrublands, ‘Ōhi‘a (*Metrosideros*) Montane dry forest, Koa/Māamane (*Acacia/Sophora*) montane forest, ‘Akoko (*Chamaesyce*) montane dry forest, ‘Ōhi‘a /‘Ōlapa (*Metrosideros*/*Cheirodendron*) Montane Wet Forest, ‘Ōhi‘a (*Metrosideros*) Mixed Shrub Montane Wet Forest, ‘Ōhi‘a /‘Uluhe (*Metrosideros*/*Dicranopteris*) Montane Wet Forest, ‘Ohi‘a/Hāpu‘u (*Metrosideros/Cibotium*) Tree Fern Forest, Koa/‘Ōhia (*Acacia/Metrosideros*) Montane Wet Forest, and ‘Ōhi‘a (*Metrosideros*) Lowland Wet Forest

<u>*Focus Species*</u>: Federally listed (partial list): *Hemignathus munroi* (‘akiapōlā‘au*), Loxioides bailleui* (palila*), Loxops coccineus coccineus* (Hawai‘i ‘ākepa*), Oreomystis mana* (Hawai‘i creeper*), Buteo solitarius* (Hawaiian hawk*),* and *Branta sandvicensis* (nēnē)*;* and two species of seabirds: *Pterodroma sandwichensis* (Hawaiian petrel*)* and *Puffinus auricularis newelli* (Newell’s shearwater); *Lasiurus cinereus semotus* (Hawaiian Hoary bat); <u>Rare plants</u>: *Argyroxiphium sandwicense* (Mauna Kea silversword*), Asplenium schizophyllum, Bidens campylotheca* ssp. *campylotheca* (ko‘oko‘olau*), Chamaesyce olowaluana* (‘akoko), *Dubautia arborea* (na‘ena‘e), *Eurya sandwichensis, Exocarpos menziesii* (heau), *Fragaria chiloensis* (‘ōhelo papa), *Haplostachys haplostachya, Hesperocnide sandwicensis, Ochrosia haleakalae* (hōlei), *Joinvillea ascendens ascendens.*

	Endangered	**Threatened**	**Candidate**	**Species of Concern**

Plants	27	-	3	8
Animals	10			-

Important Factors
The Partners Program has been supporting restoration projects on private lands within the Mauna Kea Watershed Partnership region since 2000 (e.g., Kanakaleonui corridor, Humuʻula-Koa Buffer, Mauna Kea fence assessment and repair, Paʻauilo Forest, Upper Paʻauilo Forest Link, Ahualoa Forest). The formation of a MKWP will facilitate coordinated restoration efforts within this region of Hawaiʻi Island. Following the formation of the MKWP group, and after a management plan is drafted, the Partners Program intends to provide support for restoration and protection of habitat on private lands that will benefit candidate plants and other rare species within the watershed partnership boundaries. Other issues that will require funding and collaboration include invasive weed control, feral sheep, cattle, goat and pig management, biological research, fire ecology, cultural site protection, and public use issues. Expanding populations of weeds like gorse, and ungulates such as goats, are examples of major management issues needing active, collaborative attention.

Guiding Documents and Plans:
- Hawaiʻi State Comprehensive Wildlife Conservation Strategy
- USFWS Draft Revised Recovery Plan for the Nēnē
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds
- USFWS Recovery Plan for the Hawaiian Hawk
- USFWS Recovery Plan for the Hawaiian Hoary Bat
- USFWS Recovery Plan for Blackburn's Sphinx Moth
- USFWS Recovery Plan for Hawaiian Dark-rumped Petrel and Newell's Manx Shearwater
- USFWS Plant Recovery Plan for Big Island Plant Cluster
- USFWS Plant Recovery Plan for Big Island Plant Cluster II
- USFWS Plant Recovery Plan for the Four Hawaiian Ferns
- USFWS Plant Recovery Plan for *Haplostachys haplostachya* and *Stenogyne angustifolia*
- USFWS Plant Recovery Plan for Multi Island Plants
- USFWS Safe Harbor Agreement and Habitat Conservation Plan for Kōloa and Nēnē at ʻUmikoa Ranch
- State of Hawaiʻi Safe Harbor Agreement and Habitat Conservation Plan for Kōloa and Nēnē at ʻUmikoa Ranch

Partnership Opportunities: This new partnership is still in its infancy and members are being asked to join. The State of Hawaiʻi Department of Land and Natural Resources and USFWS Hakalau Forest National Wildlife Refuge are coordinating efforts at the moment with assistance from the Department of Army, Pōhakuloa Training Area. The Partners Program would like to continue its support for restoration of private lands in the Mauna Kea region working with the State of Hawaiʻi Department of Hawaiian Homeland and others.

4) East Maui Watershed Partnership Habitat Priorities

Objective: The East Maui Watershed (EMWP) is located on the windward slopes of Haleakalā. Its native forested ecosystems represent the largest intact native forest area on the island of Maui (20 percent of the entire island) and one of the largest intact native areas in the State of Hawaiʻi. The watershed is habitat for the world's greatest concentration of endangered birds, as well as several plant and invertebrate species found nowhere else on the planet. The primary goal of the Partners Program in the EMWP is the protection of the native forested watershed through ungulate fencing, ungulate management, and invasive plant removal on private lands.

Feral ungulate disturbance and invasive weed encroachment continue to degrade the native forest that is habitat to many endangered plants and animals found in the East Maui Watershed. It is critical to protect the habitat and control threats to these ecosystems in order to stabilize and recover species in the East Maui Watershed. One of two primary threats facing these species is destruction and adverse modification of habitats by feral animals. Direct effects of feral pigs in this area are destruction of vegetation by browsing and trampling. Disturbance of the habitat then encourages invasions of alien plant species, the second primary threat to native ecosystems. Regeneration of native species is greatly reduced in communities impacted by ungulates, therefore controlling feral animals in these areas is imperative.

Key Resource Summary:
Focus Habitats: ‘Ōhi‘a/Uluhe Lowland Wet Forest, ‘Ōhi‘a/Mixed Shrub Lowland Wet Forest, ‘Ōhi‘a/Mixed Shrub Montane Wet Forest, ‘Ōhi‘a/‘Ōlapa Montane Wet Forest, ‘Ōhi‘a Mixed Lowland Mesic Shrubland, Halapepe (*Pleomele*) Lowland Mesic Forest, and Hawaiian Montane Bog

Focus Species: Federally listed: *Branta sandvicensis* (nēnē), *Hemignathus lucidus* (nukupu'u), *Lasiurus cinereus semotus* (‘'ōpe‘ape‘a), *Loxops coccineus* (‘akepa), *Melamprosops phyaeosoma* (‘ākohekohe), *Pseudonestor xanthophrys* (Maui parrotbill), *Psittirostra psittacea* (‘ō‘'ū), *Pterodroma phyaeopygia* ('ua'u), *Argyroxiphium sandwicense* ssp. *macrocephalum* ('āhinahina, listed threatened), *Diplazium molokaiense*, *Geranium arboretum* (nohoanu), *Geranium multiflorum* (nohoanu), and *Plantago princeps* var. *laxiflora* (‘ale).

	Endangered	**Threatened**	**Candidate**	**Species of Concern**
Plants	8	35	9	20
Animals	8	1	2	8

Major Threats
Uncontrolled feral ungulates (primarily pigs, goats, deer); a variety of invasive alien plants, including *Miconia*, Koster’s curse (*Clidemia*), and guava (*Psidium*), and wildfire at lower dry and mesic settings.

Guiding Documents and Plans:
- Hawai’i State Comprehensive Wildlife Conservation Strategy
- East Maui Watershed Management Plan
- USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds
- USFWS Recovery Plan for Hawaiian Dark-rumped Petrel and Newell’s Manx Shearwater
- USFWS Plant Recovery Plan for the Four Hawaiian Ferns
- USFWS Plant Recovery Plan for *Gouania hillebrandii*
- USFWS Plant Recovery Plan for Maui Plant Cluster
- USFWS Plant Recovery Plan for Multi Island Plants

Partnership Opportunities: This is the oldest of all the Hawai‘i’s watershed partnerships and includes: the State of Hawai‘i Department of Land and Natural Resources, County of Maui Board of Water Supply, the Nature Conservancy, Haleakalā Ranch, East Maui Irrigation, Haleakalā National Park and Hāna Ranch. The Partners Program has supported many of these landowners with private land restoration projects in the past, and will continue to work with them and with others in the future.

5) West Maui Watershed Partnership

Objectives: Conservation priorities of the Partners Program in the West Maui Watershed Partnership Focus Area are:
- Pest plant control in areas of rare plant populations
- Candidate species protection

- Ungulate control
- Water and watershed monitoring.

The watershed vegetation of the West Maui Mountains is home to thousands of native plants, birds, fishes, and terrestrial and aquatic invertebrates (including snails and insects). There are many rare species and forms found only in the West Maui Mountains, and scientists estimate the watershed is home to an untold number of undescribed species. Seventy percent of the land area of the West Maui Mountains Partnership is dominated by native vegetation, but of this, perhaps less than 20 percent is without invasive weed problems. Some of these weeds have completely crowded out native plants and choked off regeneration of rare and endangered species. The greatest threat to the native habitats of West Maui is a combination of the destructive effects of feral ungulates such as pigs, goats, cattle, and deer. Native vertebrate, plant and invertebrate communities cannot withstand the effects of feral ungulates, whose browsing, rooting and trampling destroy vegetation, accelerate erosion, pollute the water supply with silt, feces, and disease, and creates disturbed areas in which weeds can establish and spread.

Key Resource Summary:
Focus Habitats: ‘Ōhi‘a/‘Uluhe (*Metrosideros*/*Dicranopteris*) Lowland Wet Forest, ‘Ōhi‘a/Mixed (*Metrosideros*) Shrub Lowland Wet Forest, ‘Ōhi‘a/Mixed (*Metrosideros*) Shrub Montane Wet Forest, ‘Ōhi‘a/‘Ōlapa (*Metrosideros*/*Cheirodendron*) Montane Wet Forest, ‘Ōhi‘a Mixed (*Metrosideros*) Lowland Mesic Shrubland, Lama (*Diospyros*) Lowland Mesic Forest, and Hawaiian Montane Bog

Focus Species: Federally Listed (partial list): *Branta sandvicensis* (nēnē), *Psittirostra psittacea* (‘ō‘ū), *Pterodroma phyaeopygia* (‘ua‘u), *Cyrtandra munroi* (ha‘iwale), *Ctenitis squamigera* (pauoa), *Clermontia oblongifolia* ssp. *mauiensis* ('ōhāwai),*Cyanea lobata* (‘ōhāwai), *Pteris lydgatei* (Lydgates’ brake), *Sanicula purpurea* (snakeroot).

	Endangered	**Threatened**	**Candidate**	**Species of Concern**
Plants	12		6	53
Animals	7	1		20

Guiding Documents and Plans:
- Hawai’i State Comprehensive Wildlife Conservation Strategy
- West Maui Watershed Management Plan
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds
- USFWS Draft Revised Recovery Plan for the Nēnē
- USFWS Recovery Plan for Blackburn’s Sphinx Moth
- USFWS Plant Recovery Plan for the Four Hawaiian Ferns
- USFWS Plant Recovery Plan for *Gouania hillebrandii*
- USFWS Plant Recovery Plan for Maui Plant Cluster
- USFWS Plant Recovery Plan for Multi Island Plants
- USFWS Kaheawa Wind Farm Habitat Conservation Plan
- State of Hawai‘i Kaheawa Wind Farm Habitat Conservation Plan

Partnership Opportunities: This partnership includes the State of Hawai‘i Department of Land and Natural Resources, County of Maui Board of Water Supply, County of Maui, Kamehameha Schools, Amfac, C. Brewer and Company, Maui Land and Pineapple Company, and the Nature Conservancy. Partners funding has supported work on lands owned by Maui Land and Pineapple Company and the Maui Board of Water Supply. The program anticipates continued work with Maui Land and Pineapple Company with habitat restoration projects for candidate plant and invertebrate species.

6) Leeward Haleakalā Watershed Restoration Partnership

Objectives: The Partners Program objectives in the Leeward Haleakalā Watershed Restoration Partnership Focus Area are active koa forest restoration on private lands, protecting the private koa forest habitats from invasive species and fire, and protecting koa forest habitats from ungulates like Axis deer.

The Leeward Haleakalā Watershed Restoration Partnership (LHWRP) seeks the following benefits from native forest restoration

- Watershed enhancement and protection
- Perpetuation of important Hawaiian cultural resources
- Conservation of unique, endemic plants and animals.

Key Resource Summary:
Focus Habitats: Alpine Rockland, Subalpine Shrubland, Montane Shrubland, Montane Koa (*Acacia*) Forest, and Montane Dryland Forest

Focus Species: Federally listed (partial list): *Branta sandvicensis* (nēnē), *Melamprosops phyaeosoma* (ʻākohekohe), *Pseudonestor xanthophrys* (Maui parrotbill), *Pterodroma phyaeopygia* (ʻuaʻu), and *Manduca blackburni* (Blackburn's sphinxmoth), *Argyroxiphium sandwicense* ssp. *macrocephalum* (ʻāhinahina, listed threatened), *Bonamia menziesii* (NCN), *Cenchrus agrimonoides* (kāmanomano), *Fleuggea neowawraea* (mēhamehame), *Geranium arboretum* (nohoanu)

	Endangered	**Threatened**	**Candidate**	**Species of Concern**
Plants	18	2	1	-
Animals	6	-	-	-

Guiding Documents and Plans:

- Hawai'i State Comprehensive Wildlife Conservation Strategy
- Leeward Haleakalā Watershed Restoration Partnership Management Plan
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds
- USFWS Draft Revised Recovery Plan for the Nēnē
- USFWS Recovery Plan for Hawaiian Dark-rumped Petrel and Newell's Manx Shearwater
- USFWS Recovery Plan for Blackburn's Sphinx Moth
- USFWS Plant Recovery Plan for the Four Hawaiian Ferns
- USFWS Plant Recovery Plan for *Gouania hillebrandii*
- USFWS Plant Recovery Plan for Maui Plant Cluster
- USFWS Plant Recovery Plan for Multi Island Plants
- USFWS Safe Harbor for the Reintroduction of Nēnē at Piʻiholo Ranch
- State of Hawaiʻi Safe Harbor for the Reintroduction of Nēnē at Piʻiholo Ranch

Partnership Opportunities: This partnership includes the State of Hawaiʻi Department of Land and Natural Resources, State of Hawaiʻi Department of Hawaiian Homelands, James Campbell Estate, Haleakalā National Park, Haleakalā Ranch, Kaonoulu Ranch, Nuʻu Mauka Ranch, ʻUlupalakua Ranch, and John Zwaanstra. Partnership opportunities on lands owned by John Zwaanstra for ungulate fencing will expand upon conservation efforts begun with the adjacent landowner, Haleakalā Ranch. Additionally, habitat restoration activities at Nuʻu Ranch are being planned for the latter part of FY 2007.

7) East Molokaʻi Watershed Partnership

Objectives: The main objectives of the Partners Program in the East Molokai Watershed Partnership Focus Area are controlling ungulates and weeds on private lands.

Biological Description: The East Molokaʻi Watershed Partnership (EMoWP) is comprised of ecological systems from lowland to montane elevations. The summit area and undeveloped north side maintain high viability systems, are an important watershed, and contain over 50 native natural communities (four of which are unique to Molokaʻi). East Molokaʻi supports 248 Hawaiian endemic species of flowering plants, 25 of which are endemic to the island, and 39 of which are endangered.

Key Resource Summary:
Focus Habitats: ʻŌhiʻa/Uluhe (*Metrosideros*/*Dicranopteris*) Lowland Wet Forest, ʻŌhiʻa/Mixed Shrub Lowland Wet Forest, ʻŌhiʻa/Mixed Shrub Montane Wet Forest, ʻŌhiʻa/ʻŌlapa Montane Wet Forest, ʻŌhiʻa Mixed Lowland Mesic Shrubland, and Halapepe (*Pleomele*) Lowland Mesic Forest

Focus Species: Federally listed (partial list): *Melicope reflexa* (kōpiko), *Pritchardia munroi* (loulu), *Canavalia molokaiensis* (ʻāwikiwiki), *Clermontia oblogifolia* ssp. brevipes (ʻōhāwai), *Silene alexandri*, *Silene lanceolata*, *Branta sanvicensis* (nēnē), *Melamprosops phyaeosoma* (ʻākohekohe), *Pseudonestor xanthophrys* (Maui parrotbill).

	Endangered	**Threatened**	**Candidate**	**Species of Concern**
Plants	21	-	4	13
Animals	2			5

Major Threats
Feral animals have proven to be the main carriers, soil preparers, fertilizers and scarifiers of and for weed seeds. Pigs impact the understory (low growing ground cover plant communities) of this forest area, which diminishes the water carrying capacity and allows non-native weeds a chance to become established in open soils of this area. Feral cattle and goats are the primary reason for the degradation and erosion. Compounding the feral animal problem are the recent wildland fires that have consumed much of the landscape. Axis deer also impact the area, but prefer the low elevation kiawe forest and are rarely seen in the elevations above 900 m (3,000 ft.).

Guiding Documents and Plans:
- Hawaiʻi State Comprehensive Wildlife Conservation Strategy
- East Molokaʻi Watershed Partnership Strategic Plan FY 2004-2009
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds
- USFWS Draft Revised Recovery Plan for the Nēnē
- USFWS Recovery Plan for Blackburn's Sphinx Moth
- USFWS Plant Recovery Plan for the Four Hawaiian Ferns
- USFWS Plant Recovery Plan for *Gouania hillebrandi*
- USFWS Plant Recovery Plan for *Kokia cookei*
- USFWS Plant Recovery Plan for Molokaʻi Plant Cluster
- USFWS Plant Recovery Plan for Molokaʻi Plant Cluster II
- USFWS Plant Recovery Plan for Multi Island Plants
- USFWS Programmatic Safe Harbor for the Nēnē
- State of Hawaiʻi Programmatic Safe Harbor for the Nēnē
- USFWS Safe Harbor for the Introduction of Nēnē at Puʻu O Hōkū Ranch
- State of Hawaiʻi Safe Harbor for the Introduction of Nēnē at Puʻu O Hōkū Ranch

Partnership Opportunities: This partnership includes Kamehameha Schools, Kapualei Ranch, Ke Aupuni Lōkahi Enterprise Community, U.S. Environmental Protection Agency, State of Hawaiʻi

Department of Health, State of Hawai‘i Division of Forestry and Wildlife, Kalaupapa National Historical Park, County of Maui, County of Maui Board of Water Supply, Moloka‘i-Lāna‘i Soil and Water Conservation District, U.S.D.A. Natural Resources Conservation Service, U.S.G.S. Water Resources Discipline, and the Nature Conservancy. Partnership opportunities are ongoing with this partnership as well as with landowners adjacent to the partnership boundaries. For example, the Partners Program looks to continue its support for restoration activities on Dunbar Ranch, which is protecting upper forest and riparian areas for conservation.

8) Lāna‘i Forest and Watershed Partnership

Objective: The objective of the Partners Program in the Lāna'ihale Forest and Watershed Partnership Focus Area is to protect 23,000 acres of privately owned native habitat on east Lāna'i from feral ungulates (deer, sheep, and pigs), weeds and fire.

Biological Description: At 1,030 m (3,379 ft.) elevation, Lāna'ihale, is the tallest feature making up the island of Lāna'I. This is also the critical water recharge area and contains the highest concentrations of endangered remaining native mesic, and wet forest species on the island.

Loss of vegetative cover on Lāna'i, due primarily to introduced ungulates, has led to severely eroded landscapes, This progressive loss of cover and of soil can also be expected to result in tremendous sediment burden to near shore waters. These problems are exacerbated by high fire hazard conditions in certain areas.

Key Resource Summary:
The most important element of any endangered species habitat protection plan on Lāna'i is the construction of an ungulate exclosure around the most critical concentrations of endangered species (USFWS 1994). This fence would prevent vegetative loss due to trampling and browsing by deer or other feral animals. Virtually all other conservation management tools whether it be weeding, or outplanting, must be accompanied with fencing and ungulate removal to meet recovery goals. Given the high concentration of axis deer *(Axis axis)* on the island, deer fence is a requirement if endangered species are to be recovered. Another important key to conservation on Lāna'i for the Partners Program is that the entire island is owned by one landowner, Castle and Cooke.

Focus Habitats: Olopua (*Nestegis*) Lowland Mesic Forest, Lowland Wet Shrublands, and Lowland Wet Forest

Focus Species: About 345 native Hawaiian vascular plants have been recorded on Lāna'i, of which 205 are considered endemic or indigenous. About 70 plant species are known to have disappeared, while another 64 are either listed as endangered, candidate, or species of concern (USFWS 1994). Seventeen rare species occur in the East Lāna'i region. Of the 8 species of forest birds once native to Lāna'i, only one remains. The dark rumped petrel (*Pterodroma phaeopygia sandwichensis*), a listed seabird, is one of the priority species for the Lāna'i Focus Area. Its habitat will be protected from the fencing project and predator control will occur around nesting areas. Roughly 71 species of terrestrial mollusks have been recorded on Lāna'i, most of which are endemic, either to Lāna'i or to Hawai'i.

Lāna'ihale also includes occupied habitat for *Partulina semicarinata* (Lāna'i tree snail) and *Partulina variabilis* (Lāna'i tree snail). These 2 species are considered candidate species.

	Endangered	**Threatened**	**Candidate**	**Species of Concern**
Plants	27	-	1	2
Animals	1	1	2	2

Guiding Documents and Plans:

- Hawai‘i State Comprehensive Wildlife Conservation Strategy
- Lāna‘i Forest and Watershed Partnership Management Plan
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds
- USFWS Recovery Plan for Hawaiian Dark-rumped Petrel and Newell’s Manx Shearwater
- USFWS Plant Recovery Plan for Lāna‘i Plant Cluster
- USFWS Plant Recovery Plan for *Gouania hillebrandii*
- USFWS Plant Recovery Plan for the Four Hawaiian Ferns
- USFWS Plant Recovery Plan for the Hawaiian Gardenia
- USFWS Plant Recovery Plan for Multi Island Plants

Partnership Opportunities: This partnership includes the primary landowner, Castle and Cooke, County of Maui Board of Water Supply, Hui Mālama Pono O Lāna‘i State of Hawai‘i Department of Land and Natural Resources, U.S.D.A. Natural Resources Conservation Service, Moloka‘i- Lāna‘i Soil and Water Conservation District, and the Nature Conservancy. The Partners Program will continue its support for restoration activities on East Lāna‘i where much of the conservation activities are taking place. Additionally, restoration activities at Kānepu'u will be supported as progress is made to keep axis deer from damaging this dry forest.

9) Ko‘olau Mountains Watershed Partnership

Objectives: The objectives of the Partners Program in the Ko‘olau Mountains Watershed Partnership Focus Area are to conduct private land restoration actions designed to:

- Reduce habitat fragmentation and increase in habitat connectivity across landowner boundaries
- Contribute to the recovery of listed endangered plant and animal species and increase population levels of candidate species that may preclude addition of these species to the Endangered Species list
- Protect the valued components of the forest from the ravages of wildfire, feral ungulates, invasive weeds, and insects/diseases.

Biological Description: The Ko‘olau Mountains Watershed Partnership (KMWP) is currently comprised of 15 landowning partners and seven associate partners, spanning over 111,000 upland acres, with nearly 60 percent vested in private lands. The Service directly manages lands of the O‘ahu Forest National Wildlife Refuge comprising more than 4,525 acres of forested land in the northern Ko‘olau mountain range. As an alliance that provides the foundation for holistic, sustainable, landscape-scale conservation and management activities within the upland watershed area, the mission of the KMWP is to manage the forested watershed area and its native ecosystems to protect the value and utility of the watershed in perpetuity.

Key Resource Summary:
<u>*Focus Habitats*</u>: ‘Ōhi‘a/Uluhe (*Metrosideros*/*Dicranopteris*) Lowland Wet Forest, Uluhe (*Dicronopteris*) Lowland Wet Shrubland, ‘Ōhi‘a/Mixed (*Metrosideros*) Shrub Lowland Wet Forest, Koa/‘Ōhi‘a (*Acacia*/*Metrosideros*) Lowland Mesic Forest, Mixed Fern/Shrub Wet Cliff Community, and Mixed Shrub Dry Cliff Community

<u>*Focus Species*</u>: Federally listed: *Chamaesyce rockii* (‘akoko), *Cyanea anuminata* (hāhā), *Cyanea st.-johnii* (hāhā), *Cyrtandra viridiflora* (ha'iwale), *Gardenia mannii* (nā‘ū), *Isodendrion longifolium* (aupaka), *Lobelia gaudichaudii* ssp. *koolauensis* (NCN), *Lobelia oahuensis* (NCN), *Melicope lydgatei* (alani), *Myrsine juddii* (kōlea), *Phlegmariuris* (*Huperzia*) *mutans* (NCN), *Phyllostegia parviflora* (NCN), *Plantago princeps* (laukahi kuahiwi), *Plantanthera holochila* (NCN), *Pteris lydgatei* (NCN), *Sanicula pupurea* (NCN), *Tetraplasandra gymnocarpa* (‘ohe‘ohe), *Viola oahuensis* (NCN).

	Endangered	Threatened	Candidate	Species of Concern
Plants	47	-	5	25
Animals	17	-	8	4

Major Threats
Feral ungulates (primarily pigs); and a large variety of invasive alien plants, including Christmas berry (*Schinus terebinthifolius*), alien grasses, Koster's curse (*Clidemia hirta*), and strawberry guava (*Psidium cattelianum*). Non-native grasses in dry settings contribute to a significant wildfire threat.

Important Factors
From a natural resource perspective, the KMWP area is particularly important because it is so large and is the main source of water for southern Oʻahu and Honolulu's massive population. The mountain range retains about 54 percent native vegetation, harboring at least 37 federally endangered plant species, 8 rare vertebrates, and 34 rare invertebrates. Through the Partners Program, the upper areas of ʻŌpaeʻula and Helemano have been fenced protecting a number of rare plants, and riparian areas from further ungulate damage.

Guiding Documents and Plans:
- Hawai'i State Comprehensive Wildlife Conservation Strategy
- Koʻolau Mountains Watershed Partnership Management Plan
- USFWS Recovery Plan for Oʻahu Tree Snails
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds
- USFWS Plant Recovery Plan for the Four Hawaiian Ferns
- USFWS Plant Recovery Plan for Koʻolau Mountain Plant Cluster
- USFWS Plant Recovery Plan for Multi Island Plants
- USFWS Plant Recovery Plan for Waiʻanae Mountain Plant Cluster

Partnership Opportunities: This partnership includes the following landowners: Kamehameha Schools, State of Hawaiʻi Department of Land and Natural Resources, State of Hawaiʻi Department of Hawaiian Homelands, Agribusiness Development Corporation, U.S. Army, County of Honolulu Board of Water Supply, Queen Emma Land Management Company, Bishop Museum, Mānana Valley Farm LLC, Tiana Partners, Dole Food Company. The Partners Program looks to continue its support for restoration activities on lands owned by Kamehameha Schools and expand its support with other private landowners such as Tiana Partners, Mānana Valley, and Bishop Museum.

10) Kauaʻi Watershed Alliance

Objective: The Kauaʻi Watershed Alliance partners have identified feral ungulates (such as pigs and goats) and invasive plants as two of the most important threats to the watershed. Removing these non-native species from core conservation areas on private lands is a priority for the Partners Program.

Biological Description: In April 2003, 9 State and private landowners officially formed the Kauaʻi Watershed Alliance (KWA). The KWA partners recognize that cooperation is the key to a timely and successful watershed management program that will protect Kauaʻi's watershed from invasive alien animals, plants, and other threats. Total acreage for the alliance is nearly 142,000 acres.

Key Resource Summary:
<u>*Focus Habitats*</u>: ʻŌhiʻa/Uluhe (*Metrosideros*/*Dicranopteris*) Montane Wet Forest, ʻŌhiʻa/Mixed (*Metrosideros*) Shrub Montane Wet Forest, ʻŌhiʻa/Lapalapa (*Metrosideros*/*Cheirodendron*) Montane Wet Forest, ʻŌhiʻa (*Metrosideros*) Mixed Montane Bog, Mixed Fern/Shrub Montane Wet Cliff, ʻŌhiʻa/Kūʻ'olohia (*Metrosideros*/*Rhynchospora*) Lowland Bog, and Wetlands (coastal, riverine, upland)

Focus Species: Federally listed*: Pterodroma phaeopygia sandwichensis* (Dark rumped petrel), *Puffinus auricularis newellii* (Newell's Shearwater), *Cyanea undulata* ('ōhāwai), *Dubautia pauciflorula* (na'ena'e), *Hesperomannia lydgatei* (NCN), *Labordia lygatei* (kāmakahala), *Viola helenae* (NCN).

	Endangered	**Threatened**	**Candidate**	**Species of Concern**
Plants	80	-	4	4
Animals	2	-	-	-

Major Threats
Feral ungulates (primarily pigs, goats, deer); and a large variety of invasive alien plants, particularly following hurricane 'Iniki in 1992. Noteably, Kaua'i is the only major island without mongoose (*Herpestes auropunctatus*), an important alien predator of native birds.

Guiding Documents and Plans:
- Hawai'i State Comprehensive Wildlife Conservation Strategy
- Kaua'i Watershed Management Plan
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds
- USFWS Recovery Plan for Hawaiian Dark-rumped Petrel and Newell's Manx Shearwater
- USFWS Recovery Plan for Kaua'i Cave Amphipods
- USFWS Recovery Plan for Newcomb's Snail
- USFWS Plant Recovery Plan for *Hibiscadelphus distans*
- USFWS Plant Recovery Plan for the Kaua'i Plant Cluster
- USFWS Plant Recovery Plan for the Kaua'i Plant Cluster II
- USFWS Plant Recovery Plan for the Wahiawā Plant Cluster

Partnership Opportunities
This watershed alliance includes the following landowners: Kaua'i County Board of Water Supply, Kamehameha Schools, State of Hawai'i Department of Land and Natural Resources, Alexander and Baldwin, Kaua'i Ranch, Gay and Robinson, and McBryde Sugar Company. Continued work with Kamehameha Schools, and Alexander and Baldwin in the northern portion of the island will be critical to protect a large number of rare and endangered species found on the island.

11) Hawaiian Waterbird

One of the Region 1 Cross Program Results (CPR) Focal Areas that we recently initiated is called the Hawaiian Bird Conservation Initiative, which consists of 4 elements: Recovery of Laysan Duck and Nihoa Millerbirds, Seabird Conservation in the Hawaiian Archipelago, Waterbird Recovery in the Main Hawaiian Islands, and Forestbird Recovery on the Big Island. The Partners Program is involved in all 4 of these elements. Our waterbird recovery efforts are described below.

Objective: Our objective for this Focus Area is to enhance and restore habitat on private lands, especially breeding habitat near NWR lands, such that sufficient habitat and populations of Hawaiian stilts, Hawaiian coots, and Hawaiian moorhen to are provided to allow for downlisting and eventual delisting of these species.

NWR units, along with State of Hawaii and other lands, will provide core protected habitat for these species, where appropriate. The Partners Program will contribute to the CPR efforts by enhancing and restoring private lands, especially breeding habitat that is protected from nonnative predators of these waterbirds, their nests, and eggs.

Biological Description: These waterbirds are found on relatively small wetland and coastal areas owned and managed by a variety of Federal and State agencies, organizations, and private landowners. Several NWR units support important habitat for these species, including Hanalei NWR and Huleia NWR on Kauai, James Campbell NWR and Pearl Harbor NWR on Oahu, Kakahaia NWR on Molokai, and Kealia Pond NWR on Maui.

This Focus Area consists of forty-four (44) wetland sites. Each site is identified in the Service Waterbird Recovery Plan as "core and supporting wetland habitats," all of which must be protected and managed before any waterbird species can be considered "recovered" (USFWS 2005b). This includes 16 core and 28 of 37 (75 percent) of supporting wetlands.

Key Resource Summary:
Focus Habitats: Hawaiian Coastal Wetlands

Focus Species: In this Focus Area we will target restoration actions primarily on three species of native waterbirds listed as endangered in Hawai'i: the Hawaiian stilt, the Hawaiian coot, and the Hawaiian moorhen. Other species that will benefit from our actions in this Focus Area include the listed Hawaiian duck, Ruddy turnstone, wandering tattler, black crowned night herons and the Pacific golden plover. The Hawaiian goose (nene) is also listed as endangered, but is typically associated with upland habitats.

Guiding Documents and Plans:
- Hawai'i State Comprehensive Wildlife Conservation Strategy
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- North American Waterbird Conservation Plan
- USFWS Safe Harbor Agreement with Chevron for the Hawaiian Stilt and Hawaiian Coot
- State of Hawai'i Safe Harbor Agreement with Chevron for the Hawaiian Stilt and Hawaiian Coot
- FWS Refuge CPPs (in development)

Partnership Opportunities: Partnership opportunities for this Focus Area will be prioritized first by identifying private landowners near Service refuges where there is a significant habitat that is restorable. Important internal Service partners include the Pacific Islands FWO and the NWR complexes on Kauai, Oahu, and Maui. The Migratory Birds program also supports activities on and near these refuges. Important external partners include the State of Hawaii, the Department of Defense, USDA-Wildlife Services, the Federal Aviation Administration (FAA), other Federal agencies, conservation organizations such as Ducks Unlimited and The Nature Conservancy of Hawaii, and corporate and private landowners

12) Guam Wildlife Habitat Priorities

Objective: To protect and enhance key wetland habitats on private lands for the endangered Mariana common moorhen.

Biological Description: Guam, a U.S. Territory, hosts a rich diversity of terrestrial and aquatic species. Over 100 species of birds have been documented on the islands including migrant, wetland, seabird, grassland, and forest birds. The brown tree snake (*Boiga irregularis*) is considered the primary cause for the decline of native Guam bird species. Two species of snails, *Samoana fragilis* and *Partula radiolata*, have been on the candidate list of the Endangered Species Act for more than 10 years and currently do not receive Federal protection. Only one plant species, *Serianthes nelsonii*, is listed under the ESA.

Key Resource Summary:
Located on the southernmost island in the Mariana Archipelago, Guam is the largest island in Micronesia and the most populous. The high island contains a limestone plateau at the northern end and limestone ridges in the south on old weathered volcanic material (Guam DAWR 2005). Guam, like the other islands in the Mariana has experienced considerable environmental degradation and human induced

alteration. Native plant species are confined to undeveloped limestone forests and cliffs, and wildlife is restricted primarily to lowland wetlands, and limestone forests.

Focus Habitats: Wetlands within the watersheds of Talofofo River, Fena Valley Reservoir, Atantano Marsh, and Agana Marsh).

- Woody swamps composed of pago trees (*Hibiscus tiliaceus*) along the edges of marshes, rivers, streams, and isolated depressions in the forest
- Natural marshes overgrown with common reed and para grass
- Human-made impoundments

Focus Species: Mariana Common Moorhen, Pacific golden plover, Ruddy turnstone , Wandering tattler , and Bristle thighed curlew.

Major Threats

The degree of habitat degradation from pollution and contamination is high on Guam where development and urbanization are increasing. Significant pollution and contamination issues are associated with military developments, an electrical generation facility, and landfills. In some areas, grazing by introduced ungulates (pigs, deer, and/or goats) has reduced and continues to affect regeneration of native vegetation. On Guam, the loss of almost all avian and bat pollinators and seed dispersers as a result of brown tree snake predation further exacerbates the condition of native forests.

Important Factors

The PIFWO has established partnerships with the US Navy, US Air Force, and the Guam Department of Agriculture and Wildlife Resources (DAWR) for the protection, development, and management of fish and wildlife occurring on lands under Federal and local administration. The Partners Program hopes to expand its program to the Territory of Guam in the near future focusing on wetland restoration on private lands.

Guiding Documents and Plans:

- Guam Comprehensive Wildlife Conservation Strategy
- USFWS Recovery Plan for the Mariana Common Moorhen
- USFWS Recovery Plan for Native Forest Birds of Guam and Rota
- USFWS Recovery Plan for the Nightingale Reed Warbler
- USFWS Recovery Plan for the Mariana Fruit Bat and Little Fruit Bat
- USFWS Recovery Plan for the Micronesian Kingfisher
- USFWS Recovery Plan for the Vanikoro Swifltet
- USFWS Plant Recovery Plan for *Serianthes nelsonii*
- North American Waterbird Conservation Plan
- US Pacific Islands Shorebird Conservation Plan

Partnership Opportunities

Partnership opportunities for this Focus Area will be privately owned wetlands in the southern portion of Guam where Mariana common moorhen habitat exists.

13) Commonwealth of the Northern Mariana Islands

Objective: The objective of the Partners Program in the Northern Mariana Islands Focus Area is to restore habitats on private land that support the endangered *Nesogenes rotensis* and *Osmoxylon mariannense*. Both species are endemic to the island of Rota.

Biological Description: The Northern Mariana Islands consist of an archipelago of 15 islands in the mid-Pacific Ocean. The island chain spans a distance of 675 m from Guam, the largest and most populous island with limestone terraces in the south, to Uracas, a tiny, unpopulated volcanic island in the

north. Terrestrial wildlife, especially native forest birds, is threatened by loss of native forest habitat and the risk of extirpation by the brown treesnake.

Key Resource Summary:
The plants *Nesogenes rotensis* and *Osmoxylon mariannense* (no common names) are found only on the island of Rota in the Commonwealth of the Northern Mariana Islands (CNMI). *Nesogenes rotensis* is a low-growing herbaceous plant in the verbena family (Verbenaceae) and *Osmoxylon mariannense* is a spindly, soft-wooded tree in the ginseng family (Arialiaceae). Both species were federally listed as endangered in 2004 (USFWS 2004). *Osmoxylon mariannense* is also protected by the government of the CNMI. Currently, there are two known populations of *N. rotensis* of 15 to 20 plants each. The ten known individuals of *O. mariannense* are in scattered locations on the Sabana (the cloudswept plateau that dominates the western half of Rota).

<u>*Focus Habitats*</u>: On the Island of Rota, *Nesogenes rotensis* is found on exposed, raised limestone flats in non-forested coastal strand habitat. These flats are subject to salt spray during severe storms. *Osmoxylon mariannense* is found in limestone forests on the Sabana, a raised plateau unique in the Mariana archipelago, that are often shrouded in clouds and mist.

<u>*Focus Species*</u>: Twenty-four terrestrial species of special conservation (i.e., rare endemic species with little life history information, and with little or no management) have been identified by the CNMI's Comprehensive Wildlife Conservation Strategy (2005). Among these species are the endangered *Nesogenes rotensis* and *Osmoxylon mariannense* found only on the island of Rota.

Important Factors
Human activities that alter native vegetation and habitat are believed to be the primary factors leading to the small population sizes and limited distribution of *Nesogenes rotensis* and *Osmoxylon mariannense*. These activities include agriculture, ranching, nonnative plant and animal introductions, resort and beach park development in the coastal habitat of *N. rotensis*, and road construction and maintenance in the Sabana habitat of *O. mariannense*. In the last decade, several major typhoons have made landfall on Rota, severely impacting individuals of both species. Another factor that may affect the recovery of these two species is their vulnerability to extinction from reduced reproductive vigor due to their small population sizes.

The Partners Program hopes to expand its program to the CNMI in the near future focusing on native forest restoration on private lands.

Guiding Documents and Plans:
- Comprehensive Wildlife Conservation Strategy-Commonwealth of the Northern Mariana Islands
- USFWS Recovery Plan for the Mariana Common Moorhen
- USFWS Recovery Plan for the Micronesian Megapode
- USFWS Recovery Plan for Native Forest Birds of Guam and Rota
- USFWS Recovery Plan for the Nightingale Reed Warbler
- USFWS Recovery Plan for the Mariana Fruit Bat and Little Fruit Bat
- USFWS Recovery Plan for the Micronesian Kingfisher
- USFWS Recovery Plan for the Rota Bridled White Eye
- USFWS Recovery Plan for the Vanikoro Swifltet
- USFWS Plant Recovery Plan for *Serianthes nelsonii*
- USFWS Draft Plant Recovery Plan for *Nesogenes rotensis* and *Osmoxylon rotensis*
- North American Waterbird Conservation Plan

Partnership Opportunities
Partnership opportunities for this Focus Area will be privately owned lands on the island of Rota where *Osmoxylon rotensis* and *Nesogenes rotensis* can exist with minimal restoration assistance. In the past, the USFWS has successfully worked with a private landowner restoring *Osmoxylon rotensis* forest. The

Partners Program will also seek opportunities to restore habitat for listed birds and bats. The Division of Fish and Wildlife for the Commonwealth of the Northern Mariana Islands will be consulted for all partnerships.

14) American Samoa

Objective: The objective of the Partners Program in the American Somoa Focus Area is to work with local communities and local land managers to improve upland forest habitats for rare plants, and forest birds on private land.

Biological Description: Samoa is comprised of a chain of 13 Pacific islands (9 inhabited) plus two remote atolls located 140 miles south of the equator near the International Date Line. It is divided into two political entities, the US Territory of American Samoa where the Service has jurisdiction, and the neighboring independent country of Samoa, formerly known as Western Samoa. The youngest islands in this chain lie towards the east (Ta'u). The land area of (western) Samoa (2934 sq km, 1132 sq mi) is approximately 15 times larger than the land area of American Samoa (197.1 sq km, 76.1 sq mi).

Key Resource Summary:
Most native species here are closely related to those in Indonesia, but due to its remote location in the Pacific Ocean, the diversity of terrestrial species here is low: 343 flowering plants, 135 ferns, 25 resident or migratory land and water birds, 20 resident seabirds, 3 mammals (all bats), 7 skinks, 4 geckos, 2 sea turtles, 1 snake, and other occasional visitors. In contrast, the diversity of marine species here is high: 890 coral reef fishes, over 200 corals, and several whales and dolphins. Insects and other invertebrate species here are not well known.

Species found only in the Samoan Archipelago include one bird (Samoan starling), one stream fish, several land snails, and about 30 percent of the local plant species. Five flowering plant species are endemic to American Samoa itself. Marine endemics have not been identified, but a thorough investigation has not been conducted.

Focus Habitats: The thirteen terrestrial vegetation communities identified in American Samoa support 490 species. Among these species, 454 (93 percent) are native.

Focus Species: Focus species will be identified upon the development of a collaborative restoration project.

	Endangered	**Threatened**	**Candidate**	**Species of Concern**
Plants	-	-	-	
Animals	1	1	13	6

Important Factors
Federally listed species here include humpback and sperm whales, and the green and hawksbill sea turtles. Additional species of concern in the Territory include the sheath-tailed bat, 3 birds (Spotless Crake, Friendly Ground Dove, Many-colored Fruit Dove), and several land snails. Currently, 13 species found in American Samoa are candidates for listing, including 2 mammals, 3 birds, and 8 land snails. Another 22 species of plants and animals are currently of concern.

Guiding Documents and Plans:
- Comprehensive Wildlife Conservation Strategy-American Samoa
- USFWS Wildlife and Wildlife Habitat of American Samoa
- National Park Feasibility Study for American Samoa

Partnership Opportunities
Partnership opportunities for this Focus Area will be privately owned lands on the islands of Tutuila in native forests adjacent to the American Samoa National Park. The Department of Wildlife Resources for American Samoa as well as staff from the National Park of American Samoa will be consulted for all partnerships.

PIFWO Coastal Program Focus Areas

1) Hawai'i Focus Area

Objectives
- Develop and implement methods of offshore islet restoration, including eradication of alien rodents and translocation of endangered birds to safe islets
- Restore coastal wetland habitat to help recover endangered wetland birds and anchialine pool focus species
- Conserve coastal strand habitats supporting rare and endangered focus species
- Improve coral reef habitats and assist recovery of marine focus species by reducing anthropogenic stresses

These objectives will be accomplished by assisting implementation of high priority actions identified in the Hawai'i Comprehensive Wildlife Conservation Strategy, Hawai'i Coral Reef Local Action Strategies, and other relevant management plans. The objectives often include specific recovery actions for listed species that are identified in Service species recovery plans. The Coastal Program will work with the Service Endangered Species Division to identify and, when possible, implement recovery actions in addition to conservation actions for candidate species.

Biological Description
The Hawaiian Islands extend over 1,500 miles northwest from Hawai'i Island, the largest island of the group. The total land area of Hawai'i is about 6,500 square miles, with Hawai'i Island accounting for 2/3 of this area. The eight main islands at the southeast end of the chain are high volcanic islands fringed by coral reefs. Most of the northwestern islands, contained within the newly designated Northwestern Hawaiian Islands Marine National Monument, are low sandy atolls surrounded by several thousand acres of coral reefs.

Threats to coastal and marine species come from coastal development and recreational impacts, soil erosion into the marine environment, overfishing, poaching, water pollution, wetland filling, unshielded coastal lighting, military training impacts, incidental fisheries bycatch, marine debris ingestion, entanglement in abandoned fishing nets, ship groundings, coral bleaching and disease, global warming, and sea level rise. The Coastal Program can assist with projects that will benefit coral reefs, coastal wetlands, coastal strand areas, offshore islets and associated focus species by alleviating some of these anthropogenic stresses.

Key Resource Summary:
Focus Habitats:
- Offshore islets and isolated atolls
- Coastal emergent, estuarine, and anchialine pool wetlands
- Coastal strand and dunes
- Coral reefs and seagrass beds

Focus Species:
Fauna
- Hawksbill sea turtle (*Eretmochelys imbricata*) (E)
- Hawaiian monk seal (*Monachus schauinslandi*) (E)

- Blackburn's sphinx moth *Manduca blackburni* (E)
- Dark-rumped petrel (*Pterodroma phaeopygia sandwichensis*) (E)
- Nihoa millerbird (*Acrocephalus familiaris*) (E)
- Nihoa finch (*Telespyza ultima*) (E)
- Laysan finch (*Telespyza cantans*) (E)
- Hawaiian stilt (*Himantopus mexicanus knudseni*) (E)
- Hawaiian coot (*Fulica alai*) (E)
- Hawaiian duck (*Anas wyvilliana*) (E)
- Hawaiian moorhen (*Gallinula chloropus sandvicensis*) (E)
- Green sea turtle (*Chelonia mydas*) (T)
- Newell's shearwater (*Puffinus auricularis*) (T)
- Band-rumped storm petrel (*Oceanodroma castro*) (C)
- Anchialine pool shrimp (*Antecaridina lauensis*) (C)
- Anchialine pool shrimp (*Calliasmata pholidota*) (C)
- Anchialine pool shrimp (*Metabetaeus lohena*) (C)
- Anchialine pool shrimp (*Palaemonella burnsi*) (C)
- Anchialine pool shrimp (*Procaris Hawaiiana*) (C)
- Anchialine pool shrimp (*Vetericaris chaceorum*) (C)
- *Megalagrion* damselfly spp. (SOC)
- *Rhyncogonus* weevil spp. (SOC)
- *Hylaeus* yellow-faced bee spp. (SOC)
- *Nysius* seed bug spp. (SOC)
- Laysan albatross (*Phoebastria immutabilis*) (SOC)
- Black-footed albatross (*Phoebastria nigripes*) (SOC)
- Bristle-thighed curlew (*Numenius tahitiensis*) (SOC)
- Pacific golden plover (*Pluvialis fulva*) (SOC)
- 3 species of marine fishes listed on the *2004 IUCN Red List of Threatened Species*
- *Hippocampus* (seahorse) spp. (2 CITES species)
- 22 species of breeding seabirds
- 18 species of migratory shorebirds and waterfowl
- 62 species of hard corals
- Over 600 species of marine fishes and thousands of marine invertebrate species

Flora

- *Scaevola coriacea* (E)
- *Kanaloa kahoolawensis* (E)
- *Brighamia rockii* (E)
- *Sesbania tomentosa* (E)
- *Pritchardia affinis* (E)
- *Pleomele Hawaiiensis* (E)
- *Kokia drynarioides* (E)
- *Caesalpinia kavaiensis* (E)
- *Hibiscus brackenridgei* (E)
- *Isodendron pyrifolium* (E)
- *Abutilon menziesii* (E)
- *Chamaesyce celastroides* (E)
- *Peucedanum sandwicense* (T)
- *Solanum nelsonii* (C)
- *Bidens micrantha* (C)
- *Capparis sandwichiana* (SOC)
- *Portulaca molokiniensis* (SOC)
- *Bidens molokaiensis* (SOC)
- *Lepidium bidentatum* (SOC)
- *Nesoluma polynesicum* (SOC)
- Multiple species of native and endemic
- coastal plants

	Endangered (E)	**Threatened (T)**	**Candidate (C)**	**Species of Concern (SOC)**	**CITES& IUCN Red List species**
Flora	12	1	2	5	-
Fauna	11	2	7	8+	5

Guiding Documents and Plans:

- Hawai'i State Comprehensive Wildlife Conservation Strategy
- U.S. Pacific Islands Regional Shorebird Conservation Plan

- Pacific Coast Joint Venture Strategic Plan for Wetland Conservation in Hawai'i
- Hawai'i Coral Reef Local Action Strategies
- Offshore Islet Restoration Committee Draft Restoration Plan
- The Nature Conservancy's Hawaiian High Islands Ecoregion Plan
- Laysan Island Restoration Plan
- NMFS Recovery Plan for the Hawaiian Monk Seal
- USFWS/NMFS Recovery Plan for U.S. Pacific Populations of the Green Turtle
- USFWS/NMFS Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle
- USFWS Seabird Conservation Plan - Pacific Region
- USFWS Hawaiian Islands National Wildlife Refuge Master Plan
- USFWS Draft Revised Recovery Plan for Hawaiian Waterbirds
- USFWS Draft Revised Recovery Plan for the Laysan duck
- USFWS Recovery Plan for Hawaiian Dark-rumped Petrel and Newell's Manx Shearwater
- USFWS Northwest Hawaiian Islands Passerines Recovery Plan
- USFWS Recovery Plan for Blackburn's Sphinx Moth
- USFWS Plant Recovery Plans (multiple)

Partnership Opportunities
Productive partnerships have been formed and projects completed with the Hawai'i Divisions of Forestry and Wildlife and Aquatic Resources, USFWS Refuges Division, National Park Service, Offshore Islet Restoration Committee, Bishop Museum, USDA Wildlife Services, Ducks Unlimited, Trust for Public Lands, Maui Coastal Land Trust, NOAA, USGS Biological Resources Division, and a multitude of private non-profit conservation groups. Key strategic activities listed can be achieved by working with these existing partners. However, establishing closer relationships with USDA Natural Resource Conservation Service could assist with re-vegetation projects in wetland, offshore islet, and coastal strand Focus Areas.

2) American Samoa Focus Area

Objective
- Improve coral reef habitats and focus species by relieving anthropogenic stresses such as overfishing, habitat degradation, and excessive erosion of soil and contaminants.

This will be accomplished by assisting implementation of high priority actions identified by scientists and managers in the American Samoa Coral Reef Advisory Group. These actions are listed and prioritized in the American Samoa Coral Reef Local Action Strategies.

Biological Description
American Samoa's reefs are highly diverse, with over 200 species of corals, nearly 900 species of shorefishes, and a highly biodiverse invertebrate fauna. About 40 fish species are endemic and 5 species are listed on the IUCN Red List. Three native species of giant clams are present, all listed under CITES. Marine species listed under the Federal Endangered Species Act include green and hawksbill sea turtles. Although the reefs have demonstrated resilience following periodic hurricanes, overfishing continues to have major impacts. Additional stresses include global climate change, coral bleaching and disease, soil erosion from coastal watersheds, rapid population growth, coastal development, wetland filling, ship groundings, and water pollution. The Coastal Program can assist with projects that will benefit coral reefs and marine focus species by alleviating some of these anthropogenic stresses.

Key Resource Summary:
Focus Habitats:
- Coral reefs

- Mangrove wetlands

Focus Species:
- Hawksbill sea turtle (*Eretmochelys imbricata*) (E)
- Green sea turtle (*Chelonia mydas*) (T)
- *Tridacna* giant clam spp. (2 CITES species)
- *Hippopus hippopus* giant clam (CITES species)
- Humphead wrasse *(Cheilinus undulates)* (CITES listed)
- 5 species of marine fishes listed on the *2004 IUCN Red List of Threatened Species*
- 200 coral species
- 900 marine shorefish species and numerous marine invertebrates

	Endangered (E)	**Threatened (T)**	**Candidate (C)**	**Species of Concern (SOC)**	**CITES& IUCN Red List species**
Flora	-	-	-	-	-
Fauna	1	1	-	-	9

Guiding Documents and Plans:
- American Samoa Coral Reef Local Action Strategies
- Comprehensive Wetland Management Plans for the Islands of Tutuila, Aunuu, and Manua
- American Samoa National Park General Management Plan
- U.S. Pacific Islands Regional Shorebird Conservation Plan
- USFWS/NMFS Recovery Plan for U.S. Pacific Populations of the Green Turtle
- USFWS/NMFS Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle

Partnership Opportunities
Productive partnerships have been formed and projects have been completed with the American Samoa National Park and the American Samoa Department of Marine and Wildlife Resources. However, in order to achieve the key strategic activities for coral reef restoration listed below, a new partnership will be needed with the multi-agency American Samoa Coral Reef Advisory Group (CRAG). CRAG is the officially designated group responsible for identifying projects for funding by U.S. Coral Reef Initiative grants and other funding sources.

3) Mariana Archipelago Focus Area

Objectives
- Improve coral reef habitats and assist recovery of marine focus species by relieving anthropogenic stresses such as overfishing, habitat degradation, and excessive erosion of soil and contaminants
- Restore wetland habitat to assist in coral reef recovery and help recovery of endangered wetland birds
- Develop and implement methods of removing alien mammals from small offshore islets, which can then serve as safe havens from mammalian predators and brown treesnakes and provide habitat for the endangered Guam rail, multiple seabird species, coconut crabs, nesting green sea turtles, and native skinks and geckos.

These objectives will be accomplished by assisting in implementation of high priority actions identified and prioritized by scientists and listed in the Guam and CNMI Coral Reef Local Action Strategies, Guam and CNMI Comprehensive Wildlife Conservation Strategies, and other management plans. The objectives sometimes include specific recovery actions for listed species that are identified in Service species recovery plans. The Coastal Program will work with the Service Endangered Species Division to identify and, when possible, implement recovery actions.

Biological Description
The Mariana Archipelago includes the Territory of Guam and the Commonwealth of the Northern Mariana Islands (CNMI). The archipelago extends 500 miles north from Guam, the most densely populated and the largest of the Mariana Islands at 212 square miles. The other 14 islands are in the CNMI and have a total land area of 181 square miles, for a total of 393 square miles of land in the entire Mariana Archipelago. Rota, Tinian and Saipan account for the vast majority of CNMI's land area and all of its human population. Guam, Rota, Tinian, and Saipan are primarily limestone and the northern islands are volcanic. Some northern CNMI islands are volcanically active.

Terrestrial wildlife management is dominated by efforts to eradicate or control non-native species, including rodents, ungulates, and brown treesnakes. For this reason, establishing rodent-free and snake-free island refugia, such as Cocos Island located just offshore from Guam, is critical for maintaining Guam's native wildlife and for establishing re-introduction sites for species, like the Guam rail, that cannot survive in rat- and snake-infested areas. Coastal development and a proliferation of non-native weeds has resulted in the loss of much of the emergent wetlands and fringing mangrove wetland forests in Guam and CNMI. In addition to eliminating habitat for native wetland species, the sediment trapping and water purification functions of these areas have been lost. The resulting influx of eroded soils and non-point source pollution into the ocean has damaged coral reefs. Because the Mariana Archipelago lies on the edge of the highly diverse Indo-Pacific marine region, its coral reefs, bays, and lagoons support a diverse marine fauna dominated by hard corals. Federally listed species include green and hawksbill sea turtles. However, soil erosion into the marine environment, overfishing, poaching, water pollution, typhoons, ship groundings, coral bleaching and disease, global warming, and sea level rise are increasingly stressing the marine ecosystem. The Coastal Program can assist projects that will benefit coral reefs, coastal wetlands, offshore islets and associated focus species by alleviating some of these anthropogenic stresses.

Key Resource Summary:
Focus Habitats:
- Coral reefs
- Mangrove, emergent and estuarine wetlands
- Offshore islets

Focus Species:
- Hawksbill sea turtle (*Eretmochelys imbricata*) (E)
- Nightingale reed warbler (*Acrocephalus luscinia*) (E)
- Mariana moorhen (*Gallinula chloropus guami*) (E)
- Guam rail (*Rallus owstoni*) (E)
- Green sea turtle (*Chelonia mydas*) (T)
- Langford's tree snail (*Partula langfordi*) (C)
- Mariana Islands tree snail (*Partula gibba*) (C)
- Pacific tree snail (*Partula radiolata*) (C)
- Humphead wrasse *(Cheilinus undulates)* (CITES listed)
- 6 species of marine fishes listed on the *2004 IUCN Red List of Threatened Species*
- Coconut crab (*Birgus latro*) listed on the *2004 IUCN Red List of Threatened Species*
- 12 species of seabirds
- 20 species of migratory shorebirds and waterfowl
- Bristle thighed curlew (*Numenius tahitiensis*) (SOC and Bird of Conservation Concern)
- Multiple species of native skinks and geckos
- Over 520 species of hard and soft corals
- Over 1,000 species of shorefishes and thousands of marine invertebrate species

	Endangered (E)	Threatened (T)	Candidate (C)	Species of Concern (SOC)	CITES & IUCN Red List species
Flora	-	-	-	-	-
Fauna	4	1	3	1	8

Guiding Documents and Plans:

- CNMI Comprehensive Wildlife Conservation Strategy
- CNMI Coral Reef Local Action Strategies
- Guam Comprehensive Wildlife Conservation Strategy
- Guam Coral Reef Local Action Strategies
- U.S. Pacific Islands Regional Shorebird Conservation Plan
- USFWS/NMFS Recovery Plan for U.S. Pacific Populations of the Green Turtle
- USFWS/NNMFS Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle
- USFWS Recovery Plan for the Mariana Moorhen
- USFWS Recovery Plan for the Nightingale Reed-Warbler
- USFWS Recovery Plan for the Native Forest Birds of Guam and Rota
- USFWS Seabird Conservation Plan - Pacific Region

Partnership Opportunities

Productive partnerships have been formed and projects started with Guam Division of Aquatic and Wildlife Resources, USDA Wildlife Services, CNMI Division of Forestry and Wildlife, Mariana Islands Nature Alliance (MINA), Luta Marine Education Center, Rota High School, and CNMI Coastal Resources Management Office. To achieve the key strategic activities listed below, productive new partnerships could include the CNMI Division of Environmental Quality, USDA Natural Resource Conservation Service, USDA Forest Service, Guam Division of Forestry, Guam Environmental Education Partners Inc., and Guam Coastal Zone Management Program. A key for future funding is to work closely with the Micronesia Challenge initiative, which has a goal of raising a minimum of $18 million to conserve at least 30 percent of nearshore marine and 20 percent of forest areas in Micronesia (Palau, FSM, Marshall Islands, Guam, and CNMI) by the year 2020.

4) Caroline Islands Focus Area

Objectives

- Support the Republic of Palau and the Federated States of Micronesia (FSM) in creating and managing networks of community-based marine and terrestrial protected areas (PAs) that will provide protection for some of the world's most biodiverse marine and coastal ecosystems, including several rare and listed focus species
- Develop and implement methods of offshore islet restoration, including eradication of alien rodents for the benefit of endangered birds and other terrestrial focus species

These objectives will be accomplished by assisting implementation of high priority actions identified in the Micronesia Challenge initiative, National Biodiversity Strategy and Action Plans, the Blueprint for Conserving the Biodiversity of the Federated States of Micronesia, Nature Conservancy planning documents, and other relevant management plans.

Biological Description

The Caroline Islands includes the Republic of Palau and the Federated States of Micronesia and stretches nearly 2,000 miles across the western tropical Pacific. It includes over 900 high islands, atolls, and reefs but has a total land area of only 462 square miles. Both Palau and FSM are former U.S. trust territories

and maintain Compacts of Free Association with the U.S. that provide for continuing technical and financial assistance, such as that currently provided by the Service Pacific Islands Office.

Terrestrial biodiversity is high on the larger high islands, and includes several species of endemic birds, plants, and invertebrates. Because the western Caroline Islands lie near the center of the exceptionally diverse Indo-Pacific marine region, its coral reefs, bays, and lagoons support a rich marine fauna, including over 420 species of hard and soft corals and over 1,400 species of reef fishes. Although marine endemism is low, the amazingly high marine biodiversity of this area justifies making it a conservation priority. Federally listed marine species include green and hawksbill sea turtles, dugongs, and saltwater crocodiles. However, soil erosion into the marine environment, overfishing, poaching, water pollution, typhoons, ship groundings, road building activities in Palau and Kosrae, coral dredging, coral bleaching and disease, global warming, and sea level rise are increasingly stressing the marine ecosystem. Non-native species invasions are becoming an increasingly serious problem in terrestrial areas. The Coastal Program can assist projects that will benefit coral reefs, offshore islets and associated focus species by alleviating some of these anthropogenic stresses.

Key Resource Summary:

Focus Habitats:

- Coral reefs, seagrass beds, and grouper spawning aggregation areas
- Isolated atolls
- Mangrove, emergent, and estuarine wetlands

Focus Species:

- Hawksbill sea turtle (*Eretmochelys imbricata*) (E)
- Micronesian megapode (*Megapodius laperouse)* (E)
- Saltwater crocodile (*Crocodylus porosus*) (E)
- Dugong (*Dugong dugon*) (E)
- Green sea turtle (*Chelonia mydas*) (T)
- *Tridacna* spp. giant clams (5 CITES species)
- *Hippopus* spp. giant clams (2 CITES species)
- Humphead wrasse *(Cheilinus undulates)* (CITES listed)
- 11 species of marine fishes listed on the *2004 IUCN Red List of Threatened Species*
- Coconut crab (*Birgus latro*) listed on the *2004 IUCN Red List of Threatened Species*
- Over 420 species of hard and soft corals
- Over 1,400 species of nearshore fishes and thousands of marine invertebrate species

	Endangered (E)	**Threatened (T)**	**Candidate (C)**	**Species of Concern (SOC)**	**CITES& IUCN Red List species**
Flora	-	-	-	-	-
Fauna	4	1	-	-	20

Guiding Documents and Plans:

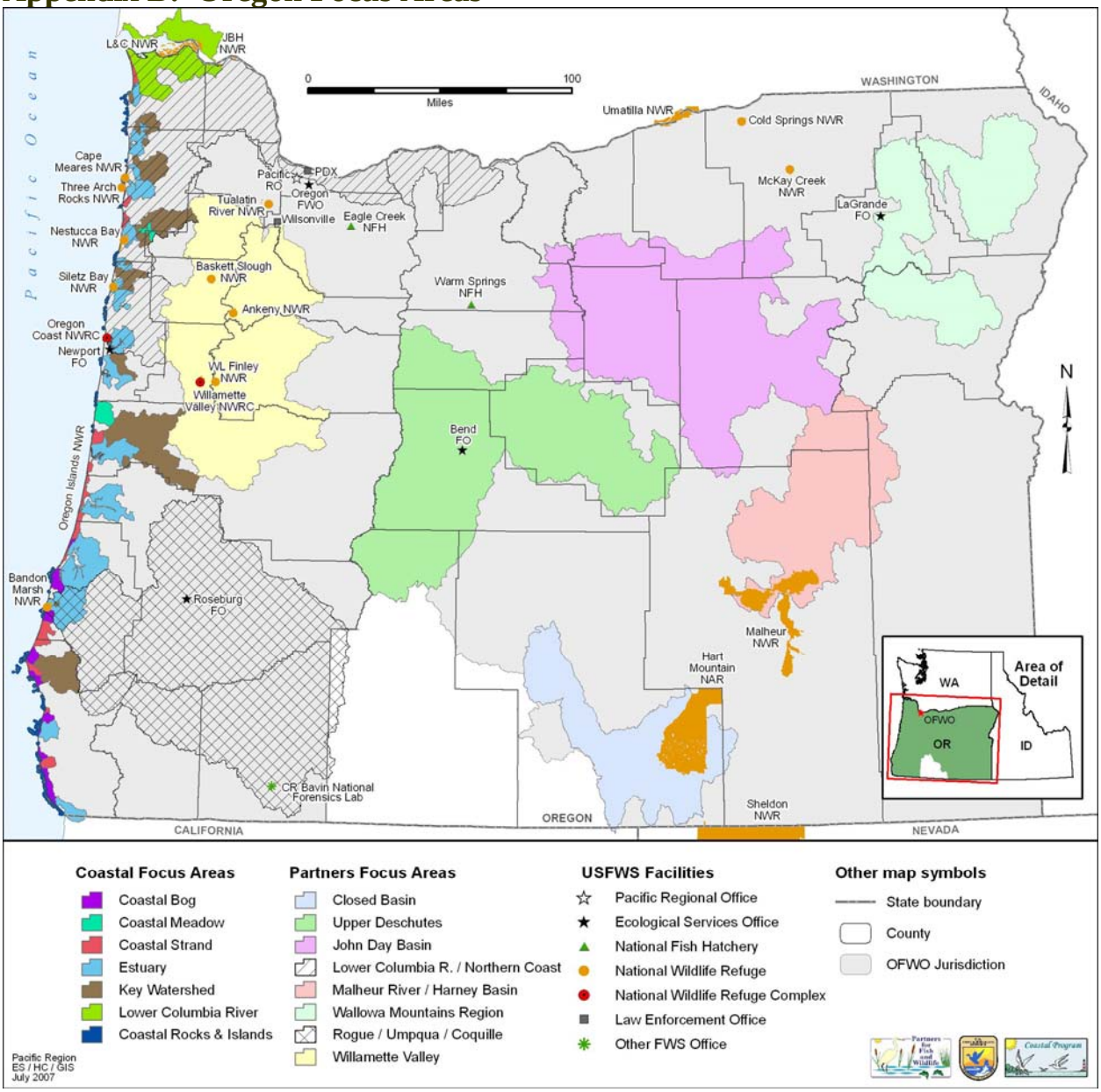
- Palau National Invasive Species Strategy
- Palau National Biodiversity Strategy and Action Plan
- Draft Palau Crocodile Management Plan
- TNC Draft Ecoregion Plan for Palau
- FSM National Biodiversity Strategy and Action Plan
- Pohnpei State Biodiversity Strategic Action Plan

- Blueprint for Conserving the Biodiversity of the Federated States of Micronesia
- USFWS/NMFS Recovery Plan for U.S. Pacific Populations of the Green Turtle
- USFWS/NMFS Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle

Partnership Opportunities

Productive partnerships have been formed and projects started with The Nature Conservancy's Micronesia Program, Palau Conservation Society, Conservation Society of Pohnpei, Kosrae Conservation and Safety Organization, and the Palau Bureau of Marine Resources. Key strategic activities listed below can be achieved by working with these existing partners and others. Establishing closer working relationships with USDA's Natural Resource Conservation Service, Chuuk Conservation Society, Yap Community Action Program, Yap Institute of Natural Science, and the Micronesia Conservation Trust would be helpful. A key for future funding is to work closely with the Micronesia Challenge initiative, which has a goal of raising a minimum of $18 million to conserve at least 30 percent of nearshore marine and 20 percent of forest areas in Micronesia (Palau, FSM, Marshall Islands, Guam, and CNMI) by the year 2020.

Appendix B: Oregon Focus Areas



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Oregon Partners Program Focus Areas

1) Willamette Valley Focus Area

Objectives: The Willamette Valley PFW program will focus on restoring oak savanna, upland prairie, and bottomland hardwood forest habitats to benefit listed species (Fender's blue butterfly, Oregon chub, Kincaid's lupine, Bradshaw's lomatium, Willamette daisy, Nelson's checkermallow, upper Willamette steelhead, and upper Willamette spring Chinook salmon) and candidate species (Taylor's checkerspot and streaked horned lark). Our efforts will focus on restoration of habitat elements that are essential to contribute to the recovery of these species. Many additional species will benefit from our projects, including grassland songbirds and rare plants.

- Enhance native upland prairie, oak savanna, and wetland prairie habitats to meet listed species habitat needs via reducing invasive woody species structure, reducing invasive understory composition, and improving native species composition
- Increase number of sites in key recovery units or basins that meet suitable habitat conditions to support potential recolonization by listed species (or reintroduction of listed species)
- Strategically implement restoration actions to achieve landscape network of habitats that augment occupied core habitats and allow for restored metapopulation dynamics.

Biological Description: The Willamette Valley contains globally imperiled oak savanna, oak woodland, upland prairie, and wet prairie habitats which support many at-risk species, including 11 listed species, two candidate species, and five species of concern. These declining habitat types support unique and significant biological diversity, yet 96 percent of habitats are in private ownership. Estimates of the remaining native upland prairie in this area are less than 1000 acres, making western Oregon upland prairie one of the most endangered ecosystems in the United States. Population growth, development pressure, and economic return in the agriculture and forestry sectors will continue to put rare and declining species and habitats at increasing risk in the Willamette Valley. Urban development and expansion of the vineyard and Christmas tree industries could further reduce remaining Oregon white oak habitats, which are critical to recovery of listed plant and invertebrate species as well as to sustaining populations of resident and migratory songbirds. These potential conflicts also provide the Service with opportunities to provide leadership in the development of broad conservation agreements, safe harbors, sustainable management planning, and restoration.

The Willamette Valley is about 100 miles long and 50 miles wide, bordered by the Cascade Range on the east and the Coast Range on the south and west. The Columbia River separates the Willamette Valley from the Puget Trough, Washington to the north.

Native vegetation of the Willamette Valley has been characterized as being dominated by prairies, bottomland/riparian hardwood forests, and oak savanna and wood woodlands. Since 1850, most of the

valley landscape has been converted to agricultural (41 percent), forest and woodland (34.8 percent), rural residential and urban land uses (10.3 percent). Less than 5 percent of the valley is in some form of public ownership.

Key Resources Summary:
Focus Habitats: Oak woodland and savanna, upland and wetland prairie, riparian, floodplain habitats, and emergent wetlands.

Focus Species: Federally listed: Fender's blue butterfly, Oregon chub, Kincaid's lupine, Bradshaw's lomatium, Willamette daisy, Nelson's checkermallow, winter steelhead, spring Chinook salmon; candidate: streaked horned lark, Taylor's checkerspot; species of concern: northwestern pond turtle, western gray squirrel, and multiple species of other declining and migratory grassland, oak savanna, and wetland birds.

Hot Spots: National Wildlife Refuge (NWR) lands and other protected open space habitats contain core habitats occupied by listed species populations. These areas will be the core habitats for species recovery actions within each recovery unit. Partners projects will be prioritized and staff resources expended in privately owned parcels located strategically to provide landscape connectivity to occupied core habitats.

Project Types: Our projects will be focused on improving habitat conditions, addressing key life history needs, and implementing identified recovery tasks for the listed species mentioned above. As a result, projects will focus on restoring native oak savanna, upland and wetland prairie, and floodplain habitats. Exotic species control, developing native grass and forb seed sources, establishing these native matrix species within historic habitats to provide key habitat constituents for listed species, augmentation of existing listed species plant populations, and reintroduction of historical populations will all be important project types.

Guiding Documents and Plans:
Partners staff participated in the development of these conservation plans and strategies for the Willamette Valley Focus Area. All these plans include strategies to conserve and restore the key species and Focus Area habitats identified by the Partners Program:

Oregon Conservation Strategy
Willamette Habitat Strategy
Willamette River Basin: Challenge of Change
Willamette Subbasin Plan
Regional Bio-diversity Strategy
Willamette Joint Venture Plan
Watershed Assessments (multiple for individual watershed councils)

Partnership Opportunities: The Willamette Valley Focus Area is highlighted in the CPR section of this Plan as an internal partnership model. In addition, strong external partnerships exist and continue to be developed with local, State, and Federal government agencies, non-governmental organizations, Soil and Water Conservation Districts (SWCDs), and watershed councils. The Willamette Valley NWR Complex has implemented a Memorandum of Understanding with both the OR Department of Fish and Wildlife (ODFW) and Natural Resource Conservation Service (NRCS) aimed at improving delivery of restoration projects to private lands in the Willamette Valley. For example, the Partners Program staff participated with the Mary's River Watershed Council to develop a locally led planning and restoration effort involving over 30 private landowners, Benton County, and Philomath High School. The Oregon Governor's office designated this effort an Oregon Solutions Project and will use the process for other community led efforts in Oregon.

List of Partners:
Natural Resource Conservation Service
Oregon Department of Fish & Wildlife

Oregon Watershed Enhancement Board
Benton County Parks & Open Space Program
Yamhill SWCD
The Nature Conservancy
Benton SWCD
East Lane SWCD
Mary's River Watershed Council
North Santiam Watershed Council
Long Tom Watershed Council
Friends of Buford Park
Institute of Applied Ecology
Greenbelt Land Trust
Marion County Parks
Native Seed Network
City of Eugene
City of Corvallis
Middle Fork Watershed Council
Luckiamute Watershed Council
McKenzie Watershed Council
Pacific Coast Joint Venture

2) Lower Columbia River-Northern Coast Focus Area

Objectives: The Lower Columbia-Northern Oregon Coast focus area will focus on restoration and enhancement of aquatic habitats to address limiting factors for coastal cutthroat trout, Pacific lamprey, and salmonid (Oregon coast coho, Chinook, steelhead, chum salmon) habitats. Migratory songbirds, shorebirds, waterfowl, and amphibians (northern red-legged frog) will also benefit from project actions. Our objectives are closely aligned with a state-led Oregon coast coho salmon conservation initiative. Our work in this focus area forms an intra-Service cross program priority with our Fisheries Research Office and NWRs and is strategically aligned to help implement the Western Native Trout Initiative. Key project types will be fish passage, instream habitat complexity, floodplain connectivity, channel reconstruction, and riparian restoration. Winter refugia and off channel habitats will be of primary interest. Active restoration projects that address near-term limiting factors and that help sustain key ecosystem processes will contribute to the success of the Oregon State Conservation Plan for Oregon Coast Coho and will be priorities.

- Build capacity in local watershed councils through offering of technical training and review, project development, and grant writing assistance
- Strategically implement restoration actions within high intrinsic potential habitats and anchor habitats to achieve instream passage, instream habitat complexity, floodplain connectivity, and riparian restoration essential to addressing life history bottlenecks for focal fish species.

Biological Description: Historically, the Columbia River produced more wild salmon than any river in the world. Fall Chinook, coho, steelhead, chum and coastal cutthroat trout all moved from the estuary into the surrounding rivers to spawn. Today less than 1 percent of the historic numbers of salmon return to natal waters and twelve stocks of Columbia and Snake River salmon are protected under the Endangered Species Act. The Columbia River Estuary is still a nationally significant estuary and one of the largest in the west coast at over 80,000 acres. It is rich in natural resources and supports some of the most productive remaining anadromous fish runs in the Northwest. It provides key refugia and feeding habitat for juvenile salmon to transition from freshwater to saltwater. It also provides key migration stopover and wintering habitat for up to 25,000 shorebirds annually.

Strategic restoration of wetland, riparian, and instream habitats in the lower portions of the Columbia River Watershed and the north coast tributaries is essential to improve ecosystem functions and sensitive fish populations.

The land ownership is predominantly private with industrial forest in the higher parts of the watershed and agriculture in the lowlands. There is limited Federal ownership with small NWR island complexes, Fort Clatsop National Park, and limited BLM lands, although State-owned forest lands are more prevalent in the Tillamook watershed. The economy is driven by timber, agriculture, and recreational interests with seasonal tourism contributing substantially.

Key Resource Summary:
Focus Habitats: Instream habitat and fish passage, off channel, riparian, and floodplain habitats, freshwater and tidal wetlands.

Focus Species: Listed: Oregon coast coho salmon, chinook salmon, chum salmon, steelhead, Columbian white-tailed deer; species of concern: coastal cutthroat trout (anadromous and resident forms), Pacific, brook & river lamprey, northern red-legged frog, northwest pond turtle, migratory waterfowl, shorebirds, and neotropical birds.

Hot Spots: ODFW is leading an Oregon coastal coho conservation effort that will include a component of private lands restoration. Key reaches with high intrinsic potential habitat or within coho anchor habitats will be priorities. Some examples of these include: Columbia River systems such as the Scappoose, Clatskanie, Lewis and Clark, and Youngs Bay. Key north coast river systems include the Nehalem, Necanicum, Neawanna, Ecola, Tillamook, Netarts, and Nestucca.

Project Types: Projects will focus on winter refugia habitats, juvenile rearing habitats, and spawning habitats. Project types will include fish passage, instream habitat complexity, floodplain connectivity, off channel habitat development, restoration of and connectivity to wetland and tidally influenced habitats, and riparian restoration. Project opportunities within anchor habitats or within high intrinsic potential habitat will be priorities.

Guiding Documents and Plans:
- Scappoose Bay Watershed Assessment
- Scappoose Bay Barrier Assessment
- Necanicum River Watershed Assessment
- Lower Columbia River Restoration Prioritization Framework (LCREP)
- Status Review of Coastal Cutthroat Trout from Washington, Oregon, and California
- LCREP: Comprehensive Conservation and Management Plan
- Lower Columbia River-Clatskanie Subbasin Watershed Assessment
- Lower Columbia Salmon Recovery: Fish and Wildlife Subbasin Plan
- Draft Coastal and Estuarine Land Conservation Plan
- Draft Oregon Conservation Plan for Oregon Coast Coho
- Joint Venture Implementation Plan: Lower Columbia River
- Joint Venture Implementation Plan: Northern Oregon Coast
- ODFW Coast Range Subbasin Fish Management Plan
- ODFW Oregon Conservation Strategy
- Status of Oregon Coast Coho
- Withdrawal of Proposed Rule To List the Southwestern Washington/Columbia River Distinct Population Segment of the Coastal Cutthroat Trout as Threatened
- Northern Pacific Region Shorebird Conservation Plan

Partnership Opportunities: The existing Partners Program has broad support from local landowners and excellent local leadership by non-profit groups, watershed councils, and local communities.

We are working successfully with State, local, and Federal agencies and organizations to provide landowner technical and financial assistance to strategically implement watershed restoration actions. We expect this streamlined project delivery and collaborative approach to continue through the future, with increases in landowner interest and participation.

List of Partners:

Numerous private landowners
Necanicum Watershed Council
Columbia River Estuary Study Taskforce
Clatsop Soil and Water Conservation District
Clatsop County Diking District 12
Rainland Flycasters
Oregon Watershed Enhancement Board
Weyerhaeuser Industries
Pacific Coast Joint Venture
North Coast Lands Conservancy
Northwest Ecological Research Institute
Upper and Lower Nehalem Watershed Councils
Young's Bay Watershed Council
Ducks Unlimited
Oregon Department of Fish and Wildlife
Longview Fibre
Many Federal agencies

3) John Day Basin Focus Area

Objectives: The objective of our efforts within the John Day Basin is to address limiting factors for focal fish species such as improving in-channel habitat complexity, improving water temperature conditions through riparian restoration, and increasing available habitat for fish species by removal of fish passage barriers. Our intent is to approach fish passage issues from a strategic standpoint designed to treat all barriers along a connected stretch to achieve full passage that maximizes adult and juvenile access to all habitats. Species benefited by these efforts include listed bull trout and steelhead as well as species of concern redband and westslope cutthroat trout, Chinook salmon, Columbia spotted frog, and riparian dependent migratory bird species. We are addressing key habitat priorities within many planning documents including the draft Bull Trout Recovery Plan and the Northwest Power and Conservation Council's (NWPCC) John Day Subbasin Plan. Furthermore, through cross program cooperation with the Services' Columbia River Fisheries Research Office we are assisting with implementation of the Western Native Trout Initiative and Fish Passage programs. We will focus on working with ranchers to implement restoration that improves the aquatic environment while maintaining working ranches.

- Strategically eliminate passage barriers for focus aquatic species (including bull trout, steelhead trout, redband trout, Pacific lamprey, Chinook salmon, and westslope cutthroat trout) opening entire systems to passage
- Address key instream and riparian habitat limiting factors for listed bull trout, steelhead, and native trout species to contribute toward recovery
- Work with multiple, adjacent landowners to address limiting factors on a landscape scale, and address key private land properties adjacent to protected public lands with key resources.

Biological Description: The John Day River is the second longest free-flowing river in the United States, running nearly 300 hundred miles with three segments designated as Federal Wild and Scenic. The country is characterized by steep basalt canyon walls, juniper, and sagebrush dotted hills, and mixed ponderosa pine forest. Historically, the John Day is one of the most culturally rich river corridors in the State with human presence in the system spanning more than 10,000 years. A majority of the land is ceded territory of Warm Springs Tribe and a small amount in the North Fork John Day is ceded territory of the Umatilla Tribe. Over 95 percent of the basin is zoned for agriculture and forestry uses.

The John Day is known for its historically diverse runs of anadromous fish and is famous for Columbia River Chinook salmon which reached over 100 pounds. This river is a particularly important resource for the recovery of native fish since it has never had any hatchery operations and has one of the last all-wild runs of anadromous fish east of the Cascade Mountains. It has no major dams and supports one of the

largest and most viable runs of wild steelhead in the Northwest, as well as native trout species of interest; bull trout, redband trout, and westslope cutthroat trout

Key Resource Summary:
Focus Habitats: Fish passage, instream habitat, riparian, and wetlands.

Focus Species: Listed species: bull trout, steelhead and; species of concern: Chinook salmon, redband trout, westslope cutthroat trout, Pacific lamprey, Columbia spotted frog, riparian dependent migratory birds, and at-risk amphibians and reptiles.

Hot Spots: The John Day is one of 22 recovery units for bull trout and is home to the only population of westslope cutthroat trout still found in Oregon. Of special significance to multiple native trout species are upper tributaries of the mainstem John Day and the south fork John Day. Of particular interest specifically for listed bull trout are upper tributaries to the north fork and middle fork John Day. Our goal is to target passage and habitat conditions on a stream system by stream system basis.

Project Types: The Partners Program will focus on stream and riparian habitat restoration and protection, strategically addressing fish passage barriers at culverts and irrigation diversions, providing fish screens at irrigation diversions, and collaborating in partnerships that address low instream flows and modification of land management practices to improve water quality and temperature. Projects that address multiple issues on a landscape scale will be higher priorities.

Guiding Documents and Plans:
- Bull Trout Draft Recovery Plan
- John Day Subbasin Plan
- Oregon Conservation Strategy (Blue Mountains Ecoregion)
- Conservation Strategy for Landbirds in the Columbia Plateau of Eastern Oregon and Washington
- Coordinated Implementation Plan for Bird Conservation in Eastern Oregon
- ODFW Instream Flow Restoration Needs
- ODFW Fish Distribution & Barrier Data
- Various local watershed Passage Assessment Documents
- Various local Watershed Assessments
- Western Native Trout Initiative (WNTI)
- Pacific Region Fisheries Program Strategic Plan

Partnership Opportunities: Solid partnerships have been developed through 5 years of outreach and successful collaboration. Because of these partnerships the Service is able to influence the direction of other Federal and State program dollars, and meet key resource needs that other programs may not be able to address. Partners Program has been successful in partnering with Bonneville Power Administration, Fisheries Restoration and Irrigation Management Act, Forest Service programs, Oregon Watershed Enhancement Board, ODFW Fish Screening program, Farm Bill programs, and non-governmental organizations. Cross program partnerships have also been developed between our Service Fisheries Office (Columbia River Fisheries Resource Office) and the Partners Program to evaluate, fund, and streamline compliance of projects that benefit fish species in this Focus Area. The Partners Program has partnered with non-traditional partners in the ranching and agricultural communities, providing the opportunity to keep working lands active while conserving species.

List of Partners:
- Grant SWCD
- Wheeler SWCD
- Monument SWCD

- Upper South Fork John Day Watershed Council
- North Fork John Day Watershed Council
- Warm Springs Tribe
- Umatilla Tribe
- ODFW
- Oregon Watershed Enhancement Board
- Bonneville Power Administration (BPA)
- U.S. Forest Service
- NRCS- John Day Basin Team
- BOR
- The Nature Conservancy (TNC)
- Oregon Water Trust
- Numerous private landowners
- Wheeler County Road Department

4) Rogue, Umpqua, Coquille Focus Area

Objectives: The Rogue and Umpqua basins provide the opportunity to work with local communities to advance recovery of listed plants through implementation of sustainable growth and habitat restoration plans. Work on recovery of Kincaid's lupine will compliment efforts in the Willamette Valley by expanding recovery actions into the southern portion of the species' range. The Coquille basin offers unique opportunities to work within the timber and agricultural communities to provide technical assistance and funding to restore anadromous fish passage, increase stream complexity and floodplain connectivity, restore wetlands, and establish riparian vegetation to improve stream condition for aquatic species.

The Rogue, Umpqua, and Coquille focus area is still in the partnership development phase. Recent urban growth has made local communities more conscious of needs to preserve open space and unique habitats, providing an excellent opportunity for development of Partners projects.

- Contribute to the recovery of Kincaid's lupine through strategic and effective oak savanna restoration actions that focus on restoring historic canopy and understory conditions, in particular restoring native species composition and structure
- Contribute to the Oregon State Conservation Plan for Oregon Coast Coho through watershed council coordination, private landowner outreach, and strategic implementation of restoration actions within high intrinsic potential habitats and anchor habitats to achieve instream passage, instream habitat complexity, floodplain connectivity, and riparian restoration essential to addressing life history bottlenecks for focal fish species
- Build capacity in local watershed councils through offering of technical review and input, project development, and grant writing assistance.

Biological Description: Combinations of topography, geology, soils, and climatic influences at the convergence of southwestern Oregon's Cascade, Siskiyou, and Klamath mountain ranges have resulted in a unique array of plants and animals. Species typically found in ecologically distinct regions come together to create species richness and diversity unmatched anywhere in the Cascade Mountains. The area supports several listed and endemic plant species as well as diverse and productive wetland and riparian habitats. Development pressure has contributed to habitat loss and fragmentation.

Our focus within the resource rich Rogue, Umpqua, and Coquille basins is restoration of oak woodland, oak savanna, instream, riparian, wetland, and potentially vernal pool habitats to target recovery of listed

plants and to provide habitat benefits to several listed and species of concern fish, reptiles, and amphibians.

The Klamath-Siskiyou region was included in World Wildlife Fund's assessment of the 200 most diverse areas for species world-wide. There are many pockets of endemic plant communities and nearly half of all native plants in Oregon are found in this ecoregion. Noted as an Area of Global Botanical Significance by The Nature Conservancy, the area supports several listed plant species, some endemic to the State and others endemic to the ecoregion. An important focus of the Partners program will be to restore habitat for listed Kincaid's lupine in the southern most extent of its range. This will complement work being done on the Willamette Valley populations and enable our program to contribute to restoration of this declining, globally sensitive habitat type. Focused restoration will contribute to Kincaid lupine recovery as well as benefits to Gentner's fritillary (for oak habitats strategically selected in the Rogue basin) and for improving the habitat conditions for the recently delisted Douglas County population of the Columbian white-tailed deer.

Other listed plants that have benefited from Partners Program activities in this area include the endangered rough popcorn flower which is endemic in the Umpqua valley. This species requires wet prairie and seasonal wetland restoration as well as intensive plant propagation and outplanting activities. The Partners Program will assist in restoring habitat structure, species composition, and hydrology while working with recovery staff in our office to assist with research, survey and monitoring. Threatened vernal pool fairy shrimp, endangered large-flowered meadowfoam, and endangered Cook's lomatium occur in vernal pool and wet meadow habitats. These shallow water and ephemeral habitats are being impacted by development pressures both to the wetlands and to surrounding upland habitats critical to the proper ecological function of these wet areas. Due to the development pressure, the primary tools to benefit vernal pool related species will likely be Habitat Conservation Plans or wetland mitigation banks rather than the Partners program.

The Coquille watershed is the largest river system that originates in the Coast Range. The river's terminus with the ocean is a long, narrow bay system measuring over 750 acres about half of which is comprised of tide lands and the other half submerged eel grass beds and tidal flats. The river is characterized by a narrow coastal plain and alluvial valley with a mountainous interior. The headwaters of the South Fork Coquille are in the Klamath Mountain Province which is composed of volcanic, diorite, and serpentine rocks. The remainder of the basin lies in the southern part of the Coast Range Province, composed of steeply sloped sandstone.

The predominant land uses are timber production, agriculture, and some mining. Approximately 70 percent of the watershed is forested with the upper reaches of all four forks of the river and most tidewater streams are commercial forests. Approximately 40 percent of the watershed is private industrial forest land. Federal, State, and county lands occupy about 30 percent of the watershed. The Bureau of Land Management (BLM) and U.S. Forest Service administer the largest of these public holdings. Another 30 percent of the basin is in smaller non-industrial private holdings.

Though the Coquille ranks high compared to other Oregon coast watersheds, for fisheries production and diversity, the present populations of some species including Oregon coast coho, chum, spring Chinook, and sea-run coastal cutthroat trout are presently at only a small fraction of stock sizes before 1900. Key factors limiting anadromous fish production are water quality, sedimentation and erosion, elevated temperature, loss of channel complexity, isolation of the floodplain, and lack of riparian vegetation. The Coquille also contains the Bandon Marsh National Wildlife Refuge and its abundant migrating shorebirds, wintering waterfowl habitats, and threatened and endangered species including California brown pelican and the recently delisted bald eagle.

Key Resource Summary:
Focus Habitats: Oak woodlands, oak savanna, wetlands, fish passage, instream habitats, riparian, Agate Desert vernal pools, and coastal NWRs.

Focus Species: Listed: Kincaid's lupine, Gentner's fritillary, rough popcorn flower, large-flowered woolly meadowfoam, Cook's lomatium, vernal pool fairy shrimp; species of concern: Columbian white-tailed deer (recently delisted sub-population), coastal cutthroat trout, Oregon coast Coho salmon, Pacific lamprey.

Hot Spots: Oak savanna and woodland habitats in Douglas County will be a key focus to provide habitat conditions suitable for future reintroduction of Kincaid's lupine and the primary focus of our Partners program efforts over the next 5 years. ODFW is leading an Oregon coastal coho conservation effort that will include a component of private lands restoration. Key reaches with high intrinsic potential habitat or within coho anchor habitats will be priorities for the Partners program.
Additional areas of importance to the Service include: oak woodland habitats in Jackson County to benefit Gentner's fritillary and wetland prairie habitats in the northern portions of Douglas County to achieve popcorn flower recovery. These areas will continue to be recovery Focus Areas and will receive Partners program attention depending on Program funding for staff and projects, which currently limits our ability to be a major player.

Project Types: Our oak savanna and woodland projects will be focused on exotic species control, thinning of invasive conifers or oaks due to suppression of fire regimes, reintroducing key ecosystem-regulating disturbance regimes, developing native grass and forb seed sources, establishing these native matrix species within historic habitats to provide key habitat constituents for Columbian white-tailed deer and Kincaid's lupine, and eventual augmentation of existing listed species plant populations or reintroduction of historical populations, as appropriate.

Our aquatic focus will be on improving habitat conditions and addressing limiting factors for Oregon Coast coho, coastal cutthroat trout, and other native and anadromous species. As a result, projects will focus on winter refugia habitats, juvenile rearing habitats, and spawning habitats while sustaining healthy forest land and meeting State-mandated water quality standards. Project types will include fish passage to ensure adult and juvenile fish have access to a full variety of stream habitat types throughout the season. Other project types will include: instream habitat complexity, floodplain connectivity, off channel habitat development, reducing livestock impacts, and riparian restoration.

Our focus over the last 3 years in this area has been to work with local staff implementing oak savanna and woodland restoration to learn about the most effective techniques in use for this habitat type. We have conducted field tours of successful restoration sites in our Willamette Valley Focus Area, provided on site demonstrations of invasive removal techniques, and conducted extensive site visits and technical review of potential projects. The results of these staff labor-intensive activities have been implementation of high quality oak savanna restoration on over 500 continuous acres, planning for oak habitat restoration on over 2000 acres, development of high functioning partnerships, increase in local expertise, and a landscape level oak restoration focus.

Guiding Documents and Plans:
- Recovery Plan for Gentner's Fritillary
- Recovery Plan for the Rough Popcorn Flower
- Draft Willamette Valley Prairie Species Recovery Plan
- Programmatic Conservation Agreement for Kincaid's Lupine in Douglas County
- Voluntary Agreement for Kincaid's Lupine in Douglas County (Private Timberland Owners)

- Draft Recovery Plan For Listed Species of the Rogue Valley Vernal Pool and Illinois Valley Wet Meadow Ecosystems
- Roseburg BLM Resource Management Plan
- Oregon Conservation Strategy
- Columbian White-Tailed Deer Post-Delisting Monitoring Plan
- Columbian White-Tailed Deer Monitoring Report 2003-2005
- Coquille Watershed's Action Plan
- Draft Oregon Conservation Plan for the Oregon Coast Coho Evolutionary Significant Unit
- Coos Bay District Resource Management Plan
- Coos and Coquille Area Agricultural Water Quality Management Plan
- North Fork Coquille River Riparian Shade Assessment, Technical Data for Water Quality Management Plan
- Middle Fork Coquille River Riparian Shade Assessment, Technical Data for Water Quality Management Plan
- Geomorphic and Riparian Assessment of the Lower South Fork of the Coquille River
- PIF Conservation Strategy for Landbirds in Lowlands and Valleys of Western Washington and Oregon

Partnership Opportunities: This Focus Area is still in the partnership development phase. Currently, we have well developed partnerships with Soil and Water Conservation Districts and NRCS for oak savanna restoration and with watershed councils and ODFW staff for instream work. Recent urban growth has made local communities more conscious of needs to preserve open space and unique habitats, providing an excellent opportunity for development of Partners projects. Potential partners in this effort include watershed councils in the Umpqua, Rogue, and Coquille basins, municipal and county agencies, along with private landowners.

List of Partners:
- Oregon Department of Fish and Wildlife
- Oregon Department of Agriculture
- Coquille Watershed Council
- Timber companies and farms
- Municipal Governments
- Coquille Watershed Association
- Coos Watershed Council
- U.S. Forest Service
- Natural Resource Conservation Service
- Bureau of Land Management
- Douglas County Parks Department
- Coos County Soil and Water Conservation District
- Douglas County Soil and Water Conservation District

5) Upper Deschutes Focus Area

Objectives: In the Upper Deschutes we will focus on restoration and enhancement of aquatic habitats to address limiting factors for native trout (bull trout, interior redband trout, and summer steelhead) and salmonid (spring Chinook and sockeye) habitats. Migratory songbirds, shorebirds, waterfowl, and declining or candidate amphibians (Columbia spotted frog and Oregon spotted frog) will also benefit from project actions. Our objectives are closely aligned with subbasin and watershed assessment plans and matches strategically with the Western Native Trout Initiative. Priority projects focus on fish passage, river channel morphology, instream habitat complexity, riparian vegetation, floodplain connectivity, wetlands, and livestock impacts.

- Contribute to the Northwest Power and Conservation Council's Deschutes Subbasin Plan through watershed council coordination and private landowner outreach
- Build capacity in local watershed councils through offering of technical training, technical review, and input, project development, and grant writing assistance
- Strategically implement restoration actions within high intrinsic potential habitats and anchor habitats to achieve instream passage, instream habitat complexity, floodplain connectivity, and riparian restoration essential to addressing life history bottlenecks for focal fish species.

Biological Description: The Upper Deschutes Focus Area encompasses the Crooked River, Metolius River, and the Upper Deschutes River (upstream of Round Butte Dam) and their respective tributaries. The Focus Area is large and complex and is comprised of a diverse landscape of mountain forest, juniper and sage rangelands, rugged outcroppings, and deep river canyons. Higher elevations consist of ponderosa and lodgepole pine forests, wet meadows, and savannah-like mountain grasslands. Mid-elevation lands support mixed conifer and ponderosa pine forests. Along the river corridors, stands of old growth ponderosa pine and lodgepole are often mixed with lush wet marshes in the summer and large expanses of dry meadows. The central elevated lands are characterized by forest landscape merging with the high desert. Much of this semi-arid plateau is overlain with a blanket of pumice and volcanic ash and covered by windblown sandy soils. The lower-elevation lands are characterized by rolling sagebrush hills, juniper woodlands, scattered ranchlands, irrigated cropland and pastures, and urban and suburban communities.

Land and water management practices over the last 120 years have resulted in a decline in riparian condition, river channel morphology, water quality and quantity, and subsequent declines or extirpation of native fish populations. Most streams in the Upper Deschutes basin are degraded and fish habitat and production is substantially diminished from historical conditions.

Land is predominantly under public ownership by the U.S. Forest Service and Bureau of Land Management and the major land cover types are forest and grasslands. Land use and water utilization on private lands are primarily for livestock grazing, timber harvest, and irrigation. Recreation and tourism have been evolving as one of the area's leading industries. While agriculture currently plays a lesser role, it dominates water resource use. Stream flows are heavily influenced by dam operations and irrigation withdrawals. Irrigation diversions provide barriers to fish movement and fish entrainment and subsequent mortality in irrigation ditches.

Central Oregon is Oregon's fastest growing region since the late 1980's which contributes to the loss and degradation of habitat. One of the most distinctive characteristics drawing growth to the Upper Deschutes basin is the river systems and its aquatic life. In particular, threats come from habitat fragmentation, invasive species, inappropriate livestock management, and urban and suburban development. The health of the rivers and sagebrush steppe habitat will continue to be threatened by development pressure unless proactive steps to protect watershed resources are taken by landowners, community members, and resource agencies.

Key Resource Summary:
Focus Habitats: Stream, riparian, floodplain, wetlands, and sagebrush steppe.

Focus Species: listed: Bull trout; reintroduced listed: spring Chinook, sockeye, and summer steelhead; candidate species: Columbia spotted frog, Oregon spotted frog; species of concern: interior redband trout, greater sage grouse; other trust species: migratory wetland, riparian, sagebrush steppe, and grassland birds.

Hot Spots: Portland General Electric and Warm Springs Power Enterprises (co-Federal Energy Regulatory Commission license applicants) are pursuing efforts to reintroduce anadromous fish upstream of Round Butte Dam. The intent of the plan is to restore summer steelhead, spring Chinook, and sockeye to their historical range in the upper Deschutes River basin, including the Crooked River below Ochoco and Bowman dams.

Project Types: Our projects will be focused on improving habitat conditions and addressing limiting factors for native trout (bull trout, interior redband trout, and summer steelhead) and salmonid (spring Chinook and sockeye) habitats. Projects will focus on: restoring fish passage, restoring river channel morphology, instream habitat complexity, improving floodplain connectivity, restoring wetlands, reestablishing riparian vegetation, reducing juniper invasion in intact sagebrush steppe habitats near sage grouse leks, and reducing livestock impacts.

Guiding Documents and Plans:

- USFWS Draft Bull Trout Recovery Plan
- NPCC Deschutes Subbasin Plan
- UDWC Upper Deschutes Action Plan
- CRWC Crooked River Watershed Restoration Work Plan
- ODFW Upper Deschutes River Subbasin Fish Management Plan
- EPA Upper Deschutes Resource Management Plan
- USFS Interior Columbia Basin Ecosystem Management Project
- Various Agricultural Water Quality Management Area Plan
- Various Federal Wild and Scenic Rivers & State Scenic Waterway Management Plan
- PIF Conservation Strategy for Landbirds of the East-Slope of the Cascades Mountains in Oregon and Washington

Partnership Opportunities: This Focus Area offers the Service unique opportunities to work with the ranching and agricultural communities and to provide technical assistance and funding to develop new restoration projects in priority reaches. Some partners, typically considered as "non-traditional" by other Service programs, are typical partners for this Focus Area.

The Partners Program has developed a presence within numerous local level collaborations including local watershed councils, SWCDs, non-governmental organizations, ODFW, and U.S. Forest Service. We are also forging new partnerships with NRCS and Bonneville Environment Foundation that will strengthen the potential to get premium projects on the ground.

By developing a presence in the Upper Deschutes basin, the Partners Program is able to contribute to influencing and shaping various Federal, State, and local partners' actions to bridge the gap between meeting landowner needs and achieving important and quantifiable benefits for Federal trust species and their habitat in a focused fashion.

List of Partners:

- Bend Metro Park and Recreation District
- City of Prineville
- Crook County SWCD
- Crooked River Watershed Council
- Deschutes County SWCD
- Private landowners and ranches
- Oregon Department of Fish and Wildlife
- Oregon Watershed Enhancement Board
- Upper Deschutes Watershed Council

- U.S. Forest Service

6) Closed Basin (Warner and Chewaucan) Focus Area

Objectives: The Closed Basin region offers the Service unique opportunities to work within the ranching and agricultural communities to provide technical assistance and funding to restore stream, wetland, and sagebrush steppe habitats while sustaining healthy rangeland to benefit grazing and meeting state-mandated water quality standards.

We will focus on restoration and enhancement of aquatic habitats to address limiting factors for threatened Warner sucker and interior redband trout, which was petitioned for listing in 1997. Strategic enhancements to upland sagebrush steppe habitats will be targeted in greater sage grouse brood rearing and nesting habitats and near active leks in an attempt to provide benefits to this species of concern. It is expected that these upland enhancements will also benefit other sagebrush steppe dependent land birds. Our stream objectives are closely aligned with activities identified in locally and state led efforts in Lake County to improve the native trout fishery and are strategically aligned with the Western Native Trout Initiative and with Warner sucker recovery actions. Our upland objectives create a privately owned, working lands corollary to Hart Mountain National Wildlife Refuge's onsite sagebrush steppe improvement efforts and thus contribute to intra-Service cross program objectives for sage grouse population enhancement.

- Contribute to implementing tasks in the Recovery Plan for Threatened and Rare Native Fishes of the Warner Basin and Alkali Subbasin through watershed council coordination and private landowner outreach
- Build capacity in local watershed councils through offering of technical training, technical review, and input, project development, and grant writing assistance
- Strategically develop restoration actions within key Warner sucker and interior redband trout habitats to achieve instream fish passage and screening in particular to restore connectivity between adfluvial (lake) and fluvial (stream) habitat conditions to maximize diversity and abundance of fish representing the various life history strategies
- Strategically implement sagebrush steppe enhancements, in particular juniper removal and upland seeding, to provide cost effective benefits to greater sage grouse brood rearing and nesting habitats.

Biological Description: This Focus Area encompasses the closed stream systems of Summer Lake, Chewaucan River to its terminus in Lake Abert, Honey, Twentymile, and Deep Creeks, and the Warner Lakes. The topography is rocky and rugged with steep canyon headwaters. Streams flow from dry forest headwaters to flat high desert terminal lakes. Irrigation is prevalent with complex ditch systems. Wetland habitats and seasonal meadows persist in the lowlands and along the margins of the lakes. Seasonally available water results in spring migrant bird habitat in playas, meadows, marshes, and alkali flats. Uplands are characterized by expansive sagebrush communities, including a portion of the sage grouse range in Oregon. Private lands are located in key areas for partnerships such as along major waterways, floodplains, and wetlands.

Volcanic activity created the area's characteristic steep, tilted faultblock mountains and closed drainage basins. During the Pleistocene, large lakes filled the Summer and Warner valleys. Over time the climate became drier and most of the lakes evaporated. The present lakes and playas are all that remain of these ancestral lakes. With no surface outlets, saline concentrations have risen until now most lake waters in

the basin are too salty for domestic or irrigation use. Some freshwater fish habitat exists at the margins and mouths of the lakes.

Land is predominantly in Federal ownership in this area with the major land cover being rangeland administered by Bureau of Land Management and U.S. Fish and Wildlife Service (Hart Mountain National Antelope Refuge, 285,000 acres). Sheldon National Wildlife Refuge (575,000 acres) is adjacent to the Closed Basin Focus Area, is beginning its Comprehensive Conservation Plan (CCP), and it is expected that a boundary expansion of the focus area will be recommended from the landscape-level conservation planning associated with the CCP. These two refuges are exemplary of high desert ecosystem habitats, with trust species such as pronghorn antelope and sage grouse traveling over private and public land between and adjacent to the refuges. Native rangeland vegetation consists primarily of low sagebrush, big sagebrush, bluebunch wheatgrass, and Sandberg bluegrass. Other land cover types include pasture, grassland, and ponderosa pine and white fir forest that occurs in elevations of 5,000 to 8,000 feet in areas that receive higher precipitation (generally 18 inches or more). Limited cultivation does occur with alfalfa being the primary commodity. The economic base centers on lumber, government, recreation, and agriculture (livestock, hay, and grain).

Interior redband trout, also known as Great Basin Redband trout, were petitioned for listing under the Endangered Species Act. The Service found that they were not warranted for listing in March 2000, however, stepped up conservation efforts led by ODFW and local landowners were initiated at this time and continue today. Historically, interior redband trout were likely distributed throughout all passable creeks in the basin from the lakes (when they were not dry) and streams up to the headwaters. Surveys in the early 1990's indicate that redband trout were present in all areas sampled, including: Hart and Crump Lakes, Honey Creek, Snyder Creek, Twentymile Creek to the confluence with Twelvemile Creek, and the Chewaucan River. Federally threatened Warner sucker probable historic range includes the main Warner Lakes (Pelican, Crump, and Hart), other accessible standing or flowing water in the Warner Valley, or low to moderate gradient reaches of the tributaries which drain into the Valley including Deep Creek (up to the falls), Honey Creek drainage, and Twentymile Creek drainage. Both redband trout and Warner suckers opportunistically take advantage of the Warner Basin's stream and lake habitats. The lakes provide a less stable habitat than the streams since the lakes occasionally go dry, however, redband and Warner suckers tend to grow larger in lakes. Redband trout and Warner suckers are known to migrate downstream to use the lake habitats when available, and migrate upstream to spawn or staying as residents in the lake. Drying of the lakes presumably results in loss of lake-dwelling populations, which are supplemented from stream dwelling individuals during wet years.

Key limiting factors and threats to interior redband trout include stream channel and watershed degradation, fish passage barriers, and predation and competition from introduced fish. Juniper expansion can result in a loss of water available for stream flow during the dry summer months. The significant amount of water and nutrients used by juniper has resulted in a loss of understory vegetation and an increased potential of soil nutrient loss, runoff, and erosion in the watershed. Juniper expansion also reduces quality of sage grouse nesting and brood-rearing habitats by reducing understory vegetation and by providing raptor perches.

Addressing fish passage and screening on irrigation diversions with willing landowners will be a major program focus. Other priorities will include riparian and meadow enhancements, including planting and exclusion fencing. Selective upland and riparian treatments that target invasive juniper removal and native grass and forb enhancements will be a priority in areas known to support greater sage grouse nesting, brood rearing, or lek habitats. Selectively targeting juniper for removal will contribute to increased ground vegetation, improved subsurface flows, and reduced erosion and sedimentation.

Valuable wetland and playa habitats exist in the Focus Area for migratory and nesting waterfowl and shorebirds. This is a key migration stopover and breeding area for many key shorebirds species such as American avocet, Black-necked stilt, Snowy plover, and curlew. Up to 100,000 shorebirds annually use these core habitats. Many of the core habitats for these species are in State or Federal ownership and under management. However, substantial high quality seasonal wetlands are on private lands. Project opportunities are somewhat limited currently due to difficulties over water rights and lack of Service staff time to develop new partnerships beyond those that we are exploring for our instream and upland focus species.

Key Resource Summary:
Focus Habitats: Fish passage, instream habitat, riparian, floodplains, wetlands, sagebrush steppe.

Focus Species: Listed: Warner sucker; species of concern: interior redband trout, greater sage-grouse, pygmy rabbit, migratory wetland and riparian birds, sagebrush steppe and grassland birds.
Birds of Conservation Concern: Snowy plover, American avocet, Long-billed curlew, Wilson's Phalarope

Hot Spots: Key systems for Warner sucker or interior redband trout include: Hart Lake, Pelican Lake, Crump Lake, Honey Creek, Deep Creek, Camas Creek, Twentymile Creek, and the Chewaucan River.

Project Types: Projects will focus on instream fish passage and screening, riparian enhancements, steam bank restoration, juniper removal in sagebrush steppe, and upland and riparian plantings.

Guiding Documents and Plans:
- Recovery Plan for Threatened and Rare Native Fishes of the Warner Basin
- Joint Venture Implementation Plan for Eastern Oregon Closed Basins
- Lakeview District BLM Land and Resource Management Plan
- Oregon Conservation Strategy
- Greater Sage-Grouse Conservation Assessment and Strategy for Oregon 2005
- Goose & Summer Lakes Basin Agricultural Water Quality Management Area Plan
- Intermountain West Shorebird Conservation Plan
- Intermountain West Waterbird Conservation Plan
- PIF Conservation Strategy for Landbirds in the Columbia Plateau of Eastern Oregon and Washington
- Hart Mountain National Antelope Refuge Comprehensive Master Plan

Partnership Opportunities: The Partners Program has been working with local ranchers and irrigation districts, Warner Valley Watershed Council, Lakeview Soil and Water Conservation District, and ODFW to provide fish passage and screening on the Chewaucan River, Deep Creek and Honey Creek. The Chewaucan River projects in particular are part of a large and successful locally led partnership to restore interior redband trout populations. These projects have relied heavily on ODFW's fish screening cost share program and on contributions by the Oregon Fisheries Restoration and Irrigation Mitigation Act of 2000 (FRIMA) program funds. Strong partnership and participation with local SWCD and watershed council staff are resulting in increased landowner participation in screening diversions on Honey and Deep Creeks.

We anticipate continuing this fish screening and passage partnership to work with additional interested landowners in the Summer and Warner Lakes Basins. Ideally, projects would combine fish friendly diversion technology and fish screening at each site and would upgrade and consolidate diversions and irrigation technology where appropriate to meet ranching and water conservation needs.

The Partners Program started working in 2005 on sagebrush steppe habitat enhancements to stabilize ephemeral streams in meadow systems and remove invading juniper to benefit greater sage grouse in

known nesting and brood rearing habitats. This has been a partnership with local ranchers, Warner Valley Watershed Council, Lakeview SWCD, ODFW, and NRCS. Opportunities exist to expand this partnership to include more ranches and to also provide cattle exclusion fencing in riparian areas used as sage grouse brood rearing areas. Opportunities also exist for Long-billed curlew conservation with grassland habitats, and for shorebirds with playas and saline lake habitats.

These projects have provided tremendous fish and wildlife habitat benefits and have helped develop an efficient and effective partnership network that has potential to expand to meet additional landowner needs.

List of Partners:
- Private Landowners and Ranches
- Irrigation Districts
- Lakeview SWCD
- Warner Valley Watershed Council
- Lake County
- ODFW
- Lakeview BLM
- Fremont National Forest
- NRCS
- Hart Mountain NWR
- Cattlemen's Association
- Ducks Unlimited
- Trout Unlimited
- Intermountain West Joint Venture

7) Wallowa Mountains Region Focus Area

Objectives: Our focus in the Wallowa Mountains Region will be on restoring native bunchgrass prairie, sagebrush steppe, alkaline meadows, wetlands, and riverine habitats to benefit listed species (Spalding's catchfly, Howell's spectacular thelypody, bull trout, Chinook salmon, and steelhead) and other species of concern (greater sage grouse, Columbian sharp-tailed grouse, and Columbia spotted frog). Our efforts will focus on restoration of habitat elements that are essential to contribute to the recovery of these species. Many additional species will benefit from our projects, including grassland, sagebrush steppe, riparian birds, and waterfowl. Our objectives are closely aligned with the State of Oregon's Conservation Strategy and sage grouse conservation plan, and with the Western Native Trout Initiative.

- Enhance native bunchgrass prairie, sagebrush steppe, and moist alkaline meadows to meet the habitat needs of target species by reducing invasive woody species, reducing invasive understory composition, and improving native species composition and structure
- Increase the number and extent of sites that support suitable habitat conditions for species recovery to facilitate population expansion and potential recolonization (or reintroduction) by listed species
- Strategically implement restoration actions in local river systems to augment occupied core habitats and allow for restored movement of listed fish between spawning and adult foraging areas.

Biological Description: Surrounding the Wallowa Mountains of northeast Oregon are several river valleys and diverse habitats that support important fisheries, wetlands, and a host of focus species. The Grande Ronde River and its largest tributary, the Wallowa River, support bull trout, Chinook salmon, and steelhead, as well as bald eagles and extensive wetlands. Adjacent to the Wallowa River Valley is Zumwalt Prairie, one of the largest remaining native grasslands in the Pacific Northwest and an area

hosting more than a dozen rare plant and animal species, including Spalding's catchfly and Columbian sharp-tailed grouse. The Powder River Valley and Pine Creek on the south side of the Wallowa Mountains support bull trout, wetlands, rare plants, and sagebrush steppe uplands occupied by greater sage grouse. Much of this area is private ranchland with irrigated agriculture along the river valleys. It is the historic home of the Nez Perce Tribe and the tribe is actively involved in restoring fisheries in this area. A diverse and proactive group of stakeholders is working in this area to restore riparian and upland habitats and protect fish and wildlife in a fashion that sustains and compliments their rural communities.

Key Resource Summary:
Focus Habitats: Wetlands, alkaline meadow habitats, instream habitat, native bunchgrass prairie, and sagebrush steppe.

Focus Species: Federally listed fish: bull trout, Chinook salmon, and steelhead;
Federally listed plants: Howell's spectacular thelypody and Spalding's catchfly;
candidate species and species of concern: Columbia spotted frog, Columbian sharp-tailed grouse, greater sage grouse, Pacific lamprey, and redband trout.

Hot Spots: Key locations for species recovery efforts include (1) Zumwalt Prairie, the largest and highest-quality expanse of Palouse bunchgrass prairie remaining in North America; (2) the Wallowa and Grande Ronde rivers, which support recoverable populations of bull trout, Chinook salmon, and steelhead; (3) Pine Creek, which supports an important bull trout population with excellent opportunities for recovery; and (4) Baker Valley, which supports rare alkaline meadow habitats and extensive wetlands that are home to a threatened plant.

Project Types: Our projects will be focused on improving habitat conditions and addressing factors that are limiting species recovery. In bunchgrass prairie, sagebrush steppe, and alkaline meadow habitats, our projects will focus on controlling invasive species and improving native species composition to help restore areas that have been degraded by past land use practices. In riverine habitats, our projects will focus on removing barriers to fish passage, increasing instream habitat complexity, and restoring riparian habitat.

Guiding Documents and Plans:
- Draft Recovery Plan for Bull Trout
- Recovery Plan for the Howell's Spectacular Thelypody
- Draft Recovery Plan for the Spalding's Catchfly
- Powder Subbasin Plan
- Grande Ronde Subbasin Plan
- Pacific Northwest Native Fish Habitat Initiative
- Snake/Hells Canyon Subbasin Plan
- The Oregon Conservation Strategy (ODFW)
- Coordinated Implementation Plan for Bird Conservation in Eastern Oregon (IWJV)
- PIF Conservation Strategy for Landbirds in the Northern Rocky Mountains of Eastern Oregon and Washington
- Greater Sage-Grouse Conservation Assessment and Strategy for Oregon (ODFW)
- Draft Oregon Management Plan for Columbian Sharp-Tailed Grouse (ODFW)
- Various Local Watershed Assessments

Partnership Opportunities: There are several well established locally-led groups in the Wallowa Mountains Region that work actively with private landowners to plan and implement habitat restoration projects. Through our Partners Program and other funding sources such as the Private Stewardship Grant Program, we have established partnerships with these stakeholder groups and landowners to provide

technical assistance and funding. Partnering opportunities are excellent with requests for technical and financial assistance far exceeding the current level of program funding and staff time. Our conservation priorities are shared by many other individuals, agencies, and organizations.
We are currently working with numerous private landowners, local watershed councils, non-profit conservation groups, SWCDs, ODFW, and other Federal agencies. The focus of our efforts in this area are to restore instream habitat, provide fish passage and screening, restore key habitats that support rare plants and animals, and facilitate cooperative conservation with local landowners. Success in our initial efforts in this area have increased our standing among local stakeholders and opened the door to our participation in an increased number of restoration and habitat improvement opportunities. These projects have high resource benefits and typically involve a wide range of cost-sharing partners.

List of Partners

- Grande Ronde Model Watershed
- Wallowa Resources
- The Nature Conservancy
- Wallowa Soil and Water Conservation District
- Union Soil and Water Conservation District
- Baker Valley Conservation Districts
- Confederated Tribes of the Umatilla Indian
- Oregon Department of Fish and Wildlife
- Natural Resource Conservation Service
- Nez Perce Tribe
- Ducks Unlimited
- Oregon Watershed Enhancement Board
- Powder Basin Watershed Council

8) Malheur River/Harney Basin Focus Area

Objectives: Our focus is to contribute to bull trout recovery in the North and Middle Forks of the Malheur River and to enhance wetland habitats in the Harney Basin for waterfowl and other migratory birds. Our efforts will focus on restoration of habitat elements that contribute strongly to reducing limiting factors for target species. Our objectives are closely aligned with the State of Oregon's Conservation Strategy and with the Western Native Trout Initiative.

- Strategically implement restoration actions in the Malheur River Basin to augment occupied bull trout core habitats and reduce barriers and obstacles in migratory corridors between spawning and overwintering areas
- Provide support to Malheur NWR refuge staff for suitable wetland habitat restoration and management actions in the Harney Basin in the vicinity of Malheur NWR.

Biological Description: The Malheur River flows nearly 200 miles from its headwaters in the Strawberry Mountains to the Snake River. It includes several major tributaries, the Middle, North, and South Fork Malheur. The North and Middle Forks of the Malheur River are important for bull trout recovery. Restoration of feeding, overwintering, and migratory habitat has been identified as a primary objective for bull trout recovery in this river basin. A key need is to add fish friendly upgrades to a number of irrigation diversions so that fish can move up and down river without getting blocked by diversion dams or trapped in irrigation ditches.

The Harney Basin contains Malheur NWR and its abundant spring migratory bird habitats. Core habitats are contained within the approximately 200,000-acre refuge, however, private irrigated hay lands north of the refuge provide shallow flooded habitats used seasonally by sandhill cranes, long-billed curlews, and

other waterfowl. The Silvies River, a low gradient waterway that terminates in Malheur Lake, supports riparian and floodplain wetlands that are used extensively by a wide variety of birds, including Long-billed curlews, a bird of conservation concern. The Blitzen River, mainly contained within the refuge, was ditched and straightened for agricultural purposes by the turn of the century. The refuge portion contains native willow and dogwood riparian vegetation that provides excellent neotropical migrant habitat and supports a quality interior redband trout population. Private land partnerships in grassland habitats north of the Refuge are important for the conservation of Long-billed curlew.

Private lands are located in key areas for partnerships such as along major waterways, floodplains, and wetlands. Threats to habitat come from recreation, loss of ranching operations, invasive species, inappropriate livestock management, and development.

Key Resource Summary:
Focus Habitats: Instream habitat, riparian, and wetlands.

Focus Species: Listed: bull trout; species of concern: Columbia spotted frog, interior redband trout, and wetland dependent birds. Birds of Conservation Concern: Long-billed curlew, Snowy plover, American avocet, Wilson's phalarope

Hot Spots: Key locations for species recovery efforts include (1) the North Fork and Middle Fork of the Malheur River which support recoverable populations of bull trout; and (2) the extensive and highly unique wetland habitats adjacent to the Malheur NWR such as the Silvies River floodplain and grasslands.

Project Types: Our projects will be focused on improving habitat conditions and addressing factors that are limiting species recovery. In riverine habitats, our projects will focus on removing barriers to fish passage, increasing instream habitat complexity, and restoring riparian habitat. In wetland areas within the Harney Basin, our projects will focus on promoting land management practices that maintain and improve seasonal wetlands.

Guiding Documents and Plans:
- Draft Recovery Plan for Bull Trout
- Malheur Subbasin Plan
- The Oregon Conservation Strategy (ODFW)
- Coordinated Implementation Plan for Bird Conservation in Eastern Oregon (IWJV)
- Pacific Northwest Native Fish Habitat Initiative
- Intermountain West Shorebird Conservation Plan
- Intermountain West Waterbird Plan
- PIF Conservation Strategy for Landbirds in the Columbia Plateau of Eastern Oregon and Washington

Partnership Opportunities: The High Desert region offers the Service unique opportunities to work within ranching and agricultural communities to provide leadership, technical assistance, and funding to proactively restore grasslands, streams, and wetland habitats while sustaining those agricultural communities.

Intra-service cross program efforts will expand partnership opportunities and optimize program efficiency by capitalizing on field office and refuge expertise, location, and local contacts. While this Focus Area is still in the partnership development phase, substantial gains have been made in the communities and with local watershed councils, SWCDs, State and Federal partnerships, and landowner interest. Through our Partners Program and other funding sources such as the National Fish and Wildlife Foundation, we have

established partnerships with stakeholder groups and landowners to provide technical assistance and funding. Our conservation priorities are shared by many other individuals, agencies, and organizations.

We are currently working with numerous private landowners, local watershed councils, non-profit conservation groups, SWCDs, ODFW, and Federal agencies. Success in our initial efforts in this area have increased our standing among local stakeholders and opened the door to our participation in an increased number of restoration and habitat improvement opportunities. These projects typically involve a wide range of cost-sharing partners.

Over the next 5 years, the Partners Program will assist stakeholders in project development, recruiting cost-share partners, and providing technical assistance with design and implementation. The emphasis will be on fish passage, removal of instream barriers, restoration of grasslands, and maintenance of seasonal wetlands. Success in meeting these 5-year projections is dependent on continued success bringing funds to private landowners through OWEB and PSGP grants, Farm Bill (WRP, WHIP) programs, and ODFW's Landowner Incentive Program funds. This includes stability in funding and staffing of these programs, but also in program implementation methodology and timing.

The primary limiting factor in attaining these projections will be the ability to develop cost-share partnerships that provide sufficient funds from both Federal and non-Federal sources. In some cases, our staff workload and the workload of other cooperating agencies may limit our ability to implement projects as quickly as we would like.

List of Partners:
- Harney SWCD
- Malheur Watershed Council
- Ducks Unlimited
- Oregon Department of Fish and Wildlife
- Natural Resource Conservation Service
- Oregon Watershed and Enhancement Board
- Intermountain West Joint Venture

Oregon Coastal Program Focus Areas

1) **Lower Columbia River Focus Area**

Objectives:
- Contribute to anadromous fish recovery by working with private landowners and local, State and Federal agencies
- Provide technical assistance to local watershed councils
- Implement restoration actions that address critical life history requirements of State and federally listed or candidate aquatic species.

Biological Description: In EPA's 2006-2011 Strategic Plan, the Columbia River Basin was elevated to one of our Nation's Great Water Bodies, joining six other watersheds. The basin covers a significant portion of the Pacific Northwest and encompasses 260,000 square miles. Columbia River salmon and steelhead runs were once the largest runs in the world. The many uses of the Columbia River have caused significant constraints and declines in the salmon population. Currently, the populations of wild salmon and steelhead are significantly depressed from historic numbers, causing fifteen salmonid populations to warrant protection under the Endangered Species Act. The Columbia River Estuary is a nationally

significant estuary and one of the largest in the west coast at over 80,000 acres. It provides essential juvenile salmonid rearing habitat and is critical to the recovery of the basin's anadromous fish.

Key Resource Summary:
The restoration of wetland, riparian, and instream habitats in the lower Columbia River is essential to recover the anadromous fish populations. Tidal wetlands, tributary spawning and rearing habitats, and off channel and winter refugia habitats for juveniles are the highest priority habitats for anadromous fish recovery.

Focus Habitats: Four habitats will be addressed within the Focus Area: in-stream aquatic habitat and fish passage, off-channel juvenile salmonid rearing habitat, riparian and floodplain habitats, and freshwater and tidal wetlands.

Focus Species: The focus species will be anadromous fish including the federally listed sockeye (Onchorynchus nerka), chinook (Onchorynchus tshawytscha), coho (Onchorynchus kisutch) and chum salmon (Onchorynchus keta), steelhead (Onchorynchus mykiss) and bull trout (Salvelinus confluentus) as well as species of concern, including coastal cutthroat trout (Onchorynchus clarki clarki) and Pacific lamprey (Lampetra tridentata).

Guiding Document and Plans:
The lower Columbia River Focus Area was developed by using existing landscape and/or ecological analyses and pertinent information on sensitive and critical habitat. Washington Department of Fish and Wildlife (2005), Oregon Department of Fish and Wildlife (2006) and Vander Schaaf et al. (2006) completed landscape strategic plans that identify key or important areas for fish and wildlife. Where available, existing recovery plans were used in the process, including those developed by the National Oceanic and Atmospheric Administration (2006).

Partnership Opportunities: Partnership options include private landowners and local, State and Federal agencies. Watershed councils established under the Oregon Watershed Enhancement Board, the Lower Columbia River Estuary Partnership and the Columbia River Estuary Study Taskforce are the primary forums for discussing, partnering and implementing fish and wildlife restoration activities.

2) Estuary Focus Area

Objectives:
- Contribute to tidal wetland restoration by working with private landowners and local, State and Federal agencies
- Provide technical assistance to local watershed councils
- Implement restoration actions that address the loss of or degradation of tidal wetland.

Biological Description: Estuaries and tidal wetlands are a priority habitat for the Oregon Coastal Program. There are 22 major and minor estuaries in Oregon that include four geomorphic types: river dominated, drowned river mouth, bar-built or blind estuaries. In the Pacific Northwest and elsewhere, they are of high ecological importance and provide essential habitat for many marine and anadromous fish as well as migratory birds. Most of the larger estuaries have been altered through dredging, filling or diking. Consequently, tidal wetlands have decreased by 40 percent or more in most of Oregon's estuaries over the last century. We have included all tidal wetlands as a Focus Area because of their high ecological importance.

Key Resource Summary:

The restoration of tidal wetland is essential for many marine and anadromous fish and migratory birds. This Focus Area addresses the importance of this habitat for a variety of species.

Focus Species: Although many species require tidal wetlands, the focus will be primarily on adult and juvenile salmonids for foraging, rearing, and/or migration. Anadromous fish that may benefit include chinook and coho salmon, steelhead, cutthroat trout, and Pacific lamprey. In addition, up to 25,000 migratory and wintering shorebirds such as Dunlin and Western sand piper will benefit.

Guiding Documents and Plans:
The estuary Focus Area was developed by using existing landscape and/or ecological analyses and pertinent information on sensitive and critical habitat. Oregon Department of Fish and Wildlife (2006) and Vander Schaaf et al. (2006) completed landscape strategic plans that identify key or important areas for fish and wildlife. Where available, existing tidal wetland inventories, such as the one developed by Scranton (2006), were used in the process. In addition, the Northern Pacific Coast Shorebired Conservation Plan was also used.

Partnership Opportunities: Partnership options include private landowners and local, State and Federal agencies, and Tribal governments. Watershed councils established under the Oregon Watershed Enhancement Board will be the primary forum for discussing, assessing, partnering and implementing tidal wetland restoration activities.

3) Coastal Strand Focus Area

Objectives:
- Contribute to coastal strand restoration and snowy plover management by working with private landowners and local, State and Federal agencies
- Engage and provide technical assistance to local entities in managing snowy plover habitat
- Implement restoration actions that address the loss of or degradation of snowy plover breeding habitat in emphasis areas.

Biological Description: Oregon's coastal strand habitat ranges from sparsely vegetated, unstable dunes and beaches to stable dunes that are characterized by meadow or forest. This habitat has been altered dramatically through the introduction of European beachgrass (Ammophila arenaria) in the early 1900s. This non-native beachgrass has successfully out competed native vegetation and has become the dominate plant community. The change in plant community has caused the foredune to stablilize and reduced the amount of sparsely vegetated, instable substrate about the high water. This change has resulted in a decline of species that prefer open, sandy habitats with a high degree of disturbance, leading the State and Federal listing of the western snowy plover as threatened and State listing the pink sand-verbena. It has also altered the amount of habitat available for migratory and wintering shorebirds and as marine mammal haul-out sites. We have included all of the emphasis areas that were identified in Oregon Parks and Recreation Department (2004) as a Focus Area because of their importance in recovering the western snowy plover in Oregon.

Key Resource Summary:
The restoration of coastal strand is essential for migratory and resident shorebirds, marine mammals and endemic plant communities. This Focus Area addresses the importance of this habitat for a variety of species by including sites that will be emphasized for natural resources management by the State.

Focus Species: Although many species require coastal strand, the primarily focus will be on restoring and maintain suitable breeding habitat for the western snowy plover. Other species that may benefit

include pink sand-verbena (Abronia umbellata ssp. Breviflora), sand dune phacelia (Phacelia argentea), and streaked horned lark (Eremophila alpestris strigata).

Guiding Document and Plans:
The coastal strand Focus Area was developed by using existing landscape and/or ecological analyses and pertinent information on sensitive and critical habitat. Oregon Department of Fish and Wildlife (2006) and Vander Schaaf et al. (2006) completed landscape strategic plans that identify key or important areas for fish and wildlife. Where available, existing plans were used in the process, such as the habitat conservation and recovery plans developed for the western snowy plover (OPRD 2004 and USFWS 2001).

Partnership Opportunities: Partnership options include private landowners and local, State and Federal agencies. Cooperation with the Oregon Department of Fish and Wildlife and Oregon Parks and Recreation Department will be essential in discussing, assessing, partnering and implementing coastal strand restoration activities on private lands.

4) Coastal Meadow Focus Area

Objectives:
- Contribute to coastal meadow restoration and Oregon silverspot butterfly by working with private landowners and local, State and Federal agencies
- Engage and provide technical assistance to local entities in managing the butterfly's habitat
- Implement restoration actions that address the loss of or degradation of the butterfly's habitat in conservation areas.

Biological Description: Coastal meadows or early successional, coastally-influenced grassland habitat is essential for the Oregon silverspot butterfly. This habitat is essential for the butterfly's lifecycle as it contains the caterpillar host plant, early blue violet, and adult nectar sources. Coastal meadows were historically maintained in the butterfly's range (coastal areas of Washington, Oregon and northern California) through soil and climatic conditions, salt-spray or mist and disturbance regimes, like fire, grazing and wind-blown sand (USFWS 2001b).

Disturbance regimes necessary to maintain coastal meadows have been significantly influenced or changed over the past 150 years. Widespread habitat loss and degradation have resulted from conditions that favor plant succession, including the reduced frequency of fire and grazing and the spread of non-native plants, like European beachgrass and Scotch broom (Cytisus scoparius) (USFWS 2001). These influences have made coastal meadow habitat with intact plant associations extremely rare. We have included all of the conservation areas that were identified by USFWS (2001b) as a Focus Area because of their importance in recovering the butterfly in Oregon.

Key Resource Summary:
The restoration of coastal meadow is essential for the Oregon silverspot butterfly and the endemic plant community. This Focus Area addresses the importance of this habitat for the recovery of the butterfly and the conservation areas and management described in the recovery plan.

Focus Species: The primary species emphasis for this Focus Area will be the Oregon silverspot butterfly and the endemic meadow plant community that it depends upon.

Guiding Documents and Plans:
The coastal meadow Focus Area was developed by using existing landscape and/or ecological analyses and pertinent information on sensitive and critical habitat. Oregon Department of Fish and Wildlife

(2006) and Vander Schaaf et al. (2006) completed landscape strategic plans that identify key or important areas for fish and wildlife. Where available, existing plans were used in the process, such as the recovery plan developed for the Oregon silverspot butterfly (USFWS 2001b).

Partnership Opportunities: Partnership options include private landowners and local, State and Federal agencies. Cooperation with the Oregon Department of Fish will be essential in discussing, assessing, partnering and implementing coastal meadow activities on private lands.

5) Coastal Bog Focus Area

Objectives:
- Contribute to coastal bog restoration and western lily recovery by working with private landowners and local, State and Federal agencies
- Engage and provide technical assistance to local entities in managing the lily's habitat

- Implement restoration actions that address the loss of or degradation of the lily's habitat, as defined by the recovery plan.

Biological Description: Coastal bogs, especially early successional bogs or coastal scrub on poorly drained soils, are important habitat for the western lily. This endangered plant occurs in bogs and along the margins of ephemeral waterbodies. It is found in Oregon within in close proximity to the Pacific Ocean in Coos and Curry Counties. The lily has been extirpated from a significant number of sites and currently occurs at fewer than seven sites in sizeable numbers (greater than 100 plants) and at 28 sites with much fewer numbers.

The same conditions that are suitable for the lily are also most suitable for cranberry culture. Consequently, the development of the cranberry industry has resulted in either the direct loss of potential habitat and/or a change in the local hydrology. In Oregon, the number of acres in cranberry culture has grown steadily overtime and its growth has been significant in recent years. There are currently about 2,500 acres in cultivation in Coos and Curry Counties. Coastal bogs were also historically maintained in the lily's range through disturbance regimes, like fire. Disturbance regimes have changes significantly over the past century causing many bogs to be unsuitable for the lily.

Significant and localized habitat loss and degradation has resulted from cranberry cultivation or by suppressing disturbance making coastal bog habitat with intact plant associations extremely rare. We have included all of the known current and historic sites identified by USFWS (1998) and USFWS (in litt. 2005) as a Focus Area because of their importance in recovering the western lily in Oregon.

Key Resource Summary:
The restoration of coastal bog is essential for the recovery of the western lily and the endemic plant community. This Focus Area addresses the importance of this habitat for the recovery of the lily and considers the sites and management described in the recovery plan.

Focus Species: The primary species emphasis for this Focus Area will be the western lily and the endemic bog plant community that it depends upon.

Guiding Documents and Plans:
The coastal bog Focus Area was developed by using existing landscape and/or ecological analyses and pertinent information on sensitive and critical habitat. Oregon Department of Fish and Wildlife (2006) and Vander Schaaf et al. (2006) completed landscape strategic plans that identify key or important areas

for fish and wildlife. Where available, existing plans were used in the process, such as the recovery plan developed for the western lily (USFWS 1998) and unpublished data (USFWS *in litt.* 2005).

Partnership Opportunities: Partnership options include private landowners and local, State and Federal agencies. Cooperation with the Oregon Parks and Recreation Department and The Nature Conservancy will be essential in discussing, assessing, partnering and implementing coastal meadow activities on private lands.

6) Key Watersheds Focus Area

Objectives:
- Contribute to anadromous fish recovery by working with private landowners and local, State and Federal agencies
- Provide technical assistance to local watershed councils
- Implement restoration actions that address critical life history requirements of the federally listed coho salmon.

Biological Description: This Focus Area includes the following watersheds:

Necanicum River	Nehalem River
Nestucca River	Salmon River
Devils Lake	Schooner-Drift Creeks (Siletz watershed)
Beaver Creek	Drift Creek (Alsea River watershed)
Siuslaw River	Sixes River
Elk River	Tillamook Bay (Miami, Kilchis and Wilson Rivers)

The watershed councils in these watersheds are working with the Oregon Watershed Enhancement Board to restore salmonid populations. These watersheds provide critical salmonid habitats including riparian and aquatic habitats used by adult and juvenile salmon for foraging, spawning, rearing, and/or migration.

Key Resource Summary:
The restoration of riparian and instream habitats in these watersheds is essential to recover anadromous fish populations. Tributary spawning and rearing habitats and off channel and winter refugia habitats for juveniles are the highest priority habitats for anadromous fish recovery. Four habitats will be addressed within the Focus Area: in-stream aquatic habitat and fish passage, off-channel juvenile salmonid rearing habitat, riparian and floodplain habitats, and freshwater wetlands.

Focus Species: The focus species will be anadromous fish including the chinook, coho and chum salmon, steelhead, cutthroat trout and Pacific lamprey.

Guiding Documents and Plans:
The key watersheds Focus Area was developed by using existing landscape and/or ecological analyses and pertinent information on sensitive and critical habitat. ODFW (2006) and Vander Schaaf et al. (2006) completed landscape strategic plans that identify key or important areas for fish and wildlife.

Partnership Opportunities: Partnership options include private landowners and local, State and Federal agencies. Watershed councils established under the Oregon Watershed Enhancement Board are the primary forums for discussing, partnering and implementing fish and wildlife restoration activities.

7) Coastal Rocks and Islands Focus Area

Objectives:
- Contribute to the protection of existing island wildlife and terrestrial habitats by working with local, State, Federal agencies and Tribes
- Participate in long-term wildlife monitoring projects with State and Federal agencies and university partners to insure population trend data is obtained
- Implement restoration actions that address the loss or degradation of terrestrial habitat on rocks and islands
- Conduct baseline inventories for native plants, shorebirds, seabirds, small mammals, reptiles, amphibians and terrestrial invertebrates.

Biological Description: Coastal rocks and islands are a priority habitat for the Oregon Coastal Program. This Focus Area includes 1,864 rocks and islands scattered along 320 miles of the Oregon Coast. The habitats can be separated into two major categories, which include vegetated and non-vegetated rocks and islands. The rocks and islands are of high ecological importance supporting 13 species of breeding seabirds, four species of pinnipeds, nesting American peregrine falcons (*Falco peregrinus*), roosting and foraging habitat of Aleutian cackling geese (*Branta hutchinsii leucopareia*), foraging habitat for bald eagles, and nesting, roosting, and foraging habitat for Black oystercatchers (a Bird of Conservation Concern). The vegetated rocks and islands serve as a botanical reserve for native plants; however, a botanical survey has only been accomplished on a single island. Small mammals, reptiles, amphibians, and terrestrial invertebrates occur on many of the rocks and islands and may contain genetically distinct populations due to isolation from the mainland, but no assessments of inventories have been conducted. An extensive inventory is planned for breeding Black oystercatchers.

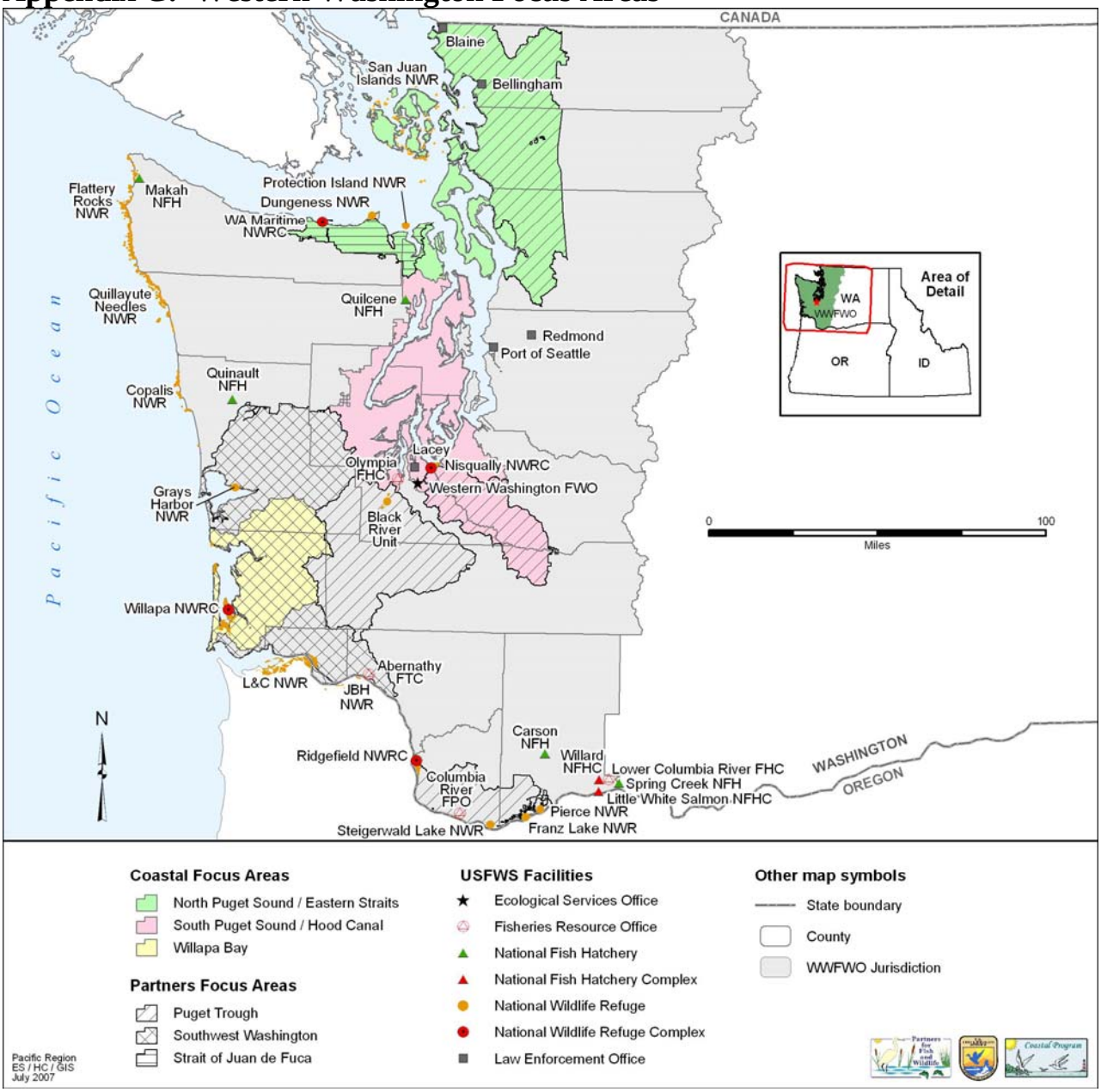
Key Resource Summary:
The inventory, monitoring, and protection of nesting migratory seabirds and breeding Steller sea lions within this Focus Area is of international importance. Obtaining baseline information on native plants, small mammals, amphibians and invertebrates is crucial to understanding their ecological importance and appropriate management needed. Timely response to the spread of invasive species is essential in protecting these sensitive species and habitats.

Focus Species: The focus species in this area include 13 species of nesting seabirds (including Black oystercatchers), breeding Steller sea lions, native plants and unknown species of small mammals, reptiles and amphibians.

Three State or regional sources were used as the foundation of our Focus Areas: *Oregon Conservation Strategy* (ODFW 2006), *Washington's Comprehensive Wildlife Conservation Strategy* (WDFW 2005) and The Nature Conservancy's *Pacific Northwest Coast Ecoregional Assessment* (Vander Schaaf *et al*. 2006). The recently completed Black Oystercatcher Conservation Plan (USFWS 2007) was also used.

Partnership Opportunities: Primary partnership would be with the National Wildlife Refuge System, Refuge Friends Groups, AmeriCorps Northwest Service Academy, universities and tribes. Other partnership options include local, State, and Federal agencies.

Appendix C: Western Washington Focus Areas



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Western Washington Partners Program Focus Areas

1) Puget Trough Focus Area

This Focus Area includes the Nooksack, Samish, Skagit, Stillaguamish, Snohomish, Nisqually and Upper Chehalis River basins of the Puget Trough ecoregion.

Objective: The Western Washington Fish and Wildlife Office (WWFWO) and the Nisqually NWR Complex will work together in this Focus Area. They will partner with the Natural Resources Conservation Service (NRCS), the Nisqually Indian Tribe, the Washington Department of Fish and Wildlife (WDFW), The Nature Conservancy and other partners to support recovery for listed species, and restoration for candidate species and species of concern. Our efforts will focus on restoring habitat elements that are essential to contribute to the recovery and restoration of these species. Many other species will benefit from our projects, including migratory birds.

Biological Description: The Puget Trough ecoregion is one of the most ecologically diverse and productive ecosystems in the western United States. It supports 9 listed species, 5 candidate species and several species of concern. Natural regions include forests, grasslands, freshwater systems, and marine systems. Over thousands of years, fish and wildlife species have evolved and adapted to this array of ecosystems. The Puget Trough ecoregion was formed by glaciers during the last ice age, about 15,000 years ago, and is part of the larger Willamette Valley-Puget Trough-Georgia Basin ecoregion that extends south into Oregon and north into British Columbia, Canada. Habitats within the Puget Trough have been identified as important conservation priority area by the Trust for Public Land, The Nature Conservancy's Ecoregional Assessment process, the Pacific Coast Joint Venture, the Shared Strategy for Puget Sound, the National Wetlands Inventory, and the WDFW through their identification of priority habitats and species. Diverse fish and wildlife habitats within this Focus Area include: coniferous and mixed forests, prairies, oak woodlands, rivers and associated floodplains, wetlands, coastal streams, estuaries, saltwater and freshwater marshes, and near shore habitats.

Several important watersheds are included in this Focus Area: the Nooksack watershed contains two genetically distinct populations of listed threatened Puget Sound Chinook salmon identified as essential for recovery of the species. The upper Skagit watershed supports the most robust population of bull trout in Puget Sound. The greater Skagit-Stillaguamish Delta, including Port Susan Bay and the Skagit River Delta, are a key stop on the Pacific Flyway, and are identified by Audubon as an Important Bird Area (IBA) (Cullinan 2001). The Skagit River delta area is currently nominated for inclusion in the Western Hemisphere Shorebird Reserve Network, and has very large concentrations of migratory shorebirds and waterfowl, and the Skagit watershed supports the largest wintering concentration of bald eagles in Washington State. In a Trust for Public Land study released in 2001, the Nisqually River basin was listed among the ten most important rivers in Puget Sound for salmon recovery. This is in part due to the fact that the lower portion of the river is considered among the best remaining intact salmon habitats and the largest producer of salmon in South Puget Sound. The Nisqually NWR is located on, and manages nearly the entire Nisqually River Delta. At nearly 3,000 acres, the Nisqually River has the largest undeveloped delta in Puget Sound. The Nisqually Delta supports an average of 5,125 birds each year (1984-2000) comprised of 275 species (USFWS 2005). The Nisqually also receives extensive use by marine mammals, and contains eelgrass and kelp beds, forage fish production, extensive shellfish beds and has been identified as critical for salmon recovery.

The Puget Trough is also one of the most imperiled ecosystems. Interstate Highway 5 connects most of the Puget Trough's urban centers (Vancouver, Centralia, Olympia, Tacoma, Seattle, Everett, Mt. Vernon, and Bellingham). More than three-fourths of Washington's human population is concentrated in this

ecoregion (WDFW, 2006), and a number of human activities and land uses adversely affect its biodiversity. In terrestrial habitats, some of the most significant problems include habitat loss and fragmentation (affecting native plants and animals in forests, in grasslands and oak woodlands, and in riparian and wetland habitats), customary management practices (which have frequently degraded the wildlife habitat value of working forests and farms), and terrestrial invasive non-native species (which pose threats to both the diversity and abundance of native plant and animal species). Ownership within the Focus Area is mostly private, but also includes two military reservations, two national wildlife refuges, several Native American reservations, and several State, county and city parks.

Key Resource Summary:

Focus Habitats:

Focus habitats include forests, streams, wetlands, salt marshes, riparian areas, native prairie grasslands, oak savannas and wet prairies.

Focus Species:

The following list includes most of the species with some status that occur in this Focus Area. We expect that project activities will provide direct or indirect benefits to most of these species. The primary species that we will be focusing our efforts on over the next 5 years are **bolded** below:

- Listed: **Coastal-Puget Sound bull trout,** marbled murrelet, northern spotted owl, **Puget Sound Chinook salmon**, Steller sea lion, brown pelican, **golden paintbrush,**
- Proposed for listing as threatened: **Puget Sound steelhead trout**.
- Candidate: **Mardon skipper, Mazama pocket gopher, Oregon spotted frog, streaked horned lark and Whulge checkerspot butterfly**.
- Species of Concern**: Oregon vesper sparrow**, **Puget Sound/Strait of Georgia coho salmon, coastal cutthroat trout**, **slender-billed white-breasted nuthatch**, **western gray squirrel**, **western pond turtle** and **white-top aster**.
- And the recently delisted **bald eagle.**
-

Special Emphasis Areas

Puget Sound Glacial Outwash Prairies: Puget Sound prairies and oak woodlands are among the rarest ecosystems in the country (TNC 2006a). They support many at risk species, including 3 listed species, 4 candidate species and 10 species of concern. The existence of these ecosystems is due to a combination of geology and Native American practices. The Nature Conservancy recently identified prairies as a "crisis ecosystem". Less than 3 percent of historic estimates remain in native vegetation in western Washington. The majority of the habitat has been lost to development and the remaining habitat is highly fragmented. Remaining habitat also continues to face threats such as invasive species. The loss of prairies has resulted in a fragmented habitat pattern that presents significant obstacles to the persistence of wildlife populations. Several species have been extirpated from these areas and some are extinct.

There are several protected areas within this Focus Area that contain important habitats for listed and candidate species populations. These protected areas include the1,100-acre Glacial Heritage Preserve owned by Thurston County, the 125-acre native prairie site adjacent to Fort Lewis owned by The Nature Conservancy, shorebird and waterfowl conservation partnership projects within the Skagit River Delta and Port Susan Bay, and several private properties currently enrolled in the Wetlands Reserve Program (WRP) as 30-year and perpetual conservation easements. These privately owned protected areas will be special emphasis areas for species recovery actions.

Service Role and Issues

The Partners Program has been providing technical assistance and partnering with private landowners, tribes, and conservation organizations to address issues of habitat loss and degradation. Along with other WWFWO restoration programs, we will continue to promote the care and restoration of fish and wildlife

habitat through on-the-ground activities, public education, and involvement in watershed assessment and planning efforts. In the prairie restoration arena, for example, the Partners Program has partnered with The Nature Conservancy, NRCS, Washington Department of Natural Resources, Little Rock Fire Department, Grand Mound Fire Department, the Forest Foundation, Thurston County Parks and Recreation and several landowners to restore prairie and oak woodland habitat within the Glacial Heritage Preserve and several adjacent properties in Thurston County. Also, the Partners Program has been providing technical assistance to NRCS to implement the WRP and other key Farm Bill conservation programs.

Key Project Types: Working with private landowners and other partners, we will continue to focus on native prairies, grasslands, and oak savannas which support many at-risk plant, butterfly, and bird species. We will also continue our focus on riparian and in-stream habitats which benefit declining salmon populations, we will work to replace culverts which block fish passage, restore healthy riparian areas along streams, and improve the quality of habitat in waterways.

Guiding Documents and Plans:
- Pacific Coast Joint Venture (PCJV) Strategic Plan
- The Nature Conservancy's (TNC) Ecoregional Assessments
- Washington Department of Fish and Wildlife's (WDFW) Comprehensive Wildlife Conservation Strategy (CWCS)
- Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout
- Recovery Plan for Puget Sound Chinook Salmon

Partnership Opportunities

Key Partners and Partnerships
Strong partnerships exist and continue to be developed with Federal, State and local units of government, tribes, and conservation organizations. Every year, requests for technical and financial assistance far exceed the current level of program funding and staff time. Partnership potential with both internal and external partners is always expanding, with new partnerships and opportunities for collaboration.

Our partners include: NRCS, Washington Departments of Fish and Wildlife, Corrections, Natural Resources, and Agriculture, City of Arlington, Nooksack Indian Tribe, Lummi Indian Nation, Nisqually Indian Tribe, Stillaguamish Tribe, Skagit River System Cooperative, Nooksack Salmon Enhancement Association, Skagit Fisheries Enhancement Group, Stilly-Snohomish Fisheries Enhancement Task Force, Whatcom Conservation District, Snohomish Conservation District, The Nature Conservancy, The Adopt-A-Stream Foundation, Nisqually NWR Complex, Ducks Unlimited, Washington State University Cooperative Extension, Capitol Land Trust, Wolftree, Inc., Wolf Haven International, Mid-Sound Fisheries Enhancement Group, South Puget Sound Salmon Enhancement Group, Lower Columbia River Estuary Partnership, Little Rock Fire Department, Grand Mound Fire Department, the Forest Foundation, Thurston County Parks and Recreation, and many more.

2) Southwest Washington Focus Area

This Focus Area includes the Willapa Bay and Grays Harbor watersheds, the Lower Chehalis and the Lower Columbia River basins. These areas have been identified as priority conservation areas by The Nature Conservancy's ecoregional assessment process, the Pacific Coast Joint Venture and the WDFW through their identification of priority habitats and species.

Objective: The WWFWO, the Willapa NWR Complex and the Nisqually NWR Complex will work together in this Focus Area. We will partner with NRCS, the Washington Departments of Fish and

Wildlife and Natural Resources, The Nature Conservancy and other partners to support recovery for listed species, and restoration of candidate species and other species of concern, and to restore and conserve a variety of terrestrial and aquatic habitats. We will also partner with the Oregon Fish and Wildlife Office. the Service's Fisheries Program, and the Joint Venture and Migratory Birds Program as part of the Cross Program Results efforts in Region 1.

Biological Description: The southwest Washington Focus Area encompasses the Willapa Hills, Willapa Bay, Grays Harbor, the Lower Chehalis River and the Lower Columbia River natural regions. The Coast Range supports dense conifer forests while the lowlands are comprised of a mosaic of mixed forests, marshes, tidal mudflats, and riparian areas. This Focus Area contains diverse fish and wildlife habitats and supports 12 listed species, 3 candidate species and several species of concern. The Willapa NWR Complex and the Grays Harbor Unit and Black River Unit of the Nisqually NWR Complex are included in this Focus Area.

The Willapa Hills, rising to 3,110 feet above sea level, are part of the Coast Range. The Willapa Hills physiographic province includes the Black Hills, Doty Hills, and the adjacent broad valleys that open up to the Pacific Ocean. Barrier beaches characterize the low-lying coastline, behind which there are major estuaries such as Grays Harbor and Willapa Bay.

Willapa Bay is one of the most pristine estuaries in the United States. The bay's shallow water and mud flats support vast beds of eelgrass and shellfish, providing spawning habitat for fish. Willapa Bay has the potential to be designated as a hemispheric reserve by the Western Hemisphere Shorebird Reserve Network. During spring migration, more than 100,000 shorebirds use the habitat in the bay (USFWS 2006a). Isolated sandbars provide pupping grounds for harbor seals and rest sites for migratory birds. Seabirds, such as brown pelicans, stream into the bay from the ocean in summer and fall. Other coastal habitats include sand dunes, sand beaches, and mud flats to grasslands, saltwater and freshwater marshes, and coniferous forests, including an old-growth stand of western red cedar-western hemlock forest. Important species in Willapa Bay include bald eagle, bull trout, Chinook, chum and coho salmon, great blue heron, Dunlin, Eastern sandpiper, and brant. Grasslands and neighboring forests are home to bear, elk, bobcat, woodpeckers, flying squirrels, marbled murrelet, spotted owl, silver-haired bat, and Pacific tree frog. Willapa Bay has many challenges to face, particularly, invasive species such as *Spartina alterniflora*, a noxious weed that threatens the region's $20 million shellfish industry. *Spartina* also degrades the bay's ability to function properly as habitat for waterfowl and other wildlife. Given the terrain, alternatives for treatment of invasive species are difficult to implement or are controversial. The Willapa NWR has entered into a ground-breaking partnership with a variety of groups including Washington State University and University of Washington, Washington State Departments of Agriculture, Natural Resources, and Fish and Wildlife, private landowners, oyster growers, The Nature Conservancy, and other private interest groups to eradicate spartina from Willapa Bay.

Grays Harbor is a bay located on the southwest Pacific coast of Washington, about 45 miles north of the mouth of the Columbia River. Grays Harbor is 15 miles long and 11 miles wide. The Chehalis River flows into the bay at the eastern end. Two spits separated by a 2 mile wide mouth separate Grays Harbor from the Pacific Ocean. In 1996, Grays Harbor Estuary was designated a hemispheric reserve by the Western Hemisphere Shorebird Reserve Network as a site of international significance. The Grays Harbor NWR of the Nisqually NWR Complex was established in 1990 and is located in the northeast corner of Grays Harbor estuary. It encompasses about 1,500 acres of intertidal mudflats, salt marsh, and uplands. From late April through early May, hundreds of thousands of shorebirds concentrate on the muddy tideflats of Grays Harbor Estuary. Grays Harbor Estuary is one of four major staging areas for shorebirds in North America and supports one of the largest concentrations of shorebirds on the west coast, south of Alaska. Shorebirds gather here in the spring to feed, store up fat reserves, and rest for the non-stop flight to their northern breeding grounds. These Arctic-bound shorebirds, coming from as far

south as Argentina, are among the world's greatest migrants; many travel over 15,000 miles round trip. From June through October the shorebirds return to the estuary in lesser concentrations on their way south during the longer fall migration period. Thousands of shorebirds, primarily Dunlin, stay for the winter. Invasive introduced vegetation is also a current threat to the native plant community. About 10 to 15 acres in the harbor are currently infested with *Spartina alterniflora* (Washington Department of Agriculture. 2006) and the local shellfish industry would suffer catastrophic damage if spartina became established in Grays Harbor.

Historically, the Columbia River produced more wild salmon than any river in the world. Fall Chinook, coho, and chum salmon, steelhead and sea run cutthroat trout all moved from the estuary into the surrounding rivers to spawn. Today less than 1 percent of the historic numbers of salmon return to natal waters. The Columbia River estuary is still a nationally significant estuary and one of the largest on the west coast. It is rich in natural resources and supports some of the most productive remaining anadromous fish runs in the Pacific Northwest. It provides key refugia and feeding habitat for juvenile salmon to transition from freshwater to saltwater. Strategic restoration of wetland, riparian, and instream habitats in the lower portions of the Columbia River watershed is essential to improve ecosystem functions and sensitive fish populations. The Lower Columbia River also supports up to 25,000 shorebirds on migration.

Key Resource Summary:
Focus Habitats: Focus habitats include forests, streams, wetlands and riparian areas.

Focus Species: The following list includes most of the species with some status that occur in this Focus Area. We expect that project activities will provide direct or indirect benefits to most of these species. The primary species that we will be focusing our efforts on over the next 5 years are **bolded** below:

- Listed: **western snowy plover**, marbled murrelet, northern spotted owl, **Columbian white-tailed deer,** Oregon silverspot butterfly**, bull trout**, brown pelican, **Lower Columbia River chum salmon, Lower Columbia River Chinook salmon, Lower Columbia River coho salmon,** and **Lower Columbia River steelhead trout.**
- Candidate: Mazama pocket gopher, streaked horned lark, and Pacific fisher.
- Species of Concern**:** Aleutian Canada goose, northern goshawk, **coastal cutthroat trout**, slender-billed white-breasted nuthatch, western gray squirrel, western pond turtle and white-top aster
- And the recently delisted **bald eagle.**

Special Emphasis Areas:
Lower Chehalis Valley Conservation Initiative: This is a multi-partnership effort to restore wetland and riparian habitats on private agricultural lands in the lower Chehalis River, in Grays Harbor County. The initiative targets approximately 21,000 acres of floodplains and associated upland areas. Principal partners include the WDFW and the NRCS, who have been working with landowners to achieve fish and wildlife benefits. To date, 26 farms, encompassing about 5,000 acres, have participated in habitat restoration and enhancement efforts as part of the WDFW's Upland Restoration Program and over 1,000 acres are currently enrolled in the Wetlands Reserve Program (WRP) as perpetual conservation easements.

Willapa's Ellsworth Creek Preserve: The Nature Conservancy recently acquired the Ellsworth Creek watershed (TNC 2006b). This 5,000-acre basin, adjacent to the Willapa NWR, is nestled in the Willapa Hills in Pacific County, where rain and a gentle topography combine to make it one of the most biologically rich ecosystems in the State. Found here are stands of old-growth Sitka spruce, Douglas-fir and other conifers thought to be more than 800 years old. Marbled murrelets nest high in their canopy, and bear, cougar, and elk make their home on the forest floor. Flanked by many of these ancient trees,

Ellsworth Creek is one of the healthiest in the region, and each fall it is choked with chum salmon returning to their natal beds. The Partners Program has been working with TNC in Ellsworth Creek and will continue to pursue opportunities for habitat restoration in this fully protected watershed.

Coastal Sand Dune Habitat: Dunes stretch along Washington's southwest coast and provide a unique habitat for several species of concern. Since 2003, the Willapa NWR has been working with several partners to restore sand dune habitat for the threatened western snowy plover. One of the restoration sites has been colonized by the pink sand verbena, a plant thought to have been extirpated from Washington before it was rediscovered this year.

Service Role and Issues

The Partners Program has been providing technical assistance to NRCS to implement the WRP and working with all these partners to restore the lands within these special emphasis areas. We have also been partnering with private landowners, tribes, industry and conservation organizations to address issues of habitat loss and degradation in other areas within this Focus Area.

Key Project Types: We will continue to focus on restoring/enhancing uplands, wetlands, and riparian and in-stream habitats.

Guiding Documents and Plans:

- Pacific Coast Joint Venture (PCJV) Strategic Plan
- The Nature Conservancy's (TNC) Ecoregional Assessments
- Washington Department of Fish and Wildlife's (WDFW) Comprehensive Wildlife Conservation Strategy (CWCS)
- Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout

Partnership Opportunities

Key Partners and Partnerships

Strong partnerships exist and continue to be developed with Federal, State and local units of government, tribes, and conservation organizations. Every year, requests for technical and financial assistance far exceed the current level of program funding and staff time. Partnership potential with both internal and external partners is always expanding, with new partnerships and opportunities for collaboration.

Our partners include: NRCS, Washington Departments of Fish and Wildlife, Natural Resources, Agriculture, and Transportation, Pacific Conservation District, Grays Harbor Conservation District, Ducks Unlimited, The Nature Conservancy, Lower Columbia River Estuary Partnership, Columbia Land Trust, Willapa Bay Regional Fisheries Enhancement Group, Willapa NWR Complex, Nisqually NWR Complex, and many others.

3) Strait of Juan de Fuca Focus Area

This Focus Area includes the Dungeness and Elwha River basins.

Objective: The WWFWO and the Washington Maritime NWR Complex will work together in this Focus Area. We will partner with NRCS, the WDFW and other partners to support recovery for listed species, and restoration of candidate species and species of concern. Our efforts will focus on restoring habitat elements that are essential to contribute to the recovery and restoration of these species. Many other species will benefit from our projects, including migratory birds.

Biological Description: The Strait of Juan de Fuca connects Puget Sound to the Pacific Ocean and provides part of the border between the United States and Canada. It is a very ecologically diverse and productive region and supports 6 listed, 3 candidate and several species of concern. The Olympic Mountains and rugged coast also provide unique and diverse habitats in a relatively short distance. A portion of this ecosystem is classified as rainforest, receiving over 130 inches of rainfall. Within less than 50 miles it transitions into near desert with less than 10 inches of rain per year due to the rain shadow effect of the Olympic Mountains. The majority of the drainages in the Strait of Juan de Fuca ecosystem originate in the protected watersheds of the Olympic National Park, and within the Olympic National Forest. This provides unique opportunities to restore entire watersheds by treating only the lowest few miles of the drainages before they enter into the Strait. These lowlands are in private or tribal ownership. Our Focus Area would complement work on adjacent Federal lands. In addition, the removal of two major dams on the Elwha River, beginning in 2008, provides high profile opportunities for the Partners Program in the lower Elwha watershed. The WWFWO has been involved in the Elwha River restoration efforts for over 20 years, and provided information that led to passage of the Elwha River Ecosystem and Fishery Restoration Act of 1992, authorizing removal of the Elwha River dams.

These areas have been identified as priority conservation areas by the Trust for Public Land, The Nature Conservancy ecoregional assessment process, the Pacific Coast Joint Venture, the Shared Strategy for Puget Sound, the National Wetlands Inventory and the WDFW through their identification of priority habitat and species. The Dungeness National Wildlife Refuge is included in this Focus Area and provides key wintering and spring migratory habitat for Black oystercatcher, brant and other waterfowl (USFWS 2006b).

Key Resource Summary:
Focus Habitats: Focus habitats include forests, streams, wetlands, riparian areas, native prairie grasslands and oak savannas.

Focus Species: The following list includes most of the species with some status that occur in this Focus Area. We expect that project activities will provide direct or indirect benefits to most of these species. The primary species that we will be focusing our efforts on over the next 5 years are **bolded** below:

- Listed: **Coastal-Puget Sound bull trout,** marbled murrelet, northern spotted owl, **Hood Canal summer chum salmon, Puget Sound Chinook salmon, Steller sea lion, and killer whale**.
- Proposed for listing as threatened: **Puget Sound steelhead trout**.
- Candidate: Pacific fisher, **Mazama pocket gopher**, and **Whulge checkerspot**.
- Species of Concern**: Black oystercatcher, peregrine falcon,** northern goshawk**, slender-billed white-breasted nuthatch**, **Oregon vesper sparrow**, **Puget Sound/Strait of Georgia coho salmon**, **coastal cutthroat trout** and **western gray squirrel**
- And the recently delisted **bald eagle.**

Special Emphasis Areas
Puget Sound prairies and oak woodlands: These rare ecosystems exist within this Focus Area, in northeast Clallam County. They support many at risk species. The existence of these ecosystems is due to a combination of geology and Native American practices. They were formed by receding glaciers during the last ice age, about 15,000 years ago, and were maintained by Native Americans, who burned the grasslands in the summer and fall to encourage growth of camas, spring gold, and other prairie-dependent plant species, which they harvested as a source of food. The burning also improved the habitat for elk, deer and other species, allowing Native Americans to hunt closer to home. The Nature Conservancy recently identified prairies as a “crisis ecosystem”. Less than 3 percent of historic estimates remain in native vegetation in western Washington. The majority of the habitat has been lost to development and the remaining habitat is highly fragmented. Remaining habitat also continues to face

threats such as invasive species. The loss of prairies has resulted in a fragmented habitat pattern that presents significant obstacles to the persistence of wildlife populations.

Key Project Types: We will continue to cooperate with our partners in restoring/enhancing wetlands, and riparian and in-stream habitats. We will also focus on native prairies and oak savannas which support many at-risk plant, butterfly, and bird species.

Guiding Documents and Plans:
- Pacific Coast Joint Venture (PCJV) Strategic Plan
- The Nature Conservancy's (TNC) Ecoregional Assessments
- Washington Department of Fish and Wildlife's (WDFW) Comprehensive Wildlife Conservation Strategy (CWCS)
- Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout
- Recovery Plan for Puget Sound Chinook Salmon

Partnership Opportunities

Key Partners and Partnerships
Strong partnerships continue to be developed with Federal, State and local units of government, tribes, and conservation organizations. Every year, requests for technical and financial assistance far exceed the current level of program funding and staff time. Partnership potential with both internal and external partners is always expanding, with new partnerships and opportunities for collaboration.

Our partners include: the NRCS, Olympic National Park, WDFW, Lower Elwha Klallam Tribe, Jamestown S'Klallam Tribe, Clallam County, Clallam Conservation District, The Nature Conservancy, Ducks Unlimited, Washington Maritime NWR Complex, local businesses, community members and other non-profit organizations.

Western Washington Coastal Program Focus Areas

1) North Puget Sound & Eastern Straits of Juan de Fuca Focus Area

The North Puget Sound and Eastern Straits of Juan de Fuca Focus Area is inclusive of Birch and Bellingham Bays, the Nooksack, Samish, lower Skagit, lower Stillaguamish, lower Snohomish, Dungeness, and Elwha watersheds, the San Juan Islands, Washington Maritime NWR Complex, and the associated nearshore habitat.

Objectives: In the North Puget Sound and Eastern Straits of Juan de Fuca Focus Area, Puget Sound Coastal Program (PSCP) staff will:

- Cooperate with internal and external partners to support recovery for listed species. We will also work with partners to develop projects and outreach that help to preclude the listing of species of concern
- Restore and conserve a variety of terrestrial, freshwater, estuarine and marine habitats by cooperating with Federal, State, tribal, and local governments and private non-profit watershed-based restoration and other recovery groups. We will promote on-the-ground restoration actions for trust resources and recovery actions for listed species.
- Collaborate with partners to support needed assessments and monitoring and conduct outreach and education about invasive species and other emerging issues.

To meet these objectives, we will use recovery plans, limiting factors analysis, assessments and monitoring information, conservation strategies, other supporting documents, and partner and Service expertise and knowledge. For Chinook salmon and bull trout, the Final Draft Puget Sound Chinook Salmon Recovery Plan and the Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout will be used to guide our efforts. These plans contain 3-year and 10-year action plans that identify specific recovery actions to be implemented in each recovery area. Many of the identified restoration activities have the potential to benefit multiple species and coastal habitats. We will collaborate with partners to implement recovery actions identified in the Recovery Plan for the Golden Paintbrush. The PCJV is currently updating their Focus Area plan for the North Puget Sound. We will provide input into plan development and work with all partners to develop and implement identified projects. The international Black Oystercatcher Working Group has identified this area as a key breeding and wintering site for Black oystercatchers. We will work with this group and partners to prevent further declines to Black oystercatchers and other Birds of Conservation Concern. We will collaborate with members of the Puget Sound/Georgia Basin Task Force and other local partners to develop outreach and education materials for invasive species and other emerging issues, and will develop management, control and eradication programs as needed.

Biological Description: North Puget Sound and the Eastern Straits of Juan de Fuca have been identified as important conservation priority areas by the Trust for Public Land, TNC's ecoregional assessment process, the PCJV, the Shared Strategy for Puget Sound, the National Wetlands Inventory, and the WDFW through their identification of priority habitat and species. This area supports nearly 80 percent of Western Washington's wintering waterfowl (Lovvorn and Baldwin 1996), extensive use by other marine birds, marine mammal haul outs, eelgrass and kelp beds, forage fish production, extensive shellfish beds, and has been identified as important for salmon and bull trout recovery. It is also a key breeding area for Black oystercatchers. This Focus Area contains diverse fish and wildlife habitat, including large and small river deltas and estuaries, bays, nearshore habitat including coastal associated upland habitat, vegetated shallows, coastal streams and rivers, and the San Juan Island Archipelago. The Padilla Bay National Estuarine Research Reserve is located within this Focus Area, and supports nearly 8,000 acres of eelgrass habitat. The Dungeness and Protection Island NWR's are also included in this Focus Area. The Dungeness NWR provides key wintering and spring migratory habitat for brant and other waterfowl, and Protection Island NWR supports 72 percent of nesting seabirds in Puget Sound (USFWS 2006).

The entire Focus Area is included in the Northwest Straits Marine Conservation Initiative, authorized by the US Congress in 1998. The Initiative promotes a locally-based approach to restoration and protection of the marine resources in the area. The Northwest Straits Commission was formed under this initiative. The commission guides and offers resources to seven county-based marine resource committees. The marine resource committees use well-founded science and grassroots consensus building to address broad-scale ecosystem health issues, provide technical assistance and education and outreach and establish marine protected areas (NWSC 2006).

Within this Focus Area, the Nooksack watershed contains two genetically distinct populations of listed threatened Puget Sound Chinook salmon identified as essential for recovery of the species. The upper Skagit watershed supports the most robust population of bull trout in Puget Sound. The greater Skagit-Stillaguamish Delta including Port Susan Bay and the Skagit River Delta are a key stop on the Pacific Flyway, and are identified by Audubon as an Important Bird Area (IBA) (Cullinan 2001). The Skagit River delta area is currently nominated for inclusion in the Western Hemisphere Shorebird Reserve Network, and has very large concentrations of migratory shorebirds and waterfowl, and the Skagit watershed supports the largest wintering concentration of bald eagles in Washington State. Landownership in this Focus Area is a mix of Federal, State, tribal and private. Fish and wildlife populations and habitat in this Focus Area have been negatively impacted by human population growth

and urban development; forestry practices; agricultural impacts; impacts from invasive species such as spartina, reed canary grass, Japanese knotweed and butterfly bush; water quality degradation and overfishing.

Key Resource Summary:
Focus Habitats: Focus habitats include large and small river deltas and estuaries, pocket estuaries, sloughs and off-channel habitat, bays, nearshore habitat, coastal associated upland habitats, eelgrass habitat and mudflats, coastal streams and rivers, and the San Juan Island Archipelago.

Focus Species:
Listed Species and Species of Concern
This list includes most of the species with State or Federal listing status that occur in this Focus Area. In general, we expect that project activities will provide direct or indirect benefits to most of these species.

- Listed: marbled murrelets, brown pelican, Stellar sea lion, orca whale, Coastal-Puget Sound bull trout, Puget Sound Chinook salmon, Hood Canal summer chum salmon, and Castilleja levisecta (golden paintbrush).
- Proposed for listing as threatened: Puget Sound steelhead trout
- Candidate: Whulge (Edith's) checkerspot.
- Federal Species of Concern: Cassin's auklet, peregrine falcon, tufted puffin, island marble butterfly, sea-run cutthroat trout, Pacific lamprey, river lamprey, and Puget Sound/Strait of Georgia coho salmon.
- State Species of Concern: herring, smelt, Pacific sand lance, Brandt's cormorant, common loon, Black oystercatchers, common murre, western grebe, gray whale, Pacific harbor porpoise, steller sea lion, sea otter, surf scoter, pigeon guillemot, and multiple species of coastal-dependent migratory birds.

Special Emphasis Areas
The Skagit River watershed is the largest watershed in Puget Sound and has been identified as a high priority for recovery and restoration of Pacific salmon and bull trout through the Shared Strategy for Puget Sound, and the Trust for Public Land's Conservation Priorities (Frisell 2001). Publicly owned lands within Skagit and the Greater Skagit-Stillaguamish Delta have been identified as a priority area for restoration and recovery work by the Skagit Watershed 1418 Task Force (Smith et al. 2005). Tribal, State, Federal, and local governments, private and non-profit organizations, and individual farmers are building partnerships and initiating collaboration to collect needed baseline information, monitor existing actions, and implement large scale estuary restoration projects.

Other areas of emphasis in the North Puget Sound and Eastern Straits of Juan de Fuca Focus Area are the Nooksack, Snohomish and Dungeness lower watersheds, estuaries and associated nearshore habitat. The PSCP is currently involved in identification, scientific support and implementation of estuary restoration actions in these areas.

Project Types:
Key project types expected to occur in the North Puget Sound and Eastern Straits of Juan de Fuca Focus Area include: large and small scale estuary and tidal slough protection and restoration, and restoration of lower river estuary floodplain by planting native vegetation. Additional project types include fish passage barrier removals, working with local farmers to provide habitat for migratory shorebirds, riparian planting and controlling livestock access, invasive species control, native prairie restoration, identification and development of restoration plans for key pocket estuaries, and nearshore habitat restoration.

Guiding Documents and Plans:
- Pacific Coast Joint Venture (PCJV) Strategic Plan
- The Nature Conservancy's (TNC) Ecoregional Assessments
- Washington Department of Fish and Wildlife's (WDFW) Comprehensive Wildlife Conservation Strategy (CWCS)
- Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout
- Recovery Plan for Puget Sound Chinook Salmon

Partnership Opportunities

The PSCP has developed strong partnerships with key partners over our years of collaboration in the North Puget Sound and Eastern Strait of Juan de Fuca Focus Area. New and old PSCP partnerships provide opportunities to provide leadership and support strategic, prioritized large and small scale restoration and protection actions, assist with scientific support when needed, and educate the public regarding emerging issues. The PSCP partnership potential with both internal NWR staff and other Service employees and with external partners is continually expanding with new partnerships and opportunities for collaboration.

Key existing and potential partners in the North Puget Sound and Eastern Strait of Juan de Fuca Focus Area are: Lummi Indian Nation, Nooksack Tribe, Skagit River System Cooperative, Jamestown S'Klallam Tribe, Lower Elwha Tribe, Tulalip Tribe, Stillaguamish Tribe, Washington Maritime National Wildlife Refuge, Natural Resources Conservation Service, Northwest Straits Commission, Puget Sound/Georgia Basin Task Force, Washington State Departments of Fish and Wildlife, Natural Resources, and Ecology, PCJV, Ducks Unlimited, Washington Audubon, Seattle City Light, TNC, North Olympic Salmon Coalition, Nooksack Salmon Enhancement Association, Stilly-Snohomish Fisheries Task Force, Skagit Fisheries Enhancement Group, Clallam Conservation District (CD), Whatcom CD, Skagit CD, Snohomish CD, Friends of the San Juans, Puget Sound Action Team, People for Puget Sound, Puget Sound Nearshore Partnership, Whatcom Land Trust, Skagit Land Trust, North Olympic Land Trust, and many more.

2) South Puget Sound & Hood Canal Focus Area

This Focus Area is inclusive of the Nisqually River, Skokomish River, Kennedy and Goldsbrough Creek, Nisqually Reach, Carr Inlet, Case Inlet, Henderson Bay, Cormorant Passage, Budd Inlet, Eld Inlet, Totten Inlet, Henderson Inlet, Hammersley Inlet, Little Skookum Inlet, Tahuya, Skokomish, Dosewallips, Duckabush, Quilcene, Union, Hamma Hamma, and Dewatto watersheds, Nisqually NWR, Quilcene National Fish Hatchery, and associated nearshore habitat.

Objectives: In the South Puget Sound and Hood Canal Focus Area, PSCP staff will:

- Cooperate with the internal and external partners, including the Nisqually NWR and Quilcene National Fish Hatchery, to restore and conserve a variety of terrestrial, freshwater, estuarine and marine habitats for listed species and species of concern.
- Cooperate with WDFW and other partners to assess and monitor selected marine bird species in South Puget Sound.
- Coordinate with State agencies and other partners to address invasive species and other emerging issues.
- Collaborate with partners to identify and implement habitat restoration projects, and develop outreach material for proposed species and species of concern.

Draft Puget Sound Chinook salmon recovery plans and other plans have been developed for the Nisqually River, and Kennedy and Goldsbrough Creeks. Draft Hood Canal summer chum and Puget Sound Chinook salmon recovery plans have been developed for Hood Canal. A Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout has also been developed. The salmon recovery plans contain 3 year and 10 year action plans that identify specific recovery actions to be implemented in each recovery area. Many of the identified restoration activities have the potential to benefit multiple species and coastal habitats. We will use these and other pertinent documents, planning processes, analyses, Service and partner expertise and knowledge to accomplish our objectives.

Biological Description: In a Trust for Public Land study released in 2001, the Nisqually River basin, located in South Puget Sound was listed among the ten most important rivers in Puget Sound for salmon recovery. This is in part due to the fact that the lower portion of the river is considered among the best remaining intact salmon habitats and the largest producer of salmon in South Puget Sound.

The Nisqually NWR is located on, and manages nearly the entire Nisqually River Delta. At nearly 3,000 acres, the Nisqually has the largest undeveloped delta in Puget Sound. The Nisqually Delta supports an average of 5,125 birds each year (1984-2000) comprised of 275 species (USFWS 2005). The Nisqually also receives extensive use by marine mammals, and contains eelgrass and kelp beds, forage fish production, extensive shellfish beds and has been identified as critical for salmon recovery. This Focus Area contains diverse fish and wildlife habitat, including large and small river deltas and estuaries, bays, nearshore habitat, vegetated shallows, coastal streams and rivers.

The Nisqually Reach Nature Center is located within this Focus Area, which focuses on estuarine environmental education. The Nisqually River Council is a coordination, advocacy, and educational organization with no independent authority. The Council seeks to integrate the history, culture, environment and economy of the Nisqually watershed by coordinating with counties, city, tribal, State, and Federal agencies, as well as many non-profit organizations throughout the Nisqually River Watershed. The Nisqually River Council recently received an award by former Secretary of the Interior Gale Norton honoring 20 years of cooperative conservation in the Nisqually River Watershed.

The Hood Canal portion of this Focus area is a fjord off Puget Sound with an average width of 1.5 miles and an average depth of 500 feet. It extends for about 65 miles southwest from the entrance between Foulweather Bluff and Tala Point to Belfair. It separates the Kitsap Peninsula from the Olympic Peninsula for its entire length. The Skokomish River, a major river within Hood Canal, contains a core population of bull trout that have been documented using the Skokomish River estuary in addition to the upper watershed. Hood Canal also contains a distinct population of chum salmon, the Hood Canal summer chum, which is a federally listed species.
Unfortunately, Hood Canal also suffers from hypoxia (lack of oxygen) that has resulted in large fish kills. The most recent fish kill, in September 2006, was one of the largest to date. Some areas of South Puget Sound are starting to show signs of hypoxia, and it is hoped that what is accomplished in Hood Canal can be replicated in South Puget Sound. Hood Canal has also been negatively impacted by invasive species such as Japanese knotweed, tunicates, and reed canary grass, which we are also addressing through our partnerships. Hood Canal has been identified as a conservation priority area by the Trust of Public Land, TNC's Ecoregional Assessment process, the Shared Strategy for Puget Sound, and National Wetlands Inventory, and the WDFW Priority Habitat and Species process. The Audubon Society has designated an area in Hood Canal near the Skokomish River as an IBA (Cullinan 2001). This area supports extensive marine bird use and extensive shellfish beds.

Key Resource Summary:
Focus Habitats: Focus habitats include large and small river deltas and estuaries, sloughs and off-channel habitat, bays, nearshore habitat, vegetated shallows, eelgrass habitat and mudflats, coastal streams and rivers.

Focus Species:
Listed Species and Species of Concern
This list includes most of the species with State or Federal listing status that occur in this Focus Area. In general, we expect that project activities will provide direct or indirect benefits to most of these species. The primary species that we will be focusing our efforts on over the next 5 years are bolded below.

- Listed: marbled murrelets, **Coastal-Puget Sound bull trout**, **Hood Canal summer chum salmon**, and **Puget Sound Chinook salmon**.
- Proposed for listing as threatened: **Puget Sound steelhead trout**.
- Candidate: Whulge (Edith's) checkerspot.
- Federal Species of Concern: peregrine falcon, sea-run cutthroat trout, Pacific lamprey, river lamprey, and **Puget Sound/Strait of Georgia coho salmon**.
- State Species of Concern: herring, smelt, Pacific sand lance, Brandt's cormorant, common loon, common murre, western grebe, sea otter, surf scoter, pigeon guillemot, and multiple species of migratory birds
- And the recently delisted bald eagle.

Special Emphasis Areas
Federal and tribally owned lands within the Nisqually delta have been identified as a priority area for estuary restoration by the Service and the Nisqually Tribe. The Nisqually Tribe has removed nearly all the dikes on their property, and the Nisqually NWR has completed planning for removal of their dike. Once removal of all dikes are completed in 2008 or 2009, over 800-acres of historic estuary will have been restored. This will be the largest estuary restoration project ever in Washington State. The project involves numerous internal and external partners, and will benefit numerous species of migratory waterfowl, shorebirds, and aquatic species such listed Chinook salmon.

Other areas of emphasis in the Hood Canal portion of the Focus Area are the Skokomish and Quilcene estuaries, and all of Hood Canal nearshore habitat. The PSCP is involved in identification, scientific support and implementation of estuary restoration actions in these areas.

Key Project Types: Key project types expected to occur in the South Puget Sound and Hood Canal Focus Area include large and small scale estuary protection and restoration benefiting bull trout, listed salmonids, and coastally dependent migratory birds. Additional projects include fish passage barrier removals; riparian planting; invasives control; nearshore habitat restoration, including removal of bulkheads and restoration of natural nearshore habitat; and restoration of tidal slough habitat. We will also be coordinating with WWFWO's Fisheries Division and Contaminants Program, National Marine Fisheries Service, Washington Department of Ecology, Tribes, and numerous other organizations to address the hypoxia issues present in Hood Canal, and threatening South Puget Sound.

Guiding Documents and Plans:
- Pacific Coast Joint Venture (PCJV) Strategic Plan
- The Nature Conservancy's (TNC) Ecoregional Assessments
- Washington Department of Fish and Wildlife's (WDFW) Comprehensive Wildlife Conservation Strategy (CWCS)
- Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout
- Recovery Plan for Puget Sound Chinook Salmon

Partnership Opportunities: PSCP has developed strong partnerships with key partners over our years of collaboration in the South Puget Sound and Hood Canal Focus Area. New and old PSCP partnerships provide opportunities to provide leadership and support strategic, prioritized large and small scale restoration and protection actions, assist with scientific support when needed, and educate the public regarding emerging issues. The PSCP partnership potential with both internal NWR staff and other Service employees, and with external partners, is continually expanding with new partnerships and opportunities for collaboration.

The PSCP has provided technical assistance and funding to partners in the South Puget Sound and Hood Canal Focus Area in the past and will continue to do so. There is a strong, technically skilled restoration community within this area of Puget Sound, with representatives from tribal, State, Federal and local governments and private and non-profit organizations. The PSCP is collaborating with these groups to identify and implement strategic, prioritized restoration actions. The PSCP staff will build upon existing partnerships and search out new partnerships to assist the restoration community with identifying and addressing emerging issues, prioritizing actions, scientific support, and funding to move restoration and recovery of fish and wildlife populations forward.

Key existing and potential partners in the South Puget Sound and Hood Canal Focus Area are: Natural Resource Conservation Service, Nisqually Tribe, Skokomish Tribe, Squaxin Tribe, Washington Department of Natural Resources (WDNR), WDFW, Washington State Parks, Nisqually River Council, Hood Canal Coordinating Council, South Puget Sound Salmon Enhancement Group, Hood Canal Salmon Enhancement Group, Jefferson CD, Mason CD, Thurston CD, Kitsap CD, Nisqually Land Trust, Capitol Land Trust, Trust for Public Land, TNC, People For Puget Sound, Puget Sound Nearshore Partnership, Tacoma Public Utilities, Ducks Unlimited, the U.S. Navy and many more.

3) Willapa Bay Focus Area

This Focus Area includes Willapa, Naselle, Bear, North, Johns, and Canon rivers, Ellsworth Creek, and Willapa Bay proper, the Longbeach Peninsula, Willapa NWR, and associated nearshore habitat.

Objectives: In the Willapa Bay Focus area, PSCP staff will:

- Collaborate with internal and external partners, including the Willapa NWR, to conserve and restore coastal wetland and upland habitats and species.
- Coordinate with partners to implement restoration actions identified in the North American Waterfowl Management Plan.
- Coordinate with Willapa NWR, and other partners to restore habitat for declining populations of anadromous fish.

To meet these objectives, we will use recovery plans, limiting factors analysis, other research information and USFWS and partner expertise and knowledge. Recovery plans have been developed for the Oregon silverspot butterfly, western snowy plover, and marbled murrelet. Recovery and restoration actions taken for western snowy plover have also demonstrated benefits to streaked horned lark and pink sandverbena. The PSCP will also work with partners to identify, investigate, and incorporate new information and update restoration actions as needed.

Biological Description: Willapa Bay has been identified as a conservation priority by TNC's ecoregional assessment process, the PCJV, and WDFW's Priority Habitat and Species Program. These areas support extensive marine bird use, eelgrass beds, and extensive shellfish beds. Willapa Bay is one of the largest and least polluted estuaries in the continental United States. This shallow bay,

approximately 60-feet at the deepest, is 30-miles long and 5 miles wide at the widest point. The Audubon Society has designated four IBA's in this Focus Area due to the rich diversity and productivity of Willapa Bay (Cullinan 2001). Willapa NWR maintains 11,000 acres of refuge land in Willapa Bay. Willapa Bay's shallow water and mud flats support vast beds of eelgrass and shellfish, providing habitat for spawning forage fish. During spring migration, more than 100,000 shorebirds are present. Isolated sandbars provide pupping grounds for harbor seals and rest sites for migratory birds. Introduced from the east coast, *Spartina* is rapidly invading the tidelands of Willapa Bay and destroying migratory bird, anadromous fish habitat, and shellfish habitat as well as marine organism and saltmarsh communities (USFWS, 2006). Willapa NWR is leading a successful effort to control and eradicate spartina from the bay. Willapa Bay is one of the 5 largest oyster-producing areas in the world. The bay supports runs of chum, Chinook and coho salmon that are declining, but not yet listed.

Key Resource Summary:
Focus Habitats: Focus habitats include large and small river deltas and estuaries, sloughs and off-channel habitat, nearshore habitat, mudflats, dune habitat, upland coastal habitat and coastal streams and rivers.

Focus Species:
Listed Species and Species of Concern
This list includes most of the species with State or Federal listing status that occur in this Focus Area.. The primary species that we be focusing our efforts on over the next 5 years are bolded below:

- Listed: **marbled murrelets, western snowy plovers**, and **Oregon silverspot butterfly**.
- Candidate Species: **streaked horned lark**
- Federal Species of Concern: peregrine falcon, coastal cutthroat trout, and Pacific lamprey.
- State Species of Concern: herring, smelt, Pacific sand lance, Brandt's cormorant, common murre, western grebe, **multiple migratory bird species**, and **pink sand verbena**.
- And the recently delisted bald eagle.

Special Emphasis Areas
Within Willapa Bay there are 3 major restoration efforts already underway. Each of these special emphasis areas provides substantial habitat gains to Service trust species. The PSCP has had past involvement in each of these emphasis areas and will remain active in these areas to expand project benefits over the next 5 years. As we focus in Willapa Bay over the next 5 years we may develop additional special emphasis areas.

The Long Beach area of Willapa Bay contains western snowy plover and Oregon silverspot butterfly habitat. The PSCP has worked with the Willapa NWR and other partners for years to restore habitat for these two species. Through our efforts with the Willapa NWR and other partners, we have restored over 60 acres of habitat for the plover. The plover restoration site has been colonized by pink sandverbena, which was thought to have been extirpated from Washington State before its rediscovery this year. The plover restoration area is also being used for streaked horned lark nesting habitat. We have also assisted with the creation of 15 acres of habitat for the Oregon silverspot butterfly. We will work with WDFW to maintain and potentially expand this habitat with the future goal of reintroducing the species to the area.

Washington DNR has designated a portion of DNR coastal forest in Willapa as a Natural Resource Conservation Area. This area is highly regarded as one of the last small uncut drainages in the Willapa Hills. Comprising 2,440 acres, it contains patches of 300-year old western red cedar and Sitka spruce, and habitat for marbled murrelets and spotted owls. Elk and deer trails cross the site, and the South and Middle Nemah River support fish and amphibian populations. The site is used extensively as an outdoor environmental education classroom. There are significant opportunities for the PSCP to partner with DNR in implementing upland, and coastal stream restoration in this area.

TNC has acquired the entire 5,000 acre Ellsworth Creek watershed. Ellsworth Creek drainage is the only fully protected coastal watershed between the Canadian border and central Oregon. Included in the watershed are more than 300 acres of rare, old-growth lowland forest, where some of the trees are more than 800 years old and measure 35 feet or more in circumference. The PSCP has been working with TNC in Ellsworth Creek, and with Willapa NWR on adjacent lands. We will continue to pursue opportunities for restoration in this fully protected watershed adjacent to the Willapa NWR property.

Project Types: Key project types expected to occur in the Willapa Focus Area include: coastal dune and upland habitat restoration to benefit Western snowy plover, streaked horned lark, pink sandverbena and Oregon silverspot butterfly; coastal forest restoration to benefit marbled murrelet; fish passage barrier removals and other instream habitat improvements for declining salmon populations; and estuary and nearshore habitat restoration to benefit coastal-dependent migratory birds.

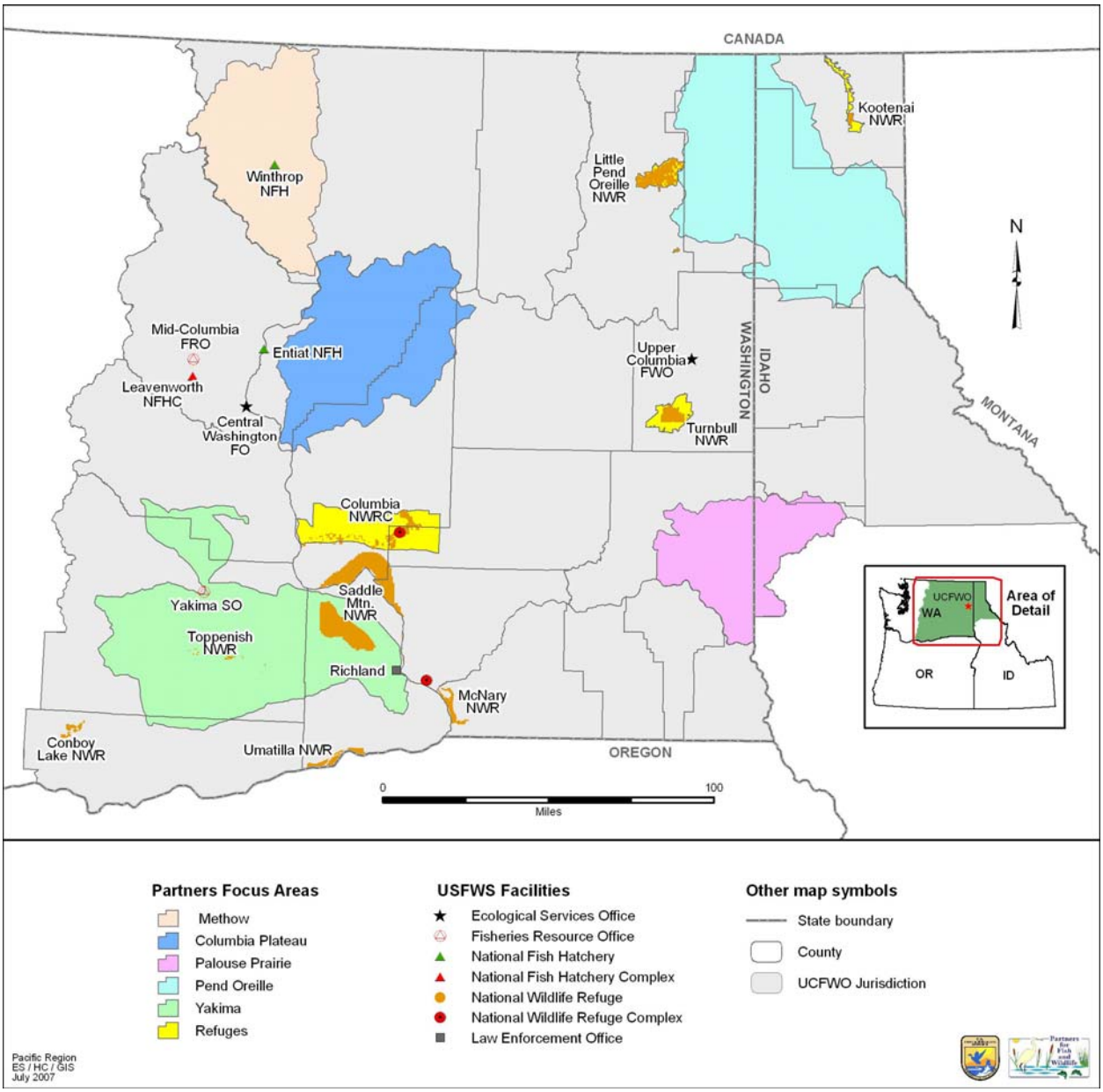
Guiding Documents and Plans:
- Pacific Coast Joint Venture (PCJV) Strategic Plan
- The Nature Conservancy's (TNC) Ecoregional Assessments
- Washington Department of Fish and Wildlife's (WDFW) Comprehensive Wildlife Conservation Strategy (CWCS)
- Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout
- Recovery Plan for Puget Sound Chinook Salmon

Partnership Opportunities: New and old PSCP partnerships provide opportunities to provide leadership and support strategic, prioritized restoration and protection actions, assist with scientific support when needed, and educate the public regarding emerging issues. The PSCP partnership potential with both internal NWR staff and other Service employees and with external partners is continually expanding with new partnerships and opportunities for collaboration.

Key partners are: Natural Resources Conservation Service, WDNR, WDFW, Ducks Unlimited, TNC, Pacific Conservation District, and the Willapa Bay Fisheries Enhancement Group.

The PSCP has provided technical assistance and funding to partners in the Willapa Focus Area in the past and will continue to do so. There is an active restoration community within this area of the coast, with representatives from, State, Federal and local governments and private and non-profit organizations. PSCP is collaborating with these groups to identify and implement strategic restoration actions. PSCP staff will build upon existing partnerships and search out new partnerships to assist the restoration community with identifying and addressing emerging issues, prioritizing actions, scientific support, and funding to move restoration and recovery of fish and wildlife populations and their habitats forward.

Appendix D: Upper Columbia Basin Focus Areas



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Upper Columbia Basin Partners Program Focus Areas

1) Columbia Plateau Focus Area

Objectives: In the Columbia Plateau Focus Area, the Service has the opportunity to work closely with a variety of local communities, watershed and conservation groups, farmers, ranchers, State, and Federal agencies to restore unique habitats. The dominant natural habitat types in this area are shrub-steppe, ponderosa pine forest, herbaceous and riparian wetlands. All of these habitats are considered Priority 1 Habitats of Conservation Concern within Washington State (WDFW 2005). In comparing current and potential future partnership opportunities with the most critical habitat issues in the Focus Area, four primary objectives have emerged for the Columbia Plateau:

- Work toward recovery of the endangered pygmy rabbit by implementing recovery actions identified in recovery plans for the Columbia plateau physiographic region.
- Work to identify and restore habitat for the greater sage grouse and Washington ground squirrel to preclude the need to list them, thereby benefiting numerous shrub-steppe associated species.
- Encourage restoration of shrub steppe remnants in Douglas, Grant, and Lincoln Counties by working with the agricultural community, Yakama and Colville Indian Nations, TNC, WDFW, land trusts, and others.
- Work with watershed groups and Conservation Districts in each county to identify, enhance and restore shrub steppe and native riparian resources.

Biological Description: The Columbia Plateau Focus Area is primarily arid, low elevation desert, and contains unique habitat types. Land ownership is primarily private, with a few large State and Federal areas managed for wildlife refuge, hunting, and fishing. Production of dry and irrigated crops and ranching and are the major land uses in this Focus Area. The primary habitats by area occupied are big sagebrush, three-tip sagebrush, and bitterbrush shrub-steppe, ponderosa pine forest, eastside (of the Washington Cascades) wetlands, springs, and their associated riparian zones. Events and processes associated with ice-age glacial recession have created unique topographical features such as coulees, channeled scablands, boulder fields, glacial erratics, moraines, and potholes, and large fertile plains. These features offer a unique and varied backdrop for an amazingly diverse group of rare mammals, birds and plants, including one federally listed endangered and three Federal candidate species. Fifteen of Washington's sixteen bat species are found within this Focus Area. More than half of the Pacific Northwest shrub-steppe habitat types listed in the National Vegetation Classification are considered imperiled or critically imperiled (WDFW 2005).

The major limiting factors in this area that may affect project success are habitat loss, isolation and fragmentation due to agricultural, industrial, hydraulic, and residential development, and invasive species. Another issue of concern is the lack of migratory corridors between and within the relatively small fragments of healthy shrub-steppe remaining.

Target resource groups include shrub steppe and riparian dependent birds and mammals, including one federally listed, and three candidate species. Habitat issues that may affect project success on private land include lack of high quality, connected shrub steppe habitat, invasive species, and loss of seasonal wetlands. These circumstances give the Service the opportunities to provide leadership in the development of broad conservation agreements, safe harbors, candidate agreements, and sustainable management planning and restoration. However, development pressure, economic issues, costs, logistics, partner capacity, and our staffing capacity limit the extent to which the Service can function and will likely continue to do so in the future.

Key Resource Summary:
Focus Habitats: Wyoming big sagebrush, three-tip sagebrush, and bitterbrush shrub-steppe, ponderosa pine forest, eastside wetlands, springs, and their associated riparian zones.

Focus Species: Federally listed: Pygmy rabbit, steelhead; Candidate: Western sage grouse, Washington ground squirrel, Sage thrasher; Species of Concern: Northern leopard frog, Sharp-tailed grouse, Northwestern pond turtle, redband trout, Burrowing owl, Sage sparrow, 15 of Washington's 16 known species of bats, and the American badger.

Project Types: Key types of projects in this focus area include, but are not limited to: fencing to protect existing and recovering riparian zones, springs, and wetlands and shrub-steppe habitat from livestock and ungulate impacts, human trespass and vehicle access; weed control, planting native shrubs, grasses, and forbs including rare plants; and increasing native seed sources to provide a more diverse array of native vegetation to plant in restoration areas and to increase populations or establish new populations of rare plants

Guiding documents and Plans:
- Draft Recovery Plan for the Pygmy Rabbit (WDFW 2005)
- Recovery Plan for the Pygmy Rabbit (WDFW 1995)
- Recovery Plan for the Sharp-tailed Grouse (WDFW 1995)
- Pygmy Rabbit Recovery Plan Update and Addendum to Washington State Recovery Plan for the Pygmy Rabbit (WDFW 2003)
- Greater Sage-grouse Recovery Plan (WDFW 2004)
- Management Recommendations for Washington's Priority Species – Volume I: Invertebrates; Volume IV: Birds (WDFW 2004)
- Coordinated Implementation Plan for Bird Conservation in Eastern Washington (Washington Steering Committee 2005)
- Partners in Flight Bird Conservation Plans: Sagebrush Steppe Species of Concern.
- Audubon Important Bird Area (Cullinan 2001)
- Intermountain West Joint Venture Channeled Scablands Focus Area Implementation Plan (2001)

Partnership Opportunities
External partnership potential includes private citizens, irrigation districts, tribes, non-profit groups, local agencies, State agencies, and Federal agencies that are actively participating in habitat restoration in the Columbia Plateau.

List of Partners:
Grant County Conservation District
Natural Resource Conservation Service
Washington Department of Fish and Wildlife
Bureau of Land Management; Eastern Washington
Chelan-Douglas Land Trust
The Nature Conservancy
Columbia National Wildlife Refuge
Ducks Unlimited
Confederated Bands and Tribes of the Yakama, and Colville Indian Nations

2) Methow Focus Area

Objectives:
- Restore stream habitat complexity by increasing floodplain access through removing or breaching man-made structures such as berms, dikes, and dams.
- Increase fish passage and survival at irrigation intakes, dams, and culverts.
- Work toward the recovery of threatened Upper Columbia River bull trout by implementing recovery actions identified in the recovery plan for the Methow Core Area.

- Work to preclude the need to list westslope cutthroat and redband trout throughout their range in this Focus Area.
- Work toward eliminating non-native species especially invasive plant species within stream corridors.
- Improve the quality and quantity of riparian habitat.
- Support local watershed group restoration efforts.

Biological Description: The Methow River watershed is 1,825 square miles (mi2) and is located in Okanogan County in north central Washington. This sub-basin is one of the most diverse and productive in the Columbia River system and has one of the highest indices of species richness in the Columbia Cascade Ecological Province. Fifteen federally listed species (3 endangered, 8 threatened, and 4 candidate) occur in the sub-basin. Additionally, 341 wildlife species occur in this sub-basin of which 98 species are listed as Washington State Partners in Flight priority focal species, 105 species are closely associated with riparian and wetland habitat, and 38 species are listed by Washington State. Also, this sub-basin hosts 50 rare plant communities. The Federal government (mainly US Forest Service) owns 85 percent and the State 5 percent of this watershed. The US Fish and Wildlife Service (Service) Winthrop National Fish Hatchery is located in this watershed which annually releases approximately 600,000 spring ESA listed Upper Columbia River spring chinook salmon and 100,000 ESA listed Upper Columbia River steelhead.

Although only 11 percent of this land is in private ownership, the private property is concentrated in valley bottoms within tributary corridors. Land use includes 86.5 percent forest, 9.6 percent range, 2.3 percent other, and 1.6 percent agriculture.

The priority habitats of interest include ponderosa pine, shrub-steppe, riparian wetland, and open water – lakes, rivers, and streams. All of the above habitats are ranked as the highest priority for conservation actions in recent management plans (i.e., Subbasin Planning, Washington's Conservation Strategy, Coordinated Implementation Plan for Bird Conservation in Eastern Washington, Draft Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Draft Recovery Plan).

Limiting factors include but are not limited to habitat quantity, quality, and connectivity; and inadequate water quantity and quality. Threats include but are not limited to residential and agricultural development.

Key Resource Summary:
Focus Habitats: Uplands including ponderosa pine and shrub-steppe; Wetlands including riparian wetland and open water, lakes, rivers, and streams (the last two are higher priority)

Focus Species: Federally listed: Upper Columbia River steelhead, Upper Columbia River spring Chinook, Bull trout, and Columbian sharp-tailed grouse; Species of Concern: Redband trout, Westslope cutthroat trout, Pacific Lamprey, Western Brook Lamprey, Silver-bordered Fritillary butterfly, California Floater bivalve; and the recently delisted Bald eagle.

Hot Spots: Restoration efforts will be focused in stream areas impacted by man-made structures and that are determined to be important for the survival and reproduction of listed and native fish species.

Project Types: Key types of projects in this focus area include, but are not limited to: Reconnecting floodplains and other geomorphic features, increasing in-stream habitat quality, quantity, and complexity, removing fish passage barriers and/or improving fish passage, screening diversions, and increasing the quality and quantity of and protecting riparian zones.

Guiding Documents and Plans:
- Methow Subbassin Plan (NPCC 2004);
- Coordinated Implementation Plan for Bird Conservation in Eastern Washington (Washington Steering Committee 2005)
- Draft Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan (Upper Columbia Salmon Recovery Board 2005)
- Bull Trout Draft Recovery Plan, chapter 22 (USFWS 2002)
- Pacific Region Fisheries Program Strategic Plan (USFWS 2006)
- Bald Eagle Recovery Plan (USFWS 1986)
- Washington's Comprehensive Wildlife Conservation Strategy

Partnership Opportunities:
List of Partners:

Bonneville Power Administration
Salmon Recovery Funding Board
Irrigation Districts
Chelan Public Utility District
Douglas County PUD
Okanogan County
(Planning Department, Water Resources)
Bureau of Reclamation
Washington Dept of Fish and Wildlife
Methow Salmon Recovery Foundation
Okanogan Conservation District
Grant County PUD
U.S. Forest Service

Watershed planning activities such as the Washington State Engrossed Substitute House Bill 2514 Watershed Planning Act, and the Northwest Power and Conservation Council's Sub-basin planning and recovery program are enhancing our partnership opportunities in this area. Scientifically sound habitat restoration/conservation activities, especially projects that will aid in the recovery of listed salmon, have been and are increasingly being supported by stakeholders in this Focus Area. Stakeholders are continuously and increasingly providing all aspects of project support as needed. Stakeholders are playing a very important role in coordinating with and informing private landowners on proposed and ongoing projects.

3) Palouse Prairie Focus Area

Objectives: Work toward recovery of Spalding's catchfly by implementing recovery actions identified in the recovery plan for the Palouse Grasslands physiographic region.
- Work to identify and restore prairie remnants that support rare plants to preclude the need to list them.
- Continue to develop partnerships in Whitman County by working with the parks department, Conservation Districts, The Nature Conservancy, Palouse-Clearwater Environmental Institute and others.
- Continue to work with the Latah SWCD to restore Palouse Prairie in Latah County.
- Work to recover declining grassland bird populations. As a group, grassland breeding bird populations have declined significantly in recent decades. Loss of grasslands on the breeding grounds and habitat fragmentation are considered among the causes most responsible for these declines. Efforts to restore degraded grassland habitats and reestablish previously converted grasslands have been shown to benefit grassland birds and may have the potential to help stem population declines.

Biological Description: The Palouse Focus Area is 1,410 square miles (mi2) and is located in east-central Washington and northern Idaho. Major land uses in the Palouse include agriculture and suburban development. Over 90 percent of the Focus Area is cropland; 4 percent is occupied by urban uses; approximately 3 percent is forested; and 2 percent is riparian/wetlands. There are two cities with populations over 10,000 (Moscow, Idaho and Pullman, Washington), one city with a population over 3,000 (Colfax), and dozens of smaller communities.

The Palouse Prairie is considered one of the most endangered ecosystems in the United States. It is estimated that only 0.1 percent of this grassland ecosystem remains in a natural state (Noss et al. 1995). Several Palouse Prairie plant associations are considered globally imperiled (G1 or G2) (DNR 2003). The Palouse Prairie supports many at-risk species including one federally listed and five species of concern. Most of the remaining Palouse Prairie is in privately owned patches of less than 10 acres. These native prairie remnants are isolated and continue to suffer degradation, potentially leading to the further loss of rare and endemic species.

Nearly all Palouse Prairie was converted to agriculture and grazing land by the turn of the last century, but now human development and the growth of urban areas are increasing threats to the remaining prairie. Additional threats include: habitat degradation due to competition from invasive plants; direct and indirect loss of populations due to herbicide application and isolation of populations. Long-term benefits of restoration include protection of habitat and populations; enhanced diversity; increased connectivity among populations; maintenance of genetic variability; increased numbers and improved sustainability of populations of rare plants and associated pollinators, and precluding listing of at-risk plants and recovery of a listed plant.

Key Resources Summary:
Focus Habitat: Palouse prairie (meadow and meadow steppe) and oxbow wetlands

Focus Species: Federally listed: Spalding's catchfly, water howellia; Species of Concern: Jessica's aster, Palouse goldenweed, and Broad-fruited mariposa lily; State listed as imperiled/sensitive: Palouse thistle, Palouse milkvetch, and many grassland birds. Another species that may benefit is the Giant Palouse earthworm that was recently rediscovered (after being considered extinct) and petitioned for listing as endangered species.

Hot Spots: The Partners program provides a unique funding source for native upland prairie restoration that is not available through other Federal or State agency programs. Our cooperators have been working to identify, protect and restore prairie remnants. Numerous landowners have prairie remnants that they would like to restore and maintain, but they are in need of technical and financial assistance.

Restoration will be targeted to existing Palouse Prairie remnants or agricultural fields that, if restored to Palouse Prairie habitat would connect existing remnants. Highest priority will be given to those sites that still support the rare focus plants listed above or sites with existing conservation easements or with landowners willing to place a conservation easement on the restoration area. In addition, restoration will be targeted to restoring and expanding the limited existing habitat for water howellia.

Project Types: Key types of projects in this focus area include, but are not limited to: increasing native seed sources to provide seed from native grasses and forbs not commercially available, to provide a more diverse array of native vegetation to plant in restoration areas and to increase populations or establish new populations of rare and listed plants; restoration of prairie remnants including weed control, native grass and forbs planting; conversion of agricultural fields to native prairie; increasing native species component in CRP fields; fencing to minimize or eliminate livestock grazing on high quality remnants, especially those that support populations of rare endemic plants; wetland restoration in and around the existing water howellia population.

Guiding Documents and Plans:
- Draft Recovery Plan for *Silene spaldingii* (Spalding's catchfly)
- Palouse Grasslands Physiographic Region recovery area calls for restoring 3-40 acre sites that support 500 individuals each and are composed of at least 80 percent native plants, adjacent to habitat that can support native pollinators.
- Identification of Conservation Priorities for and Threats to Palouse Grassland and Canyon Grassland Remnants in Idaho, Washington, and Oregon (Weddell 1998)
- Coordinated Implementation Plan for Bird Conservation in Eastern Washington (Washington Steering Committee 2005)
- Status and Conservation of the Palouse Grassland in Idaho (Lichthardt 1997)
- Idaho Landowner Incentive Program Tier 2 Application (IDFG 2006)
- Draft Clearwater Subbasin Assessment (Ecovista 2003)
- Latah Soil and Water Conservation District Resource Conservation Plan (LSWCD)
- Indicates that the District supports efforts to protect and enhance the remaining remnant of the Palouse Prairie.
- Idaho Comprehensive Wildlife Conservation Strategy

Partnership Opportunities
List of Partners:

Palouse Land Trust	Latah Soil and Water Conservation District
Palouse Prairie Foundation	Palouse-Clearwater Environmental Institute
Whitman County	Palouse Soil Conservation District
Idaho Conservation Data Center	Natural Resources Conservation Service
Washington Natural Heritage Program	

Partnership potential includes working with the Idaho Conservation Data Center and the Washington Natural Heritage Program to survey and map high quality prairie remnants and rare plant populations and then work with the technical expertise of both agencies and the local knowledge of the conservation districts to develop restoration strategies and identify and contact willing landowners. In addition, Idaho is using their Landowner Incentive Program (LIP) program funds to place conservation easements on 250 acres of the best remaining Palouse Prairie habitat. This will provide permanent protection to the prairie remnants where the Partners program funds restoration efforts.

Internal partnership potential includes working with our recovery branch to implement recovery actions for Spalding's catchfly and with the Service's Migratory Bird Office to develop projects that will maximize benefits to migratory birds.

4) Pend Oreille Focus Area

Objectives: Work toward recovery of bull trout by implementing recovery actions identified in the recovery plan for the Lake Pend Oreille, Priest and Pend Oreille River Core Areas.

- Work to preclude the need to list westslope cutthroat trout throughout its range in this Focus Area.
- Support watershed group restoration efforts including the Pend Oreille Lead Entity and the Pack River Watershed Advisory Group.
- Restore hydrology and vegetation to valley bottom wetlands to improve habitat for wetland dependent birds and amphibians.

Biological Description: The Pend Oreille Focus area is 3,261square miles (mi2) and includes all of the Pend Oreille, Priest and Lake Pend Oreille sub-basins, and the portion of the Clark Fork sub-basin that is in Idaho. The Focus Area is located in northeastern Washington and northern Idaho. This is a

mountainous area with many glacial lakes, rivers, and streams. The Pend Oreille River, Lake Pend Oreille, and Priest Lake are major waterbodies. Communities are mostly small and rural, but population and development around Sandpoint have been greatly increasing in recent years. Summer residences are common on lakes and large river systems. Participation in outdoor recreation is also increasing rapidly. Forestry, livestock grazing, mining, and localized agriculture are principal land uses; 34 percent of the land is in private ownership, 47 percent within National Forests, and 13 percent owned by the State of Idaho; less than 1 percent is within Indian Reservations; 6 percent of the Focus Area is open water.

The habitats of interest in this Focus Area include wetlands, streams, and riparian zones. More than 85 percent of low elevation wetlands have been lost in Idaho, placing them on the list of endangered ecosystems in the United States (Noss et al, 1995). Target resource groups include native fish, including one federally listed and three species of concern; and wetland and riparian dependent migratory birds, including one federally listed.

Limiting factors that can be addressed on private land include invasive alien plant and animal species, fish passage barriers, poor water quality due to increased temperature and sedimentation, loss of seasonal wetlands, loss of in-stream habitat complexity, and habitat fragmentation. Factors that will affect our success in restoring native salmonids to the Pend Oreille Basin are the three dams that occur on the mainstem Pend Oreille River; Boundary, Box Canyon, and Albeni Falls. The first two facilities are privately owned, while the third is owned and operated by the U.S. Army Corps of Engineers. The dams have impacted both aquatic and terrestrial resources. None of the dams have fish passage facilities, although temporary fish passage may begin at Box Canyon Dam as early as 2007, and an evaluation of fish passage at Albeni Falls Dam has been initiated. Dams in Pend Oreille tributaries further fragment the connectivity of native salmonid populations, including at Sullivan Lake, Mill Pond, Calispell Pumps, and West Branch LeClerc Creek. Fish passage is blocked upstream of Lake Pend Oreille in the Clark Fork River at Cabinet Gorge Dam. The other limiting factor that cannot be addressed solely on private land is the large number of non-native fish throughout the sub-basin, particularly rainbow and brook trout which can hybridize with native westslope cutthroat and bull trout, respectively.

Key Resource Summary:
Focus Habitats: Wetlands, streams and riparian zones

*Focus Specie*s: Federally listed Bull trout; Species of Concern: Westslope cutthroat trout, the Northern leopard frog, many riparian and wetland dependent birds; and the recently delisted bald eagle.

Hot Spots: Focus stream restoration on key bull trout watersheds including Gold, Granite, Grouse, Lightning, North Gold, and Trestle Creeks, and the Middle Fork East River and Pack River in Idaho and Cedar, Sullivan, Mill, LeClerc, and Indian Creeks in Washington. Wetland restoration will be focused in the large Pend Oreille River valley bottom.

Project Types: Key types of projects in this focus area include, but are not limited to: fish passage; wetland restoration; riparian planting; in-stream habitat restoration; floodplain function; reducing sediment sources

Guiding Documents and Plans:
- Coordinated Implementation Plan for Bird Conservation in Eastern Washington (Washington Steering Committee 2005)
- Bull Trout Draft Recovery Plan (chapters 3 and 23) (USFWS 2002)
- Bull Trout Habitat Limiting Factors for Water Resource Area 62 (Andonaegui 2003)

- Draft Strategy for Protection and Improvement of Native Salmonid Habitat in the Pend Oreille Watershed, Washington (Pend Oreille Lead Entity 2003)
- Intermountain Province Subbasin Plan (NWPP 2004)
- Pack River Watershed Management Plan and TMDL Implementation Plan (Pack River Technical Advisory Committee 2006)
- Management Recommendations for Washington's Priority Habitats: Riparian (Knutson and Naef 1997)

Partnership Opportunities: External partnership potential includes many private citizens, tribes, non-profit groups, local agencies, State agencies, and Federal agencies that are actively participating in habitat restoration in the Pend Oreille Sub-basin.

List of Partners

Idaho Department of Fish and Game
Washington Department of Fish and Wildlife
Pend Oreille Conservation District
Bonner Soil and Water Conservation District
U.S. Forest Service Panhandle National Forest
U.S.Forest Service Colville National Forest
Washington Salmon Recovery Funding Board
Avista Corporation
Kalispel Tribe
Trout Unlimited
Town of Ione
Natural Resources Conservation Service
Idaho Office of Species Conservation

5) Upper Columbia Basin Refuges

Objectives:
- Work toward downlisting or delisting plant species through implementation of recovery goals;
- Work to preclude the need to list westslope cutthroat trout throughout its range in this Focus Area;
- Restore or enhance habitat connectivity through restoration, selective acquisitions, and/or placement of conservation easements;
- Restore hydrologic function and vegetation to valley-bottom wetlands for the benefit of migratory birds, waterfowl, and amphibians;
- Improve water quality within streams for the benefit of native salmonids and amphibians.

Biological Description: The Focus Area covers four National Wildlife Refuges (NWRs) in eastern Washington and northern Idaho: the Little Pend Oreille (LPO) and Turnbull NWRs within the northeastern portion of Washington State, the Kootenai NWR in northern Idaho, and the Columbia NWR in central Washington State.

The Focus Area geomorphology is characterized by the Channeled Scablands, the result of glacial floods during the Pleistocene that deeply eroded the basalt plateau, leaving giant gravel bars, alluvial aprons, and ephemeral lake deposits. The scablands contain densities of wetland basins rivaling those found in the Prairie Pothole region in the upper Midwest and in some areas waterfowl production exceeds that of the Potholes region. In the Lower Crab Creek drainage of the Columbia Basin, refuge lands form the largest area of the Drumheller Channels National Natural Landmark, designated as one of the best examples of landscape created by the erosion of lava flows during the Ice Age Floods.

The close proximity of upland forests, grassland and sage-scrub steppe, wetland and riparian habitats unique to the Channeled Scablands has created exceptional wildlife and plant diversity. Extensive agriculture within the Focus Area helps provide food and shelter for many focus species thereby contributing to this diversity and increased wildlife abundance in the area. Wet areas with prolific vegetative cover provide dense nesting cover for waterfowl and rails, blackbirds, marsh wrens, etc., and

during the hot dry summers, shrinking water surfaces expose mud and alkali flats which provide forage for breeding and migratory shorebirds.

The primary factors limiting the abundance and/or distribution of trust resources include the following:
- Lack of habitat complexity as a result of anthropogenic uses (e.g., grazing, agriculture, water impoundments and diversions) which, in turn, reduces species diversity and abundance;
- Overgrowth of mature or senescent-stage vegetation communities (e.g., ponderosa pine);
- Colonization of habitat by non-native weedy plant species (e.g., cheatgrass, knapweed);
- Frequent fire-return intervals;
- Increasing habitat fragmentation as a result of habitat conversion for urban and semi-rural development, agriculture and livestock grazing;
- Habitat fragmentation or barriers in rivers, streams and creeks that prevent fish movement and/or alter floodplain hydrology;
- Poor water quality (i.e., salinity, nutrient load, temperature, dissolved oxygen, sediment) in rivers, streams, and creeks supporting salmonids and amphibians;
- Loss of habitat for migratory and/or breeding birds and waterfowl under current water-use regimes, especially during drought years;
- Loss of soils as a result of irrigated farming; and
- Lost floodplain and wetland ecological and hydrological function through land-use, water diversions, and upstream impoundments;

Key Resource Summary:
Focus Habitats: Those common to all lands within the Focus Area include wetlands, streams, riparian zones and croplands. Other key resources in the northeastern portion of the Focus Area include old growth and mature forests, aspen stands and ponderosa pine forests (USFWS 2005) and Palouse-steppe vegetation. In the mid-Columbia basin, grasslands and shrub-steppe become significant resources.

Focus Habitats	LPO	Turnbull	Columbia	Kootenai
Wetlands/moist-soils	X	X	X	X
Streams	X	X	X	X
Riparian	X	X	X	X
Shrub-steppe			X	
Palouse-steppe		X		
Ponderosa pine	X	X		
Aspen	X	X		
Old-growth or mature forests	X			

General distribution of key habitat types across the Focus Area.

Focus Species: The species targeted within the Focus Area include up to 26 species of waterfowl (7 of which are NAWCA priority waterfowl and 10 of which are considered to be below desired condition); at least 6 species or stocks of anadromous fish; listed and sensitive species of fish, amphibians, raptors, grassland and sage steppe-dependent birds, small mammals and plants; and sensitive reptiles.

Species	LPO	Turnbull	Columbia	Kootenai
Bald eagle	X	X	X	X
Raptors	X	X	X	
shorebirds	X	X	X	

Species	LPO	Turnbull	Columbia	Kootenai
riparian-dependent birds	X	X	X	
waterfowl	X	27 species	26 species	X
grassland-dependent birds			X	
migratory birds	X	X	X	
Bats		10 species	15 species	
WA ground squirrel			X	
Pygmy rabbit			X	
Black-tailed jackrabbit			X	
Merrian's shrew			X	
Canada lynx	X			
Grizzly bear				X
Fish	westslope cutthroat trout		Mid-Columbia River steelhead	Kootenai River white sturgeon
	redband trout			redband trout
				Bull trout
Plants		yellow lady's slipper	Ute-ladies' tresses	
		water howellia	Piper's daisy	
		Spaulding's silene	Northern wormwood	
Northern leopard frog			X	
Columbian spotted frog	X	X	X	
Blotched tiger salamander		X		
Whipsnake			X	
Nightsnake			X	
Sagebrush lizard			X	

Hot Spots:
Special emphasis areas were determined by the relative wildlife use of the keystone resources and the relative rarity or the current threats to these resources. Wetlands, moist-soil habitat, streams and riparian corridors provide critically needed habitat for a majority of the trust resources (i.e., migratory and/or breeding birds, waterfowl, anadromous fish, amphibians and bats). Shrub-steppe and Palouse-steppe habitats support suites of species upon which trust resources (e.g., Washington ground squirrel, burrowing owls) in these habitats depend. Therefore, restoration to the extent possible, and habitat acquisition are needed to enhance the status of species dependent upon these habitat types. Forest health is also considered an area requiring special emphasis; forests are major habitat components of the Focus Areas at both LPONWR and Turnbull NWR. The status of Canadian lynx and migratory birds would be improved

by efforts to restore natural forest conditions through thinning and the restoration of natural fire disturbance regimes.

The Palouse-steppe vegetation community which occurs in the Channeled Scablands is recognized at the national and State level as a critically endangered ecosystem (Noss *et al.*, unpublished literature).
The following are the key areas in which projects will be focused:
- Little Pend Oreille River;
- Crab Creek and floodplain;
- Habitat areas supporting listed plants
- Channeled scabland wetlands in the upper Cheney-Palouse flood tract
- Palouse-steppe habitat; and
- Shrub-steppe habitat.

Guiding Documents and Plans:
- U.S. Fish and Wildlife Service Habitat Management Plan for Little Pend Oreille NWR (2005);
- U.S. Fish and Wildlife Service Final Comprehensive Conservation Plan Turnbull National Wildlife Refuge (2005);
- U.S. Fish and Wildlife Service Final Comprehensive Conservation Plan for Little Pend Oreille NWR (2002);
- State of Washington: Management Recommendations for Washington's Priority Habitats – Riparian;
- State of Washington: Management Recommendations for Washington's Priority Habitats and Species;
- Partners-in-Flight Conservation Strategy for Landbirds in the Northern Rocky Mountains of Eastern Oregon and Washington;
- Partners-in-Flight Continental Priorities and Objectives Defined at the State and Bird Conservation Region Level: Washington;
- The 1998 Intermountain West Joint Venture Channeled Scablands Focus Area Implementation Plan;
- U.S. Fish and Wildlife Service Recovery Plan for (*Howellia aquatilis*). 1996
- Spokane County Comprehensive Plan (Spokane County 2002);
- Intermountain West Waterbird Conservation Plan (Ivey and Herziger 2006);
- Coordinated Implementation Plan for Bird Conservation in Eastern Washington (Washington Steering Committee, IWJV 2005);
- Intermountain West Shorebird Conservation Plan (September 2000);
- Conservation Strategy for Landbirds in the Columbia Plateau of Eastern Oregon and Washington (Altman and Holmes 2000);
- Birds of Conservation Concern (USFWS 2002);
- Role of Washington State's National Wildlife Refuges in Conserving the State's Biodiversity (Cassidy et al. 1997); and
- Interior Columbia Basin Ecosystem Management Project, Eastside Draft EIS (May 1997).

Partnership Opportunities:

List of Partners:
US Bureau of Reclamation
NOAA Fisheries
Washington Department of Fish and Wildlife
Washington Department of Natural Resources
Natural Resources Conservation Service
Central Basin Audubon Society
Adams and Grant Conservation Districts
Friends of Mid-Columbia River NWRC
Adams and Grant County Weed Boards
Bureau of Land Management
Bonneville Power Administration
Washington State University
Grant County Public Utility District
Ducks Unlimited
Friends of Little Pend Oreille NWR
Inland NW Land Trust
Refuge neighbors
The Nature Conservancy

Boundary Soil Conservation District
Idaho Department of Fish and Game
Kootenai Tribe of Idaho
Vital Ground Foundation
Quincy, South, and East Columbia Basin Irrigation Districts
Easement owners
Private hunting clubs
Service Fisheries Resource Office
Trout Unlimited

6) Yakima Focus Area

Objectives: The Yakima Focus Area contains numerous headwater tributaries that drain into the Yakima River, inhabiting high elevation western red cedar and western hemlock forests. Diverse habitats continue downslope through eastside (of the Washington Cascades) lodgepole pine, aspen, mixed conifer forests, ponderosa pine/oak forest, shrub-steppe, and lower elevation herbaceous and riparian wetland. Each of these habitats, except high elevation conifers, is considered a Priority 1 Habitat of Conservation Concern within Washington State (WDFW 2005).

There are two outstanding features of interest to the Partners Program in the Yakima Focus Area; one is the great variety of ecotypes represented, the other is the opportunity for unique and effective partnerships. In order to utilize these attributes for restoration of the Yakima Focus Area, four primary objectives have emerged:

- Work toward recovery of bull trout, and steelhead by implementing recovery actions identified in respective recovery plans for the Yakima River physiographic region;
- Work to identify and restore habitat for the Greater sage grouse and Washington ground squirrel to preclude the need to list them, thereby also benefiting numerous shrub-steppe associated species;
- Encourage restoration of shrub-steppe remnants in Kittitas, Yakima, and Benton Counties by working with the Columbia NWR, the agricultural and ranching community, the Yakama Nation, WDFW, Conservation Districts, and others;
- Work with watershed groups and Conservation Districts in each county to identify, enhance and restore unique forest stands, shrub-steppe and diverse aquatic habitats.

Biological Description: The primary habitats types are mixed conifer, Douglas fir, and ponderosa pine forests, Wyoming big sagebrush, three-tip sagebrush, and bitterbrush shrub-steppe. More than half of the Pacific Northwest shrub-steppe habitat types listed in the National Vegetation Classification are considered imperiled or critically imperiled (WDFW 2005). Important aquatic habitats in this Focus Area include rivers, streams, off-channel fluvial features, eastside (of the Washington Cascades) wetlands, and forested and non-forested riparian zones. Of the approximately four million acres within this Focus Area, roughly 1.2 million acres (32 percent) is in private ownership. The Yakama Indian reservation alone encompasses 1.3 million acres.

Target resource groups include native salmonids, and shrub-steppe and riparian dependent birds and mammals, including four federally listed, and four candidate species, Wyoming big sagebrush shrub-steppe, aspen and oak woodlands, streams, springs, and wetlands; including their associated riparian zones.

Habitat issues that may affect project success on private land include lack of high quality, connected sage steppe habitat, invasive species, fish passage barriers, inadequate or absent fish screening, poor water quality due to increased temperature and sedimentation, or contaminants, loss of seasonal wetlands, off-channel and in-stream habitat complexity, riparian forest habitat loss and fragmentation. These circumstances provide the Service with opportunities to provide leadership in the development of broad conservation agreements, safe harbor agreements, and sustainable management planning and restoration. However, development pressure, economic issues, costs, logistics, partner capacity, and our staffing

capacity limit the extent to which the Service may function in this Focus Area and will likely continue to do so in the future.

Representatives of the Service's habitat/species restoration programs have been active in this Focus Area for over 10 years. Over the next 5 years the Partners Program will continue to facilitate and maintain partnerships; provide much needed technical assistance on project planning, coordination, design, and permitting; assist in filling project funding gaps; and provide other assistance and support for local projects as needed and as resources allow.

Key Resource Summary:
Focus Habitats: River and stream habitats: riparian forests, spawning and rearing habitats for listed bull trout and steelhead. Wyoming big sagebrush, three-tip sagebrush, and bitterbrush shrub-steppe, ponderosa pine forest, eastside wetlands, springs, and their associated riparian zones.

Focus Species: Federally listed species: Pygmy rabbit, Mid-Columbia River steelhead, and Bull trout; Candidate Species: Washington ground squirrel, Western sage grouse, and Basalt daisy; and Species of Concern: Northern leopard frog, Western gray squirrel, Sharp-tailed grouse, Burrowing owl, State Candidate: Sage Thrasher; Lewis' woodpecker, American badger, and the recently delisted bald eagle.

Project Types: Key types of projects in this focus area include, but are not limited to: Fencing to protect existing and recovering streams, springs, wetlands and sage steppe habitat from livestock and ungulate impacts, human trespass and vehicle access; in-stream work to remove fish passage barriers, improve morphology and habitat; restore wetlands; stabilize roads, crossings and other sediment sources, close and decommission roads; restore recruitment of large woody debris for riparian forests where appropriate; weed control; native tree, shrub, grass and forb planting; native seed increase.

Guiding Document and Plans:
- Greater Sage-grouse Recovery Plan (WDFW 2004)
- Sharp-tailed grouse Management Plan (WDFW 1995)
- Management Recommendations for Washington's Priority Species – Volume I: Invertebrates; Volume IV: Birds (WDFW 2004)
- Coordinated Implementation Plan for Bird Conservation in Eastern Washington. (IWJV 2005)
- Washington Department of Ecology Watershed Planning, Watershed (WRIA) Planning for Salmon Habitat
- Final Bull Trout and Dolly Varden Management Plan (WDFW 2000)
- Washington Statewide Strategy to Recover Salmon: Extinction is Not an Option
- Watershed Stewardship Team Yakima Subbasin Salmon Recovery Plan (draft)
- Bull Trout (*Salvelinus confluentus*) Draft Recovery Plan (USFWS 2002)
- Pacific Region: Fisheries Program Strategic Plan 2004-2006.
- Coordinated Implementation Plan for Bird Conservation in Eastern Washington:
- Lists Priority habitats as: eastside grasslands, shrub-steppe, eastside riparian - wetlands, and herbaceous wetlands habitat. Shrub-Steppe Bird Conservation Areas: Yakima Training Center, Hanford Department of Energy Lands (Rattlesnake, Saddle Mt. ALE), Toppenish Ridge, Horse Heaven Hills, Yakima River Canyon, L.T. Murray Wildlife Area, Saddle Mountain Refuge.
- Audubon Important Bird Areas (IBA) of Washington (Cullinan 2001)
- Lists seven IBA's for the Yakima Focus Area: Columbia Hills, Fort Simcoe, Yakima River Oxbows, Umtanum Creek Valley, Yakima Canyon, and the Yakima Training Center.
- The Columbia River Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs and Yakama Tribes (CRITFC 1994)

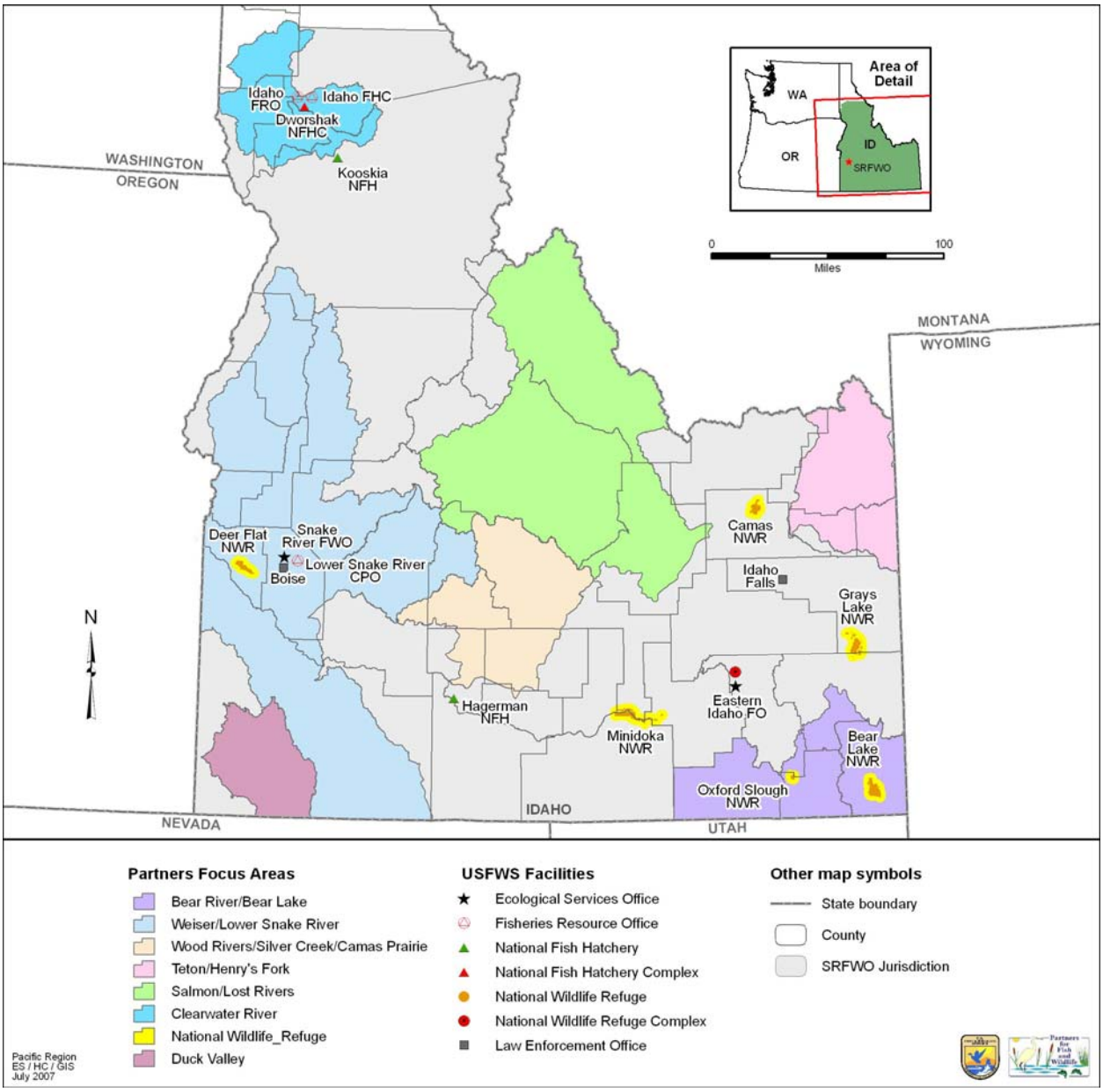
- Partners in Flight Bird Conservation Plans for the sagebrush ecosystem
- Sagebrush steppe species of concern priority species include but are not limited to; greater sage-grouse, sage thrasher, sage sparrow, and burrowing owl.

Partnership Opportunities
External partnership potential includes private citizens, the agriculture and ranching community, irrigation districts, tribes, non-profit groups, local agencies, State agencies, and Federal agencies that are actively participating in habitat restoration in the Yakima River watershed. A large stakeholder is the Yakama Indian Nation. The Yakama Indian Nation and the Service usually partner on several projects per year. These projects include stream and riparian restoration, upland/sage-steppe restoration and wetland restoration and enhancement.

Recently, the Bureau of Land Management, Kittitas County Conservation District, Natural Resource Conservation Service, North Yakima Conservation District, The Nature Conservancy, US Army Yakima Training Center, Service, Hanford Reach National Monument and Saddle Mountain National Wildlife Refuge, Washington Department of Fish and Wildlife, Yakama Indian Nation, Grant Conservation District, and Washington State University Extension Service entered into a Memorandum of Understanding to conserve the shrub steppe/rangeland landscape in Benton, Yakima, Grant, and Kittitas Counties. The Yakima Focus Area includes those non-Federal shrub steppe/rangeland lands surrounding and connecting the Yakima Training Center, Hanford Reach National Monument, the Yakama Reservation, and Washington Department Fish Wildlife's Recreation Areas.

List of Partners:
- Washington Department of Fish and Wildlife
- Okanogan and Wenatchee National Forests
- North Yakima Conservation District
- Mid-Columbia National Wildlife Refuge
- Confederated Bands and Tribes of the Yakama Indian Nation

Appendix E: Snake River Basin Focus Areas



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Snake River Basin Partners Program Focus Areas

1) Bear River/Bear Lake Focus Area

Objective: Partners conservation projects in this area will focus on conserving wetland, wet-meadow, riparian, shrub-steppe, and instream/aquatic habitats. Benefits will be targeted for all aspects of migratory bird habitat and sensitive species such as greater sage grouse, Columbian sharp-tailed grouse, trumpeter swans, greater sandhill cranes, white-faced ibis, long-billed curlew, and Bonneville cutthroat trout.

The objectives of Partners projects within this Focus Area would be to
- reduce the need to list Columbian sharp-tailed grouse and greater sage grouse under the ESA by conserving shrub-steppe and grassland habitat on private land,
- reduce the need to list Bonneville cutthroat trout by reducing the threats of passage barriers, irrigation diversions, and riparian/aquatic habitat, and water quality degradation, and
- increase populations of migratory birds, including, but not limited to trumpeter swans, greater sandhill cranes, white-faced ibis, and long-billed curlew by improving habitat quality and quantity. At fiscal year 2006 funding levels, all of these objectives will not be met; however, performance measures identified below are expected to partially meet the objectives.

Biological Description: This area covers the Bear Lake and River watershed and Oneida County in southeastern Idaho. The area is generally characterized by forest-covered mountains, dissected by broad valleys which are dominated by shrub-steppe and native grassland rangeland, and farmland. The mountain and arid rangeland areas are generally Federal land, administered by the U.S. Forest Service or the Bureau of Land Management. The more productive rangeland and farmland are generally in private ownership. The Bear River/Bear Lake watershed flows north in Idaho from Bear Lake, and then turns west and south and flows into Utah. Native habitats in the area have been impacted by agriculture and water use activities such as livestock grazing, crop production, irrigation water withdrawal and transportation, and other activities. As a result, there has been considerable degradation of wetland, wet-meadow, riparian, shrub-steppe, native grassland, and instream/aquatic habitats important to migratory birds and sensitive species. Active habitat restoration, enhancement and protection are needed on private lands in the area to conserve focus fish and wildlife species and their habitats.

Key Resource Summary:
Focus habitats: wetland, wet-meadow, riparian, shrub-steppe, native grassland, and instream/aquatic habitats.

Focus species: greater sage grouse, Columbian sharp-tailed grouse and Bonneville cutthroat trout, and migratory birds including wetland-dependent birds, riparian and grassland-dependent songbirds, trumpeter swans, greater sandhill cranes, white-faced ibis, and long-billed curlew.

Bear Lake, Oxford Slough, and the Curlew Grasslands are within this Focus Area and are identified as Priority A, Bird Habitat Conservation Areas in the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture. The area is also within the Great Basin Bird Conservation Region Identified in the Intermountain West Regional Shorebird Plan and contains one managed shorebird site. The Idaho Comprehensive Wildlife Conservation Strategy (ICWCS), developed by the Idaho Department of Fish and Game, identifies this area as part of three ecological units (Northwestern Basin and Range, Overthrust Mountains, and Bear Lake), each with its associated species with greatest conservation need.

Through many years of work in this area, the Partners Program is recognized as a program with the ability to efficiently deliver on-the-ground funding and technical assistance to habitat projects on private land. Our goal is to continue and expand our past efforts. The Service's role in this area will be to use the Partners Program to work with private landowners and other partners to develop and implement on-the-ground conservation projects intended to benefit focus habitats and species. The area provides opportunities to conserve the focus species on private land and compliment ongoing local conservation planning efforts by combining efforts of multiple Divisions of the Service as a designated Cross Program Results (CPR) Focal Area, and also provide benefits to fish and wildlife resources on Bear Lake National Wildlife Refuge, which is located in the Focus Area.

Project types: restoration or enhancement of wetland, riparian and instream/aquatic habitats; removing barriers to Bonneville cutthroat trout passage; reducing impacts of irrigation diversions on Bonneville cutthroat trout; restoration or enhancement of shrub-steppe and native grassland habitat; to conserve Columbian sharp-tailed grouse and greater sage grouse; and control of invasive plant species.

Guiding Documents and Plans:
The recently approved Bear River Settlement Agreement with PacifiCorp, which the Service is a party to, provides for implementation of a management plan for conservation of Bonneville cutthroat trout and other fish and wildlife resources in the Bear River watershed for 30 years. Other conservation plans with relevance to this area include the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture, the Intermountain West Regional Shorebird Plan, the ICWCS, the Western Native Trout Initiative, the Trumpeter Swan Management Plan, the Conservation Plan for the Greater Sage Grouse in Idaho, and others. The Partners Program objectives for this area will support the goals of these plans by providing on-the-ground habitat benefits for focus species.

Partnership Opportunities: There are a wide variety of partnership opportunities in this Focus Area. To date, the Partners Program has partnered with multiple private landowners, Soil and Water Conservation Districts, the Bear Lake Regional Commission, Bear Lake Watch, PacifiCorp, Idaho Department of Fish and Game, Natural Resources Conservation Service, and others. At current (FY2006) project and staff funding levels, we are unable to meet the all the project funding requests from our current partners. Expanding partnerships in this area will provide the Service the opportunity to work with partners on large-scale habitat conservation efforts in the Bear River/Bear Lake watershed, restoration and enhancement of shrub-steppe and native grassland habitat in Oneida County, and restoration and enhancement of wetland habitat and habitats adjacent to Bear Lake National Wildlife Refuge.

This area has been proposed as a CPR for its potential for combining Service funding and personnel resources from Ecological Services, Refuges, Fisheries, and Migratory Birds, to address on-the-ground conservation needs of resources under the jurisdiction of all these Service Divisions.

2) Weiser/Lower Snake River Focus Area

Objective: Conservation projects in this area would be targeted at protection and restoration of wetland, instream/aquatic, riparian, grassland, and native shrub-steppe habitats to benefit all aspects of migratory bird habitat and sensitive species such as greater sage grouse, mountain quail, Columbian sharp-tailed grouse, long-billed curlew, white-faced ibis, southern Idaho ground squirrels, northern Idaho ground squirrels, pygmy rabbits, bull trout, interior redband trout, Bruneau hot springsnail, Idaho springsnail, slickspot peppergrass, Packard's milkvetch, Indian Valley sedge, and biennial princesplume.

The objectives of Partners projects within this Focus Area would be to:
- reduce the need to list species under the ESA by conserving shrub-steppe, grassland, riparian, and instream/aquatic habitats on private land, and
- increase populations of migratory birds by improving habitat quality and quantity. At fiscal year 2006 funding levels, these objectives will not be met for all species; however, performance measures identified below are expected to partially meet the objectives.

Biological Description: The area includes the Weiser River, Payette and Boise River watersheds, the Little Salmon River watershed within the New Meadows Valley, and the lower Snake and Bruneau river watersheds between Bruneau and Weiser in southwestern Idaho. The area is generally characterized by forest-covered mountains, dissected by broad valleys which are dominated by shrub-steppe and native grassland, and farmland. The Snake River Plain covers the southern part of the area and is a large plain, running east and west along the Snake River, characterized by shrub-steppe rangeland and irrigated farmland. The mountain and arid rangeland areas are generally Federal land, administered by the U.S. Forest Service or the Bureau of Land Management. The more productive rangeland and farmland are generally in private ownership. The area has been heavily impacted from agriculture (livestock grazing, crop production, and irrigation), mining, logging, water use and urbanization activities that have resulted in degradation of shrub/steppe, riparian, wetland and instream/aquatic habitats. Invasive plant species, such as cheatgrass, are a serious threat to native shrub-steppe habitat and the associated wildlife species in this area. These impacts are widespread; active habitat restoration, establishment and protection are needed on private land to conserve focus habitats and species. The area supports a variety of sensitive species including several ESA-listed and candidate species and other sensitive species; it is also an important area for migratory birds.

Key Resource Summary:
Focus habitats: wetland, instream/aquatic, riparian, grassland, and native shrub-steppe habitats.

Focus species: greater sage grouse, mountain quail, Columbian sharp-tailed grouse, southern Idaho ground squirrels, northern Idaho ground squirrels, pygmy rabbits, bull trout, redband trout, Bruneau hot springsnail, Idaho springsnail, slickspot peppergrass, Packard's milkvetch, Indian Valley sedge, and biennial princesplume, and wetland and riparian dependent migratory birds including long-billed curlew and white-faced ibis.

The Snake River Birds of Prey Area, Lower South Fork Boise River, and the Payette Region are identified as Priority A, Bird Habitat Conservation Areas in the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture. The area is also within the Great Basin Bird Conservation Region Identified in the Intermountain West Regional Shorebird Plan and contains three managed shorebird sites. The Focus Area encompasses the area covered by the Programmatic Southern Idaho Ground Squirrel Candidate Conservation Agreement with Assurances. The ICWCS identifies this area as part of three ecological units (Blue Mountains, Idaho Batholith, and the Owyhee Uplands), each with its associated species with greatest conservation need.

The Service's role in this area will be to use the Partners Program to work with private landowners and other partners to develop and implement on-the-ground conservation projects intended to benefit focus habitats and species.

Project types: restoration or enhancement of wetland habitats through wetland construction or restoration of the original hydrologic function; riparian and instream/aquatic habitat protection and restoration through controlling or excluding livestock grazing, vegetation planting and active stream channel restoration; removal of fish passage barriers and instream restoration of fish habitat; restoration or

enhancement of shrub-steppe and native grassland habitat through upland seeding and livestock management; and control of invasive plant species.

Guiding Documents and Plans:
Conservation plans with relevance to this area include the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture, the Intermountain West Regional Shorebird Plan, the ICWCS, the Western Native Trout Initiative, the Programmatic Southern Idaho Ground Squirrel Candidate Conservation Agreement with Assurances, the Conservation Plan for the Greater Sage Grouse in Idaho, and others. The Partners Program objectives for this area will support the goals of all these plans by providing on-the-ground habitat benefits for focus species.

Partnership Opportunities: To date, the Partners Program has partnered with multiple private landowners, Soil and Water Conservation Districts, the Idaho Department of Fish and Game, Natural Resources Conservation Service, Ducks Unlimited, Pheasants Forever, city and local governments, and other partners in this area. Partnerships in this area provide the Service the opportunity to provide leadership in the conservation of habitats, on a landscape scale, for a variety of sensitive fish, wildlife, and plant species, and migratory birds. At current (FY2006) funding levels we are unable to meet the demand from our partners for project funding in this area.

3) Wood Rivers/Silver Creek/Camas Prairie Focus Area

Objective: Conservation projects in this area would be targeted at conservation of wetland, wet-meadow, instream/aquatic, riparian, shrub-steppe, and native grassland habitat. Conservation benefits would be realized for grassland, riparian and wetland dependent migratory birds and sensitive native species such as greater sage grouse, Columbian sharp-tailed grouse, mountain quail, greater sandhill cranes, long-billed curlew, white-faced ibis, pygmy rabbits, Wood River sculpin, and Utah valvata snails.

The objectives of Partners projects within this Focus Area would be to
- reduce the need to list species under the ESA by conserving shrub-steppe, grassland, riparian, and instream/aquatic habitats on private land, and
- increase populations of migratory birds by improving habitat quality and quantity. At fiscal year 2006 funding levels, these objectives will not be met for all species; however, performance measures identified below are expected to partially meet the objectives.

Biological Description: This area includes the Big and Little Wood Rivers, Silver Creek, Camas Creek, and Copper Basin watersheds in central Idaho. The area is generally characterized by forest-covered mountains, dissected by broad valleys which are dominated by shrub-steppe and native grassland rangeland and farmland. The mountain and arid rangeland areas are generally Federal land, administered by the U.S. Forest Service or the Bureau of Land Management. The more productive rangeland and farmland are generally in private ownership. Native habitats in the area have been impacted by agriculture and water use activities such as livestock grazing, crop production, irrigation water withdrawal and transportation, and other activities. The areas of greatest impact (valley bottoms) are primarily private land and active habitat restoration, establishment and protection are needed on these private lands to conserve focus species and habitats.

Key Resource Summary:
Focus habitats: wetland, wet-meadow, instream/aquatic, riparian, shrub-steppe, and native grassland habitats.

Focus species: wetland, grassland and riparian dependent migratory birds, and sensitive species such as greater sage grouse, Columbian sharp-tailed grouse, mountain quail, greater sandhill cranes, long-billed curlew, white-faced ibis, pygmy rabbit, Wood River sculpin, redband trout, and Utah valvata snails.

The Camas Prairie, Vanishing Rivers, and Big Desert which are partially located in this Focus Area are identified as Priority A, Bird Habitat Conservation Areas in the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture. The area is also within the Great Basin Bird Conservation Region identified in the Intermountain West Regional Shorebird Plan and contains one managed shorebird site. The ICWCS identifies this area as part of three ecological units (Challis Volcanics, Snake River Basalts, and the Owyhee Uplands), each with its associated species with greatest conservation need.

The Service's role in this area will be to use the Partners Program to work with private landowners and other partners to develop and implement on-the-ground conservation projects intended to benefit focus habitats and species.

Project types: restoration or enhancement of wetland and riparian habitats, primarily through restoration of original hydrologic function; riparian and instream/aquatic habitat protection and restoration through controlling or excluding livestock grazing, vegetation planting and active stream channel restoration; removal of fish passage barriers and instream restoration of fish habitat; restoration or enhancement of shrub-steppe and native grassland habitat through upland seeding and livestock management; and control of invasive plant species.

Guiding Document and Plans:
Conservation plans with relevance to this area include the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture, the Intermountain West Regional Shorebird Plan, the ICWCS, the Western Native Trout Initiative, the Conservation Plan for the Greater Sage Grouse in Idaho, and others. The Partners Program objectives for this area will support the goals of all these plans by providing on-the-ground habitat benefits for focus species.

Partnership Opportunities: To date, the Partners Program has partnered with multiple private landowners, Soil and Water Conservation Districts, Idaho Department of Fish and Game, North American Grouse Partnership, The Nature Conservancy, Natural Resources Conservation Service, the Wood River Land Trust, NAWCA, and other partners in this area. Partnerships in this area provide the Service the opportunity to provide leadership in the conservation of habitats, on a landscape scale, for a variety of sensitive fish, wildlife, and plant species, and migratory birds. At current (FY2006) funding levels we are unable to meet the requests from our partners for project funding in this Focus Area.

4) Teton/Henry's Fork Focus Area

Objective: Projects in this area will concentrate on conserving upland, wetland, wet-meadow, and instream/aquatic habitats to benefit grassland, riparian and wetland dependent migratory birds, and sensitive species such as trumpeter swans, greater sandhill cranes, greater sage grouse, Columbian sharp-tailed grouse, long-billed curlew, white-faced ibis, pygmy rabbits, Yellowstone cutthroat trout, Utah valvata snails, and Utes ladies' tresses.

The objectives of Partners projects within this Focus Area would be to
- reduce the need to list species under the ESA by conserving shrub-steppe, grassland, riparian, wetland, wet-meadow, and instream/aquatic habitats on private land, and

- increase populations of migratory birds by improving habitat quality and quantity. At fiscal year 2006 funding levels, these objectives will not be met for all species; however, performance measures identified below are expected to partially meet the objectives.

Biological Description: This Focus Area includes the Teton River and Henry's Fork of the Snake River watersheds in eastern Idaho. The area is generally characterized by forest-covered mountains, dissected by broad valleys which are dominated by shrub-steppe, native grassland, wetland and riparian habitats. The mountain and arid rangeland areas are generally Federal land, administered by the U.S. Forest Service or the Bureau of Land Management. The more productive rangeland and farmland are generally in private ownership. Native habitats in the area have been impacted by agriculture and water use activities such as livestock grazing, crop production, irrigation water withdrawal and transportation, urbanization, and other activities. The areas of greatest impact (valley bottoms) are primarily private land and active habitat conservation is needed on these private lands to conserve focus species and habitats.

Key Resource Summary:
Focus habitats: wetland, wet-meadow, instream/aquatic, riparian, shrub-steppe, and native grasslands.

Focus species: grassland, riparian and wetland dependent migratory birds, and sensitive species such as trumpeter swans, greater sandhill cranes, greater sage grouse, Columbian sharp-tailed grouse, long-billed curlew, white-faced ibis, pygmy rabbits, Yellowstone cutthroat trout, Utah valvata snails, and Utes ladies' tresses.

The Idaho Department of Fish and Game has been implementing a Teton River Fishery Enhancement Program since 1988. The Teton Valley, Island Park Caldera, and lower Henry's Fork are within this Focus Area and are identified as Priority A, Bird Habitat Conservation Areas in the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture. The area is also within the Great Basin Bird Conservation Region Identified in the Intermountain West Regional Shorebird Plan. The Service is involved in implementation of a Trumpeter Swan Management Plan in this area. The ICWCS identifies this area as part of two ecological units (Snake River Basalts and Yellowstone Highlands), each with its associated species with greatest conservation need.

The Service's role in this area will be to use the Partners Program to work with private landowners and other partners to develop and implement on-the-ground conservation projects intended to benefit focus habitats and species.

Project types: restoration or enhancement of wetland and riparian habitats, primarily through restoration of original hydrologic function; riparian and instream/aquatic habitat protection and restoration through controlling or excluding livestock grazing, vegetation planting and active stream channel restoration; removal of fish passage barriers and instream restoration of fish habitat; restoration or enhancement of shrub-steppe and native grassland habitat through upland seeding and livestock management; and control of invasive plant species.

Guiding Document and Plans:
Conservation plans with relevance to this area include the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture, the Intermountain West Regional Shorebird Plan, the ICWCS, the Western Native Trout Initiative, the Conservation Plan for the Greater Sage Grouse in Idaho, the Teton River Fishery Enhancement Program, Trumpeter Swan Management Plan, and others. The Partners Program objectives for this area will support the goals of all these plans by providing on-the-ground habitat benefits for focus species.

Partnership Opportunities: To date, the Partners Program has partnered with multiple private landowners, Idaho Department of Fish and Game, Natural Resources Conservation Service, the Teton Regional Land Trust, Friends of the Teton River, the Service's Private Stewardship Grant Program, Ducks Unlimited, Henry's Lake Foundation, and others. Partnerships developed with the Teton Regional Land Trust, Friends of the Teton River, and the Henry's Lake Foundation allows the Service to take advantage of these organization's local knowledge, staff expertise, and project development work, which will save the Partners Program considerable staff time. Increased involvement with projects in this area provide the Service the opportunity to become more involved with excellent landscape-scale habitat conservation efforts that are currently underway and being led by State and NGO organizations. These efforts will provide conservation benefits for a variety of sensitive fish, wildlife, and plant species, and migratory birds. At current (FY2006) funding levels we are unable to meet the requests from our partners for project funding in this Focus Area.

5) Salmon/Lost Rivers Focus Area

Objective: Conservation projects in this Focus Area would be targeted at upland, instream/aquatic, riparian and wetland habitats to benefit ESA-listed fish (bull trout, sockeye salmon, Chinook salmon, and steelhead), westslope cutthroat trout, Big Lost mountain whitefish, Pacific lamprey, greater sage grouse, long-billed curlew, pygmy rabbits, Salmon twin bladderpod, and riparian and grassland dependent migratory birds.

The objectives of Partners projects within this Focus Area would be to
- reduce the need to list species under the ESA by conserving shrub-steppe, grassland, riparian, wetland, and instream/aquatic habitats on private land, and
- increase populations of migratory birds by improving habitat quality and quantity. At fiscal year 2006 funding levels, these objectives will not be met.

Biological Description: This area includes the upper Salmon River watershed (Main Salmon, Lemhi, Pahsimeroi and the East Fork Salmon River watersheds), and the Big and Little Lost River watersheds in central Idaho. The Salmon and Little Lost River watersheds are important for bull trout conservation; while bull trout do not occur in the Big Lost River, Big Lost mountain whitefish do occur in the river and are considered a sensitive fish species. The area is generally characterized by forest-covered mountains, dissected by broad valleys which are dominated by shrub-steppe, native grassland, wetland and riparian habitats. The mountain and arid rangeland areas are generally Federal land, administered by the U.S. Forest Service and the BLM. The more productive rangeland and farmland are generally in private ownership. Native habitats in the area have been impacted by agriculture and water use activities such as livestock grazing, crop production, irrigation water withdrawal and transportation, and other activities. The areas of greatest impact (valley bottoms) are primarily private land and active habitat restoration, establishment and protection are needed on these private lands to conserve focus species and habitats.

Key Resource Summary:
Focus habitats: wetland, instream/aquatic, riparian, and shrub-steppe habitats.

Focus species: riparian and grassland dependent migratory birds, and sensitive species such as bull trout, sockeye salmon, Chinook salmon, steelhead, westslope cutthroat trout, Big Lost whitefish, Pacific lamprey, greater sage grouse, long-billed curlew, pygmy rabbits, and Salmon twin bladderpod.

The Vanishing Rivers Priority A, Bird Habitat Conservation Area identified in the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture is in this Focus Area. The area is also within the Great Basin Bird Conservation Region Identified in the Intermountain West Regional Shorebird Plan. The ICWCS identifies this area as part of three ecological

units (Idaho Batholith, Challis Volcanics and the Beaverhead Mountains), each with its associated species with greatest conservation need.

The Service's role in this area will be to use the Partners Program to work with private landowners and other partners to develop and implement on-the-ground conservation projects intended to benefit focus habitats and species.

Project types: restoration or enhancement of instream/aquatic and riparian habitats, primarily through restoration of original hydrologic function; riparian and instream/aquatic habitat protection and restoration through controlling or excluding livestock grazing, vegetation planting and active stream channel restoration; removal of fish passage barriers and instream restoration of fish habitat; and restoration or enhancement of shrub-steppe and native grassland habitat through upland seeding and livestock management.

Guiding Document and Plans:
Conservation plans with relevance to this area include the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture, the Intermountain West Regional Shorebird Plan, the ICWCS, the Western Native Trout Initiative, the Conservation Plan for the Greater Sage Grouse in Idaho, and others. The Partners Program objectives for this area will support the goals of all these plans by providing on-the-ground habitat benefits for focus species.

Partnership Opportunities: To date, the Partners Program has partnered with multiple private landowners, the Idaho Department of Fish and Game, Soil and Water Conservation Districts, The Nature Conservancy, and others. Increased involvement with projects in this area provide the Service the opportunity to become more involved with excellent landscape-scale habitat conservation efforts that are currently underway and being led by State and local organizations. These efforts will provide conservation benefits for a variety of sensitive fish, wildlife, and plant species, and migratory birds. At current (FY2006) funding levels we are unable to meet the requests from our partners for project funding in this Focus Area.

6) Clearwater River Focus Area

Objective: Projects in this area would be targeted at benefiting riparian, grassland, and wetland dependent migratory birds and listed and at-risk species such as bull trout, chinook salmon, steelhead, westslope cutthroat trout, Pacific lamprey, long-billed curlew, Spalding's catchfly, Clearwater phlox, and restoration of native Palouse Prairie grasslands and associated species.

The objectives of Partners projects within this Focus Area would be to
- reduce the need to list species under the ESA by conserving shrub-steppe and native Palouse Prairie grasslands, riparian, and instream/aquatic habitats on private land, and
- increase populations of migratory birds by improving habitat quality and quantity. At fiscal year 2006 funding levels, these objectives will not be met for most species.

Biological Description: This area includes the Clearwater River watershed in northern Idaho. The area is generally characterized by forested hills dissected by deep canyons formed by the Clearwater River and its tributaries. The lower elevation canyon areas are native bunchgrass communities, most of which have been extensively invaded by introduced invasive plant species such as cheatgrass and yellow star thistle. Grassland areas in the western edge of the area contain remnant Palouse Prairie grassland. The forestland is generally owned by Federal government (administered by the U.S. Forest Service), Potlatch Corporation, or other private landowners. Shrub-steppe and grassland areas are generally owned by the Federal government (administered by the Bureau of Land Management) or private landowners. Native

habitats in the area have been impacted by forest management and agriculture activities such as timber harvest, livestock grazing, crop production, and other activities. The areas of greatest impact are primarily private land and active habitat restoration, establishment and enhancement are needed on these private lands to conserve focus species and habitats.

Key Resource Summary:
Focus habitats: wetland, instream/aquatic, riparian, shrub-steppe, and native Palouse Prairie grassland habitats.

Focus species: riparian, grassland, and wetland dependent migratory birds and sensitive species such as bull trout, chinook salmon, steelhead, westslope cutthroat trout, Pacific lamprey, long-billed curlew, Spalding's catchfly, Clearwater phlox, and restoration of native Palouse Prairie grasslands and associated species.

The Clearwater River, North Fork Clearwater River, and Palouse Prairie have been identified as Priority B, Bird Habitat Conservation Areas in the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture. The ICWCS identifies this area as part of three ecological units (Palouse Prairie, Bitterroot Mountains, and the Idaho Batholith), each with its associated species with greatest conservation need.

The Service's role in this area will be to use the Partners Program to work with private landowners and other partners to develop and implement on-the-ground conservation projects intended to benefit focus habitats and species.

Project types: restoration or enhancement of wetland and riparian habitats, primarily through restoration of original hydrologic function; riparian and instream/aquatic habitat protection and restoration through controlling or excluding livestock grazing, vegetation planting and active stream channel restoration; removal of fish passage barriers and instream restoration of fish habitat; restoration or enhancement of shrub-steppe and native Palouse Prairie grasslands; and control of invasive plant species.

Guiding Document and Plans:
Conservation plans with relevance to this area include the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture, the Intermountain West Regional Shorebird Plan, the ICWCS, the Western Native Trout Initiative, and others. The Partners Program objectives for this area will support the goals of all these plans by providing on-the-ground habitat benefits for focus species.

Partnership Opportunities: To date, the Partners Program has partnered with multiple private landowners, Idaho Department of Fish and Game, Latah Soil and Water Conservation District, Lewis Soil and Water Conservation District, and other partners in this area. Increased involvement with projects in this area, provide the Service the opportunity to become more involved with conservation efforts that are currently underway and to provide leadership in developing additional conservation efforts. These efforts will provide conservation benefits for a variety of sensitive fish, wildlife, and plant species, and migratory birds.

7) Snake River Basin Refuges Focus Area

Objective: Projects in this area will concentrate on conserving wetland, wet-meadow, upland, riparian, and instream/aquatic habitats to benefit migratory birds and sensitive species such as greater sage grouse, greater sandhill cranes, Columbian sharp-tailed grouse, trumpeter swans, long-billed curlew, white-faced ibis, Bonneville cutthroat trout, and Utah valvata snails.

The objectives of Partners projects within this Focus Area would be to

- reduce the need to list species under the ESA by conserving wetland, wet-meadow, upland, riparian, and instream/aquatic habitats on private land, and
- increase populations of migratory birds by improving habitat quality and quantity. At fiscal year 2006 funding levels, these objectives will not be met for most species.

Biological Description: Refuges in Idaho south of the Clearwater River are: Deer Flat NWR and the Southeast Idaho NWR Complex (Bear Lake NWR, Camas NWR, Grays Lake NWR, and Minidoka NWR). All these refuges are primarily dominated by wetland habitats; however, they are also comprised of the other focus habitats and can play a key role in species-specific conservation (e.g. conservation of Bonneville cutthroat trout on Bear Lake NWR and conservation of greater sage grouse on Minidoka NWR). Habitat on refuges can be affected by land use and habitat conditions on adjacent private lands.

Key Resource Summary:
Focus habitats: wetland, wet-meadow, upland, riparian, and instream/aquatic habitats.

Focus species: riparian, grassland, and wetland dependent migratory birds and sensitive species such as greater sage grouse, greater sandhill cranes, Columbian sharp-tailed grouse, trumpeter swans, long-billed curlew, white-faced ibis, Bonneville cutthroat trout, and Utah valvata snails.

All five of these refuges are identified as managed migratory shorebird sites within the Great Basin Bird Conservation Region in the Intermountain West Regional Shorebird Plan. The refuges are also key management areas for bird species identified in the Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture. The refuges fall within four ecological units identified in the ICWCS (Owyhee Uplands, Snake River Basalts, Overthrust Mountains, and Bear Lake), each with its associated species with greatest conservation need.

The Service's role in this area will be to use the Partners Program to work with private landowners and other partners to develop and implement on-the-ground conservation projects intended to benefit focus habitats and species, and refuge resources.

Project types: restoration or enhancement of wetland and riparian habitats, primarily through restoration of original hydrologic function; riparian and instream/aquatic habitat protection and restoration through controlling or excluding livestock grazing, vegetation planting and active stream channel restoration; removal of fish passage barriers and instream restoration of fish habitat; restoration or enhancement of shrub-steppe and native grassland habitat; and control of invasive plant species.

Guiding Document and Plans:
Conservation plans with relevance to this area include the Coordinated Implementation Plan for Bird Conservation in Idaho developed by the Intermountain West Joint Venture, the Intermountain West Regional Shorebird Plan, the ICWCS, the Western Native Trout Initiative, the Trumpeter Swan Management Plan, Conservation Plan for the Greater Sage Grouse in Idaho, and others. The Partners Program objectives for this area will support the goals of all these plans by providing on-the-ground habitat benefits for focus species.

Partnership Opportunities: To date, the Partners Program has worked with refuges, private landowners, and others to conserve fish and wildlife habitat on refuge easement lands and private lands adjacent to refuge lands. Increased involvement with projects in this Focus Area provides the Partners Program the opportunity to become more involved with conservation efforts that are currently underway

on and adjacent to refuge lands. These efforts will provide conservation benefits for a variety of sensitive fish, wildlife, and plant species, and migratory birds.

8) Duck Valley Focus Area

Objectives:
- reduce the need to list species under the ESA by conserving riparian, aquatic, wetland, native shrub-steppe habitat, and
- increase populations of migratory birds by improving habitat quality and quantity.

Biological Description: This Focus Area includes the Duck Valley Reservation, including the Owyhee River watershed and Mary's Creek, a tributary of the Bruneau River in southwestern Idaho. The area is generally characterized by forest-covered mountains, dissected by broad valleys and the Owyhee and Bruneau River canyons. These lands cover a very diverse array of habitats including wetland, upland, riparian, forest, and instream/aquatic habitats. This Focus Area was proposed by the Shoshone-Paiute Tribes whose aboriginal land is vast and includes, but is not limited to, the majority of southern Idaho. Duck Valley is part of the Shoshone-Paiute Tribes' aboriginal land and has been the location of their reservation since 1877. The Tribes are deeply concerned about fish, wildlife and their habitats throughout their aboriginal lands, and Duck Valley represents a place of special importance to the Tribe. The East Fork of the Owyhee River flows through Duck Valley. In addition, Mary's Creek is located on the reservation. Both the Owyhee River and Mary's Creek were historically important spawning areas for anadromous fishes. As a result of downstream Federal and private dam construction without fish passage provisions, anadromous fishes no longer inhabit the area. The Duck Valley area has also been impacted by upstream and off-reservation mining activities, Air Force and other military training activities, detrimental land management practices on Federal and private lands, livestock grazing practices, and off-road vehicle activity.

Projects in this area would be targeted at protection, enhancement and/or restoration of riparian, aquatic, wetland, native shrub-steppe and aspen woodland habitat. Potential projects would be designed to benefit migratory birds and sensitive species such as greater sage grouse, long-billed curlew, white-faced ibis, bald eagles, golden eagles, Columbia spotted frogs, pygmy rabbits, and redband trout.

Key Resource Summary:
Focus habitats: riparian, aquatic, wetland, native shrub-steppe and aspen woodland habitats.

Focus species: migratory birds, greater sage grouse, long-billed curlew, white-faced ibis, bald eagles, golden eagles, Columbia spotted frogs, pygmy rabbits, and redband trout.

The Service's role in this area will be to use the Partners Program to work with the Shoshone-Paiute Tribal Government and others to develop and implement on-the-ground conservation projects intended to benefit focus habitats and species.

Project types: Key types of projects in this Focus Area would include, but are not limited to, restoration or enhancement of wetland and riparian habitats, primarily through restoration of original hydrologic function; riparian and instream/aquatic habitat protection and restoration through controlling or excluding livestock grazing, vegetation planting and active stream channel restoration; removal of fish passage barriers and instream restoration of fish habitat; restoration or enhancement of shrub-steppe and native grassland habitat; and control of invasive plant species.

Partnership Opportunities: The Shoshone-Paiute Tribe has expressed interest in participating in the Partners Program. Increased involvement with projects in this Focus Area provides the Partners Program

the opportunity to become more involved with, and support fish, wildlife, and plant conservation efforts of interest to the Shoshone-Paiute Tribe. These efforts will further the government-to-government relationship identified in the Service's Native American Policy and Secretarial Order 3206, and also provide conservation benefits for a variety of sensitive fish, wildlife, and plant species, and migratory birds.

9) Other Native American Tribal Focus Area

Objectives:
- facilitate working with Native American governments on reservation lands, near-reservation lands, and non-reservation lands of interest to Native American Governments,
- reduce the need to list species under the ESA by conserving habitats on tribal or private land, and
- increase populations of migratory birds by improving habitat quality and quantity.

Biological Description: This area includes any reservation or aboriginal non-reservation tribal or private lands in eastern or central Idaho, within the jurisdiction of the Service's Snake River Fish and Wildlife Office. These lands cover a very diverse array of habitats including wetland, upland, riparian, forest, and instream/aquatic habitats. Native American Governments have the authority and interest in natural resource conservation on reservation lands and their aboriginal non-reservation lands. In central and southern Idaho, the Shoshone-Paiute, Nez Perce, and Shoshone-Bannock Tribes have expressed interest in participating in the Partners Program.

Projects in this area will concentrate on conserving wetland, upland, riparian, forest, and instream/aquatic habitats to benefit migratory birds and sensitive species such as those identified in each of the eight other Focus Areas in the Snake River Basin.

Key Resource Summary:
Focus habitats: wetland, upland, riparian, forest, and instream/aquatic habitats.

Focus species: all those species identified in the other eight Focus Areas for the Snake River Basin Partners Program.

Project types: Key types of projects in this Focus Area would include, but are not limited to, restoration or enhancement of wetland and riparian habitats, primarily through restoration of original hydrologic function; riparian and instream/aquatic habitat protection and restoration through controlling or excluding livestock grazing, vegetation planting and active stream channel restoration; removal of fish passage barriers and instream restoration of fish habitat; restoration or enhancement of shrub-steppe and native grassland habitat; and control of invasive plant species.

Partnership Opportunities: To date, the Shoshoni-Paiute, Nez Perce, and Shoshoni-Bannock Tribes have expressed varying degrees of interest in participating in the Partners Program. Increased involvement with projects in this Focus Area provides the Partners Program the opportunity to become more involved with, and support fish, wildlife, and plant conservation efforts of interest to Native American Governments. These efforts will further the government-to-government relationship identified in the Service's Native American Policy and Secretarial Order 3206, and also provide conservation benefits for a variety of sensitive fish, wildlife, and plant species, and migratory birds.

Appendix F: Stakeholders Contacts

Pacific Islands Eco-region Stakeholders Contacted

The symbol (*) indicates organization provided comments (applicable within Pac. Islands list).

Federal Agencies
NOAA Fisheries
USDA Wildlife Resources - Guam office

State Agencies
Hawaii Department of Land and Natural Resources; Division of Forestry and Wildlife and the Division of Aquatic Resources, Christine Ogura*, Christen Mitchell

Other Governments
American Samoa National Park
CNMI Coastal Resources Management Office**
CNMI Division of Fish and Wildlife- Laura Williams
Guam Division of Aquatic and Wildlife Resources**
Guam Division of Forestry
Palau Bureau of Marine Resources

Non-Governmental Organizations/Working Groups
Conservation Society of Pohnpei
East Maui Watershed Partnership-Alex Michailidis
East Molokai Watershed Partnership-Ed Misaki
Kauai Watershed Alliance -Allan Reitow*
Kohala Watershed Partnership- Lisa Hadway
Koolau Mountains Watershed Partnership- Stuart Lau
Kosrae Conservation and Safety Organization
Lanai Forest and Watershed Partnership- Derral Stokes
Leeward Haleakala Watershed Restoration Partnership -Art Medeiros
Mariana Islands Nature Alliance*
Mauna Kea Watershed Partnership- Jennifer Crummer*
Olaa Kilauea Partnership- Tanya Rubenstein*-
Palau Conservation Society
TNC Hawaii Program- Sam Gon*
TNC Micronesia Program*
West Maui Mountains Watershed Partnership-Chris Brosius*

Oregon Stakeholders Contacted

Federal Agencies
Bureau of Land Management
Natural Resource Conservation Service (NRCS)
National Oceanic and Atmospheric Administration (NOAA fisheries)

Tribal Governments
Burns Paiute Tribe
Confederated Tribes of Coos, Lower Umpqua & Siuslaw Indians
Nez Perce Tribe
Confederated Tribes of Umatilla Indian Reservation
Confederated Tribes of Warm Springs
Confederated Tribes of the Siletz Indians
Coquille Indian Tribe

State Agencies
Oregon Department of Agriculture
Oregon Department of Fish and Wildlife
Oregon Natural Heritage Program
Oregon Technical Advisory Committee
Oregon Watershed Enhancement Board
Summer Lake Wildlife Management Area

Oregon Watershed Councils (WSC)
Alsea WSC- Linda Johnston
Coos WS Association- Jon Souder
Coquille WS Association- Jennifer Hampel
Crooked and Upper Deschutes Watershed Councils
Grande Ronde Model Watershed
Lower Columbia WSC- Margaret Magruder
Lower Nehalem WSC- Dave Godsey
Lower Rogue WSC- Dana Hicks
Malheur Watershed Council
Mary's River Watershed Council
MidCoast WSC- Wayne Hoffman
Middle Fork Watershed Council
Necanicum WSC- Dave Godsey
Nestucca Neskowin WSC- Alex Sifford
Nicolai-Wickiup WSC- Bud Henderson
North Coast Watershed Association- Lori Lilly
Powder Basin Watershed Council
Rogue Valley Council of Governments
Salmon Drift Creek Group- Katie McKenzie
Scappoose Bay Watershed Council
Siuslaw WSC- Todd Miller
Skipanon WSC- Jim Scheller
Smith River WSC- Paul Dailey
South Coast WSC- Harry Hoogesteger
Tenmile Lakes Basin Partnership- Mike Mader
Tillamook WSC- Denise Lofman
Umpqua Basin Watersheds

Umpqua Rivers, Partnership for- Bob Kinyon
Upper Nehalem WSC- Maggie Peyton
Upper South Fork John Day Watershed Council
Warner Lakes Watershed Council
Young's Bay WSC- Mike Seppa

County Government, Soil and Water Conservation (SWCDs) and Irrigation Districts
Baker SWCD
Benton County Parks and Open Space
Benton SWCD
Clatsop County Parks
Clatsop SWCD
Coos SWCD
Crooked SWCD
Deschutes SWCD
Douglas SWCD
East Lane SWCD
Grant SWCD
Harney SWCD
Lakeview Irrigation District representatives names on record
Malheur SWCD
Union SWCD
Wallowa SWCD
Wheeler SWCD
Yamhill SWDC
Oregon Association of Conservation Districts (SWCDs)

Private landowners
Private land owner names on record
Private landowners previously involved in Partners projects
Farm owners, small woodland owners

Non-Government Organizations/working groups
Columbia River Estuary Science Team (CREST)
Defenders of Wildlife
Ducks Unlimited
Greenbelt Land Trust
High Desert Partnership
Institute of Applied Ecology
Lower Columbia Estuary Partnership (LCREP)
McKenzie River Land Trust
North Coast Lands Conservancy
Oregon Trout
Pacific Joint Venture
The Nature Conservancy
The Wetlands Conservancy

Wallowa Resources

Industry/Other
Heritage Seedlings
National Cattlemen's Beef Association
John Day Screen Shop

Western Washington Stakeholders Contacted

Federal Agencies
Bureau of Land Management
National Oceanic and Atmospheric Association (NOAA Fisheries)
Puget Sound Action Team
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service Migratory Birds and Fisheries Divisions
U.S. Dept. of Agriculture, Natural Resources Conservation Service (NRCS)
U.S. Forest Service

Tribal Governments
Jamestown S'Klallam Tribe
Lower Elwha Tribe
Lummi Nation
Nisqually Indian Tribe
Northwest Indian Fisheries Commission
Stillaguamish Nation
Skokomish Tribe

State Agencies
Hood Canal Coordinating Council
Washington Department of Ecology
Washington Department of Fish and Wildlife
Washington Department of Natural Resources
Washington Department of Veterans Affairs

Local or County Governments, Soil and Water Conservation Districts (SWCDs) and Irrigation Districts
City of Seattle
Clallam County
King County
Kitsap County
Skagit Conservation District
Skagit County
Snohomish County
Snohomish Conservation District
Thurston Conservation District
Whatcom Conservation District

Whatcom County

Land Trusts
Capitol Land Trust
Cascade Land Trust
Columbia Land Trust
Lummi Island Heritage Trust
Nisqually Land Trust
Trust for Public Lands
Vashon Land Trust
Whidbey Camano Land Trust

NGOs/Working Groups
American Bird Conservancy
Citizens for a Healthy Bay
Ducks Unlimited
FRIENDS (all cap) of the San Juans
Hood Canal Salmon Enhancement Group
Lower Columbia River Estuary Partnership
Nooksack Salmon Enhancement Association
North Olympic Salmon Coalition
Northwest Straits Commission
Northwest Watershed Institute
Pacific Coast Joint Venture
Puget Sound Restoration Fund
Shoreline Alliance
Skagit Fisheries Enhancement Group
Skagit Cooperative System
Skagit Watershed Council
South Puget Sound Salmon Enhancement Group
Stream Keepers
Stilly-Snohomish Fisheries Taskforce
The Nature Conservancy
Wahkiakum Community Foundation
Washington State Audubon
Washington Trout
Washington Water Trails Association
Willapa Bay Fisheries Enhancement Group
Washington Wildlife and Recreation Coalition

Industry/Other
Entrix, Inc.
Port Blakely Timber Company
Robert Altman Consulting

Stakeholders Contacted in Eastern Washington and Northern Idaho (Upper Columbia Basin)

Federal Agencies
Bureau of Land Management – Eastern and Central Washington
Bureau of Reclamation
Colville National Forest
Idaho Panhandle National Forest
National Park Service -Lake Roosevelt, Coulee City office
Natural Resources Conservation Service
Okanogan and Wenatchee National Forests

Tribal Governments
Coeur d'Alene Tribe
Confederated Tribes of the Colville Reservation
Kalispel Tribe of Indians
Kootenai Tribe of Idaho
Umatilla Tribe
Spokane Tribe of Indians
Yakama Indian Nation

State Agencies
Idaho Department of Fish and Game
Washington Department of Ecology
Washington Department of Natural Resources
Washington Department of Fish and Wildlife
Washington State Parks and Recreation Commission

Local/County Government/ Soil and Water Conservation Districts (SWCDs) and Irrigation Districts
Adams Conservation District
Asotin Conservation District
Benewah Soil and Water Conservation District
Benton Conservation District
Bonner Soil and Water Conservation District
Boundary County Soil and Water Conservation District
Chelan Conservation District
Columbia Conservation District
Eastern Irrigation District
Ferry Conservation District
Foster Creek Conservation District
Franklin Conservation District
Gant Conservation District
Kittitas Conservation District
Klickitat Conservation District
Kootenai-Shoshone Soil and Water Conservation District

Latah Soil and Water Conservation District
Lincoln Conservation District
Moses Lake Conservation District
North Yakima Conservation District
Okanogan Conservation District
Palouse Conservation District
Palouse-Rock Lake Conservation District
Pend Oreille Conservation District
Pomeroy Conservation District
Quincy Irrigation District
South Douglas Conservation District
South Yakima Conservation District
Spokane Conservation District
Stevens County Conservation District
Underwood Conservation District
Walla Walla Conservation District
Whitman Conservation District

NGOs/Working Groups
Audubon Society
Clark Fork-Pend Oreille Conservancy
Ducks Unlimited
Friends of the Kootenai National Wildlife Refuge
Friends of the Little Pend Oreille National Wildlife Refuge
Friends of Turnbull National Wildlife Refuge
Idaho Native Plant Society
Inland Northwest Land Trust
Methow Salmon Recovery Foundation
Mid-Columbia Fisheries Enhancement Group
National Wild Turkey Federation
Palouse-Clearwater Environmental Institute
Palouse Land Trust
Rocky Mountain Elk Foundation
The Nature Conservancy
Tri-State Steelheaders
Trout Unlimited
Washington Trout
Washington Native Plant Society

Industry/Other
Avista Corporation
Inland Empire Paper Company

Stakeholders Contacted in Idaho

Ranch owners plus 38 additional private land owners (private landowner names on record)
Big Lost Ranch-Mark Gates
Bird Dog Ranch-Guy Bonnivier
Black Butte Hills, LLC-Chuck Hill
Lazy Bear Ranch-Tim Wrightman
Osborne Ranch, Inc-Ed Osborne
OX Ranch-John Dyer
Reid Ranch-Ken Davis
Silver Springs Ranch-Tom O'Gara
V Dot Cattle Company-Jim Little
Van Deusen Ranch-Jim Little

Federal Agencies
Deer Flat National Wildlife Refuge-Elaine Johnson
Southeast Idaho National Wildlife Refuge-Dick Munoz
U.S. Army Corps of Engineers-Robert Brochu
U.S. Fish and Wildlife Service-Jody Brostrom, Meggan Laxalt Mackey
U.S. Forest Service-Dave Skinner

Federal Elected Officials
Senator Larry Craig-Jason Bohrer, Calli Daly, Jeff Fayre, Dustin Miller
Senator Mike Crapo-Layne Bangerter, Don Dixon, Leslie Huddleston
Congressman Mike Simpson-Laurel Hall
Congressman C.L. "Butch" Otter-Lane Jolliffe (note Mr. Otter is currently Governor of Idaho)

Tribal Governments- Cultural Resource Contact
Duck Valley Shoshone-Paiute Tribes-Ted Howard
Nez Perce Tribe of Idaho-Keith Lawrence
Nez Perce Tribe of Idaho-Chairwoman Rebecca Miles
Nez Perce Tribe of Idaho-Samuel Penney
Shoshone-Bannock Tribe-Chairman Blaine Edmo
Shoshone-Paiute Tribe-Tim Dykstra
Shoshone-Paiute Tribe-Chairman Terry Gibson
Shoshone-Paiute Tribe-Doug McConnaughey
Shoshone-Paiute Tribe-Jake Sellman

State Agencies
Division of Environmental Quality-Toni Hardesty
Governor's Office of Species Conservation-Jim Caswell
Idaho Department Fish and Game-Terry Gregory, Kim Ragotzkie, HQ-Mike Larkin, Rex Sallabanks, Miles Benker, Tom Curet, Jeff Dillon, Mary Dudley, Mark Gambin, Cal Groen, Steve Huffaker, J. J.Teare, CDC-Chuck Harris, HQ-Karla Drewsen, HQ-Don Kemner,
Idaho Department of Agriculture-Pat Takasugi
Idaho Department of Lands-George Bacon

Idaho Department of Water Resources-Hal Anderson
Idaho Soil Conservation Commission-Jerry Nizolescu
Office of the Attorney General-Clive Strong

Local/County Government, Agency or Soil and Water Conservation District
Arco SWCD
Boise SWCD
Bear Lake Regional Commission-Allen Harrison, Mitch Poulson
Blackfoot River Watershed Council-Charlotte Reid
Butte County SWCD-Frances Perkes
Caldwell SWCD
Grangeville SWCD
Latah County SWCD-Patrick Evans, Trish Heekin, Ken Stinson
Lewis SWCD-Sharon Kinsen
Lewiston SWCD
Malheur County SWCD-Lance Philips
Moscow SWCD
North Bingham SWCD
Oneida SWCD -Linda Daniels
Orofino SWCD
Payette SWCD
Rexburg SWCD
Salmon SWCD
St. Anthony SWCD
Weiser SWCD
Weiser Irrigation District-Director
West Central Highlands Resource Conservation-Russ Manwaring

Local Elected Official
Commissioner - Fremont County-Paul Romrell

Industry/Other
Idaho Cattle Association-Jeff Faulkner
Idaho Cattle Association-Lloyd Knight
Idaho Cattle Association-Mike Webster
Idaho Farm Bureau Federation-Greg Nelson
Idaho Wool Growers Association-Stan Boyd
Idaho Rangeland Committee-Dr. Ted Hoffman
Idaho Rangeland Resource Commission-Gretchen Hyde
Idaho Water Users Association Inc.-Norman W. Semanko
Intermountain Aquatics-Jeff Klausmann
PacifiCorp-Buffi Morris, Mark Stenberg
Picabo Land and Livestock Company-Nick Purdy
Soulen Livestock Company-Margaret Soulen-Hinson
South Cove Ventures-Chuck Hill

Non-Governmental Organizations /Working Groups
Bear Lake Watch-Director
Defenders of Wildlife-Suzanne Stone
Ducks Unlimited-Chris Bonsignore
Friends of the Teton River-Lyn Benjamin
Idaho Conservation League-John Robison
Northwest Natural Resources Group Limited-Joe Hinson
Northwest Resources and Information Center-Ed Cheney
Pheasants Forever-Cade Powell
The Nature Conservancy of Idaho -Alan Sands, Trish Klahr, Bas Hargrove
The Wilderness Society Idaho-Craig Gehrke
Teton Regional Land Trust-Rob Cavallaro, Trust-Mike Whitfield
Trout Unlimited-Warren Colyer, Kim Goodman, Trout Unlimited-Helen Neville
Upper Salmon Basin Watershed Project-Katie Slavin
Western Watersheds Project-Katie Fite, Kelley Weston
Wood River Land Trust-Kathyryn Goldman

University
Albertson College of Idaho-Biology-Dr. Eric Yensen

Appendix G. Comparison of Strategic Plan and Operational Plan Targets

The projected habitat targets portrayed in Tables 1 and 2 of this Plan represent 5-year cumulative habitat performance measures for Region 1's Partners for Fish and Wildlife and Coastal Program Strategic Plan (Strategic Plan). These performance measures are intentionally not identical with Operational Plan/GPRA performance measures. This difference enables us to retain flexibility and to ensure that our Strategic Plan habitat targets are not used out of context. The Table below describes the differences and similarities between the Strategic Plan targets and the Operational Plan targets.

	Strategic Plan Targets	**Operational Plan Targets**
Time Frame	Five year cumulative totals projected	Annual totals projected
Scale	Identified and defined by individual Focus Areas	Developed station by station; rolled up into regional totals for WO use
HabITS data entry requirements	Same	Same
Flexibility	Will be modified as needed per circumstances	Locked in early in fiscal year
Metrics	**Partners for Fish and Wildlife and Coastal Program metrics are the same:** • Wetland acres habitat improved • Upland acres habitat improved • Riparian miles habitat improved • Instream miles habitat improved • Shoreline miles (coastal or lacustrine) improved • Number of fish barriers removed/installed/modified	**Partners for Fish and Wildlife**: • Wetland acres restored/enhanced • Upland acres restored/enhanced • Riparian stream/shoreline miles restored/enhanced • Number fish barriers removed/installed • Acres of wetlands reopened to fish passage • Acres/miles stream/shoreline reopened to fish passage • Acres infested with invasive plants treated **Coastal Program:** • Marine/Coastal wetland acres restored/enhanced • Marine/Coastal upland acres restored/enhanced • Marine/Coastal stream/shoreline miles restored/enhanced • Number Fish Barriers removed/installed • Wetland acres protected • Upland acres protected • Shoreline miles protected • Acres of wetland reopened to fish passage • Acres/Miles stream/shoreline reopened to fish passage

Appendix H. Table of References

Table of References

Guam Division of Aquatic Wildlife and Resources. 2005. Guam Comprehensive Wildlife Conservation Strategy. Mangilao, Guam. 256 pp.

Idaho Department of Fish and Game. 2005. Idaho Comprehensive Wildlife Conservation Strategy. Idaho Conservation Data Center, Idaho Department of Fish and Game, Boise, ID. http://fishandgame.idaho.gov/cms/tech/CDC/cwcs.cfm

Mitchell, C, C Ogura, DW Meadows, A Kane, L Strommer, S Fretz, D Leonard, and A McClung. 2005. *Hawaii's Comprehensive Wildlife Conservation Strategy*. Department of Land and Natural Resources. Honolulu, Hawai'i. 722 pp. Also available at: http://www.state.hi.us/dlnr/dofaw/cwcs/.

Noss, Reed; Edward LaRoe, and J. Michael Scott. Endangered Ecosystems of the United States: A Preliminary Assessment of Loss and Degradation. 1995. Biological Report 28. National Biological Service.

Oregon Department of Fish and Wildlife. 2005. Oregon Conservation Strategy. Oregon Department of Fish and Wildlife, Salem, Oregon.

The Nature Conservancy. 2006. Hawaiian High Islands Ecoregion Plan. Web-based document at: www.hawaiianecoregionplan.info/home/html

U.S. Environmental Protection Agency. 2007. Ecoregions and Watersheds. Web-based document at: epa.gov/bioindicators/html/ecoregions.html.

USFWS (U.S. Fish and Wildlife Service). 2006a. Strategic Plan-The Partners for Fish and Wildlife Program Stewardship of Fish and Wildlife Through Voluntary Conservation. USFWS, Washington, DC.

USFWS (U.S. Fish and Wildlife Service). 2006b. Strategic Plan- The Coastal Program Stewardship of Fish and Wildlife Through Voluntary Conservation. USFWS, Washington, DC.

WDFW (Washington Department of Fish and Wildlife). 2005. Washington's Comprehensive Wildlife Conservation Strategy. Washington Department of Fish and Wildlife, Olympia, Washington.

World Wildlife Federation. 2001. Web-based document at: http://www.nationalgeographic.com/wildworld/profiles/terrestrial_oc.html

References in Appendix A: Pacific Islands Focus Areas

American Samoa Department of Marine and Wildlife Resources. 2006. A Comprehensive Strategy for Wildlife Conservation in American Samoa. Pago Pago, AS.

Amerson, A., A. Whistler, and T. Schwanger. 1982a. Wildlife and Wildlife Habitat of American Samoa. 1. Environment and Ecology. Prepared for the USFWS. Honolulu, HI.

Amerson, A., A. Whistler, and T. Schwanger. 1982b. Wildlife and Wildlife Habitat of American Samoa. II. Accounts of Flora and Fauna. Prepared for the USFWS. Honolulu, HI.

Biosystems Analysis Inc. 1992. A Comprehensive Wetland Management Plans for the Islands of Tutuila and Aunuu, American Samoa. American Samoa Coastal Management Office. Pago Pago, AS.

Biosystems Analysis Inc. 1993. A Comprehensive Wetland Management Plans for the Islands of Manua, American Samoa. American Samoa Coastal Management Office. Pago Pago, AS.

Commonwealth of the Northern Mariana Islands Division of Fish and Wildlife. 2005. Comprehensive Wildlife Conservation Strategy. Saipan, MP.

Craig, Peter (ed.). 2002. Natural History Guide to American Samoa. National Park of American Samoa and Department Marine and Wildlife Resources, Pago Pago, AS

CRTF (U.S. Coral Reef Task Force). 2006a. Hawaii Local Action Strategy Fact Sheet. Available at http://www.coralreef.gov/las/pdf/Hawaii_LAS_factsheet.pdf

CRTF (U.S. Coral Reef Task Force). 2006b. American Samoa Local Action Strategy Fact Sheet. Available at http://www.coralreef.gov/las/pdf/AS_LAS_factsheet.pdf

CRTF (U.S. Coral Reef Task Force). 2006c. CNMI Local Action Strategy Fact Sheet. Available at http://www.coralreef.gov/las/pdf/CNMI_LAS_factsheet.pdf

CRTF (U.S. Coral Reef Task Force). 2006d. Guam Local Action Strategy Fact Sheet. Available at http://www.coralreef.gov/las/pdf/Guam_LAS_factsheet.pdf

East Maui Watershed Partnership. 2006. Draft Environmental Assessment-East Maui Watershed Partnership Fence Extensions in the East Maui Watershed. January 2006. Makawao, HI.

Engilis, A. and M. Naughton. 2004. U.S. Pacific Islands Regional Shorebird Conservation Plan. U.S. Shorebird Conservation Plan. U.S. Fish and Wildlife Service, Portland, OR.

Federated States of Micronesia (FSM) National Government. 2002. FSM National Biodiversity Strategy and Action Plan. Palikir, Pohnpei.

Henry, A. 2006. Pacific Coast Joint Venture Strategic Plan for Wetland Conservation in Hawaii. Pacific Coast Joint Venture, Honolulu, HI.

Kaua'i Watershed Alliance. 2005. Kaua'i Watershed Management Plan: Overall Management Strategy. April 2005. Lihue, HI.

Koʻolau Mountains Watershed Partnership. 2002. Koʻolau mountains watershed partnership management plan. Honolulu, HI.

Kostka, W. et al. 2002. A Blueprint for Conserving the Biodiversity of the Federated States of Micronesia. The Nature Conservancy, Kolonia, Pohnpei.

Lānaʻi Forest Watershed Partnership. 2001. Lānaʻi Forest Watershed Partnership Plan. Lānaʻi City, HI.

Leeward Haleakalā Watershed Restoration Partnership. 2006. Leeward Haleakalā watershed restoration partnership management plan. Makawao, Hawaii.

Morin, M. and S. Conant. 1998. Laysan Island Ecosystem Restoration Plan. USFWS, Honolulu, HI.

National Environmental Protection Council. 2004. Palau National Biodiversity Strategy and Action Plan. Koror, Palau.

National Invasive Species Committee. 2004. Palau National Invasive Species Strategy. National Environmental Protection Council, Koror, Palau.

NMFS (National Marine Fisheries Service).1983. Recovery Plan for the Hawaiian Monk Seal (*Monachus schauinslandi*). NMFS Southwest Region, Terminal Island, CA.

NMFS (National Marine Fisheries Service) and U.S. Fish and Wildlife Service. 1998a. Recovery Plan for U.S. Pacific Populations of the Green Turtle (*Chelonia mydas*). NMFS, Silver Spring, MD.

NMFS (National Marine Fisheries Service) and U.S. Fish and Wildlife Service. 1998b. Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle (*Eretmochelys imbricata*). NMFS, Silver Spring, MD.

National Park Service. 1997. General Management Plan American National Park of American Samoa. Pago Pago, AS.

National Park Service. 1998. National Park Feasibility Study-American Samoa. National Park Service, Pago Pago, AS.

Offshore Islet Restoration Committee (OIRC). 2003. OIRC Draft Restoration Plan. USFWS, Honolulu, HI.

Palau Bureau of Marine Resources. 2006. Draft Palau Crocodile Management Plan. Koror, Palau.

Pohnpei Resource Management Committee. 2004. Pohnpei State Biodiversity Strategic Action Plan. Pohnpei, FSM.

TNC (The Nature Conservancy) of Hawai‘i, 1998a. East Molokai watershed strategic plan. High Islands Ecoregional Plan. Molokai Office, HI.

TNC (The Nature Conservancy),1998b. Hawaiian High Islands Ecoregional Plan. Internal manuscript, not publicly distributed.

TNC (The Nature Conservancy) 2004. Draft Ecoregion Plan for Palau. TNC, Koror, Palau.

TNC (The Nature Conservancy), 2006. Hawaiian High Islands Ecoregion Plan. Web-based document at: www.hawaiianecoregionplan.info/home/html.

U.S. Environmental Protection Agency et al. 2004. Hawaii's Local Action Strategy to Address Land-Based Pollution Threats to Coral Reefs. Prepared jointly by EPA, USGS, USFWS, NOAA, CZM, DOH, DLNR. EPA, Honolulu, HI.

USFWS (U.S. Fish and Wildlife Service). 1983. Hawaiian Dark-rumped Petrel and Newell's Manx Shearwater Recovery Plan. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1984a. The Hawaiian Hawk Recovery Plan. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1984b. Recovery Plan for the Northwest Hawaiian Islands Passerines. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1984c. *Vicia menziesii* Recovery Plan. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1986. Hawaiian Islands National Wildlife Refuge. Final Master Plan/Environmental Impact Statement. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1990a. *Gouania hillebrandii* (Rhamnaceae) Recovery Plan. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1990b. Guam Mariana Fruit Bat and Little Fruit Bat Recovery Plan. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1991a. Recovery Plan for the Mariana Common Moorhen (= Gallinule) *Gallinula chloropus guami*. Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1991b. Recovery Plan for the Mariana Islands Population of the Vanikoro Swiftlet, *Aerodramus vaniforensis bartschi*. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1993a. Draft Recovery Plan for *Haplostachys haplostachya* and *Stenogyne angustifolia*. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1993b. Recovery Plan for the Hawaiian Gardenia (*Gardenia brighamii)*. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1993c. Recovery Plan for *Serianthes nelsonii*. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1994a. Recovery Plan for *Caesalpinia kavaiensis* and *Kokia drynarioides*. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1994b. Recovery Plan for *Lipochaeta venosa* and *Isodendrion hosakae*. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1994c. Recovery Plan for the Wahiawa Plant Cluster. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1995a. Recovery Plan for the Kaua‘i Plant Cluster. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1995b. Recovery Plan for the Ka‘u Silversword. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1995c. Lanai Plant Cluster Recovery Plan. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1995d. Recovery Plan for the Waianae Plant Cluster. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1996a. Pacific Islands Ecoregion Coastal Ecosystems Program Proposal. USFWS, Honolulu, Hawaii.

USFWS (U.S. Fish and Wildlife Service). 1996b. Recovery Plan for the Big Island Plant Cluster. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1996c. Recovery Plan for *Hibiscadelphus distans*. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1996d. Recovery Plan for Koolau Mountain Plant. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1996e. Recovery Plan for Molokai Plant Cluster. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1997. Recovery Plan for the Maui Plant Cluster. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1998a. Big Island II: Addendum to the Recovery

Plan for the Big Island Plant Cluster. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1998b. Kauai II: Addendum to the Recovery Plan for the Recovery Plan for the Kauai Plant Cluster. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1998c. Molokai II: Addendum to the Recovery Plan for the Molokai Plant Cluster. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1998d. Recovery Plan for Four Species of Hawaiian Ferns. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1998e. Recovery Plan for the Hawaiian Hoary Bat. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1998f. Recovery Plan for *Kokia cookei*. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1998g. Recovery Plan for the Micronesian Megapode (*Megapodius laperouse laperouse*). USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1998h.. Recovery Plan for the Nightingale Reed-warbler, *Acrocephalus luscinia*. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 1999a. Recovery Plan for the Multi-island Plants. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 2000. Native Forest Birds of Guam and Rota of the Commonwealth of the Northern Mariana Islands Recovery Plan. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 2001. Draft Addendum to the Recovery Plan for Multi-Island Plants. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 2002. North American Waterbird Conservation Plan. Shepardstown, WV. Electronic document: http://www.waterbirdconservation.org/.

USFWS (U.S. Fish and Wildlife Service). 2003. Draft Revised Recovery Plan for the ʻAlalā (*Corvus hawaiiensis*). USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 2004a. Draft Revised Recovery Plan for the Nēnē or Hawaiian goose (*Branta sandvicensis*). USFWS, Portland, OR. 148 pp.

USFWS (U.S. Fish and Wildlife Service). 2004b. Draft Revised Recovery Plan for the Laysan Duck (*Anas laysanensis*). USFWS, Portland OR.

USFWS (U.S. Fish and Wildlife Service). 2005a. Draft Revised Recovery Plan for Hawaiian Forest Birds. USFWS, Portland OR. 428 pp.

USFWS (U.S. Fish and Wildlife Service). 2005b. Draft Revised Recovery Plan for Hawaiian

Waterbirds. Second Draft of Second Revision. USFWS, Portland OR. 155 pp.

USFWS (U.S. Fish and Wildlife Service). 2005c. Recovery Plan for the Blackburn's Sphinx Moth (*Manduca blackburni*). USFWS, Portland OR. 125 pp.

USFWS (U.S. Fish and Wildlife Service). 2005d. Regional Seabird Conservation Plan, Pacific Region. USFWS, Portland, OR.

USFWS (U.S. Fish and Wildlife Service). 2006a. Draft Recovery Plan for the Nosa Luta or Rota Bridled White-eye (*Zosterops rotensis*). USFWS, Portland OR.

USFWS (U.S. Fish and Wildlife Service). 2006b. Recovery Plan for the Kauai Cave Arthropods: The Kauai Cave Wolf Spider (*Adelcosa anops*) and the Kauai Cave Amphipod (*Spelaeorchesia koloana*). USFWS, Portland OR.

USFWS (U.S. Fish and Wildlife Service). 2006c. Recovery Plan for Newcomb's Snail (*Erinna newcombi*). USFWS, Portland OR.

USFWS (U.S. Fish and Wildlife Service). 2007. Recovery Plan for Two Plants from Rota (*Nesogenes rotensis* and *Osmoxylon mariannense*). USFWS, Portland OR.

West Maui Mountains Watershed Partnership. 1999. West Maui Mountains Watershed Management Plan. Kapalua, HI.

References in Appendix B: Oregon Focus Areas

Altman, Bob and Aaron Holmes. 2000. Conservation Strategy for Landbirds in the Columbia Plateau of Eastern Oregon and Washington. Oregon-Washington Partners In Flight.

BLM (Bureau of Land Management). 1995. Roseburg District Record of Decision and Resource Management Plan. Prepared by the Roseburg District Bureau of Land Management, Roseburg, Oregon. 228 pp.

BLM (Bureau of Land Management). 1994. Coos Bay District Record of Decision and Resource Management Plan. Prepared by the Coos Bay District Bureau of Land Management, Coos Bay District, North Bend, Oregon.

BLM (Bureau of Land Management). 2003. Lakeview District BLM Land and Resource Management Plan. Lakeview BLM Office, Lakeview, Oregon.

Clearwater BioStudies, Inc. Geomorphic and Riparian Assessment of the Lower South Fork of the Coquille River. Prepared for the Coquille Watershed Association, Coquille, Oregon. April 2003.

Cole, Michael B., R. Blaha, and J. Lemke. 2003. Upper South Fork of the John Day River Watershed Assessment. Prepared for Grant Soil and Water Conservation District, John

Day, OR.

Coos and Coquille Local Advisory Committee, the Oregon Department of Agriculture, the Coos County Soil and Water Conservation District. 2006. Coos and Coquille Area Agricultural Water Quality Management Plan. Coos Soil and Water Conservation District, Coquille, Oregon.

Coquille Watershed's Action Plan - Coquille Watershed Association, 1997. Action Plan, Coquille Watershed Association, Coquille, Oregon.

Crooked River Local Advisory Committee, Oregon Department of Agriculture, Crook County Soil and Water Conservation District. 2006. Crooked River Agricultural Water Quality Management Plan. First Biennial Revision. Crook County Soil and Water Conservation District, Prineville, Oregon.

Crooked River Watershed Council. 2002. Crooked River Watershed Assessment. Crooked River Watershed Council, Prineville, Oregon.

Crooked River Watershed Council. 2005. Lower Crooked River Watershed Restoration Program Work Plan 2005-2007. Crooked River Watershed Council, Prineville, Oregon.

DEA (David Evans and Associates, Inc.). 2000. *Scappoose Bay Watershed Assessment*. Prepared for the Scappoose Bay Watershed Council. Scappoose, Oregon.

DEA (David Evans and Associates, Inc.). 2001. *A comprehensive assessment of fish passage barriers in the Scappoose Bay Watershed*. Prepared for the Scappoose Bay Watershed Council, Scappoose, Oregon.

DOI (Department of the Interior). 2002. Endangered and Threatened Species: Withdrawal of Proposed Rule To List the Southwestern Washington/Columbia River Distinct Population Segment of the Coastal Cutthroat Trout as Threatened. Federal Register: Vol. 67, No. 129 / Friday, July 5, 2003/ 44934-44961.

DOI (Department of the Interior). 2003. Endangered and Threatened Wildlife and Plants; Final Rule to Remove the Douglas County Distinct Population Segment of Columbian White-Tailed Deer From the Federal List of Endangered and Threatened Wildlife. U.S. Fish and Wildlife Service. Federal Register / Vol. 68, No. 142 / 43647-43659. Thursday, July 24, 2003.

E & S Environmental Chemistry, Inc. and the Necanicum River Watershed Council, Necanicum River Watershed Assessment, March, 2002. Seaside, Oregon.

Evans, N.R., R.M. Thom, G.D. Williams, J. Vavrinec, K.L. Sobocinski, L.M. Miller, A.B. Borde, V.I. Cullinan, J.A. Ward, C.W. May, C. Allen. 2006. Lower Columbia River Restoration Prioritization Framework. Prepared for the Lower Columbia River Estuary Partnership. Battelle Memorial Institute, Pacific Northwest Division, Richland,

Washington. 73 pp.

Fies, T., B. Lewis, S. Marx, J. Fortune, M. Manion, and T. Shrader. 1996a. Upper Deschutes River subbasin fish management plan. Oregon Department of Fish and Wildlife, Bend, Oregon.

Follansbee, Bruce. 2002. North Fork Coquille River Riparian Shade Assessment. Technical Data for Water Quality Management Plan. Prepared for the Coquille Watershed Association, Coquille, Oregon. September 2002.

Follansbee, Bruce. 2003. Middle Fork Coquille River Riparian Shade Assessment. Technical Data for Water Quality Management Plan. Prepared for the Coquille Watershed Association, Coquille, Oregon. July 2003.

Goose and Summer Lakes Basin Local Advisory Committee. 2005. Goose & Summer Lakes Basin Agricultural Water Quality Management Area Plan. Developed by the Goose and Summer Lakes Basin Local Advisory Committee with Assistance from Oregon Department of Agriculture and Lakeview Soil and Water Conservation District, Lakeview, Oregon. 34 pp.

Hill, M. 2001. John Day Basin, Stream Flow Restoration Priorities for Recovery of Salmonids. Prepared for The Oregon Plan.

Johnson, O.W., M.H. Ruckelshaus, W.S. Grant, F.W. Waknitz, A.M. Garrett, G.J. Bryant, K.Neely, and J.J. Hard. 1999. Status Review of Coastal Cutthroat Trout from Washington, Oregon, and California. Northwest Fisheries Science Center, National Marine Fisheries Service, Seattle, WA. 320 pp.

Lower Columbia Fish Recovery Board. 2004. Lower Columbia Salmon Recovery: Fish & Wildlife Subbasin Plan. Volume II – Subbasin Plan, Chapter A – Lower Columbia Mainstem and Estuary. 300 pp.

Lower Columbia River Estuary Program. 1999. Comprehensive Conservation and Management Plan, Volume 1. Lower Columbia River Estuary Program, Portland, Oregon. 32 pp.

Lower Columbia River Watershed Council. 1999. Lower Columbia - Clatskanie Subbasin Watershed Assessment.

NMFS (National Marine Fisheries Service). 2003. Preliminary conclusions regarding the updated status of listed ESUs of West Coast salmon and steelhead, Section C – Coho Salmon. NOAA. Portland, Oregon.

NOAA Fisheries (National Oceanic and Atmospheric Administration). 2006. Columbia River Estuary recovery plan module. National Marine Fisheries Service. Portland, Oregon.

NPCC (Northwest Power and Conservation Council), Bonneville Power Administration.

Deschutes Subbasin Plan. 2004. In Columbia River Basin Fish and Wildlife Program. Portland, Oregon. http://www.nwcouncil.org/fw/subbasinplanning/deschutes/plan/. Accessed November 11, 2006.

NPCC (Northwest Power and Conservation Council). 2004. Grande Ronde Subbasin Plan. In *Columbia River Basin Fish and Wildlife Program*. Portland, Oregon.

NPCC (Northwest Power and Conservation Council). 2004. Powder River Subbasin Plan. In *Columbia River Basin Fish and Wildlife Program*. Portland, Oregon.

NPCC (Northwest Power and Conservation Council), Bonneville Power Administration. 2005. John Day Subbasin Revised Draft Plan. In Columbia River Basin Fish and Wildlife Program. Portland, Oregon. http://www.nwcouncil.org/fw/subbasinplanning/johnday/plan/. Accessed November 7, 2006.

NPCC (Northwest Power and Conservation Council). 2005. Malheur River Subbasin Assessment and Management Plan. In *Columbia River Basin Fish and Wildlife Program*. Portland, Oregon.

Oregon Coastal Management Program. 2005. The Oregon Coastal Management Program Coastal and Estuarine Land Conservation Plan**.** Department of Land Conservation and Development Salem, Oregon. 41 pp.

ODFW (Oregon Department of Fish and Wildlife). 2005. Greater Sage-Grouse Conservation Assessment and Strategy for Oregon.Oregon Department of Fish and Wildlife, Salem, Oregon.

OPRD (Oregon Parks and Recreation Department). 2004. Habitat Conservation Plan for the Western Snowy Plover. Salem, Oregon.

Oregon Wetlands Joint Venture. 1994. Joint Venture Implementation Plans: Eastern Oregon Closed Basins. Prepared for Pacific Coast Joint Venture. 25 pp.

ODFW (Oregon Department of Fish and Wildlife). 1992. Coast Range Subbasin Fish Management Plan. Oregon Department of Fish and Wildlife, Salem, Oregon.

ODFW (Oregon Department of Fish and Wildlife). 2004. Fish Passage Barriers, John Day Watershed District. Oregon Department of Fish and Wildlife, Salem, Oregon.

ODFW (Oregon Department of Fish and Wildlife). 2005. Draft Oregon Management Plan for Columbian Sharp-tailed Grouse.

ODFW (Oregon Department of Fish and Wildlife). 2006. The Oregon Conservation Strategy. Oregon Department of Fish and Wildlife, Salem, Oregon.

ODFW (Oregon Department of Fish and Wildlife). 2006. Draft State of Oregon Conservation Plan for the Oregon Coast Coho Evolutionary Significant Unit. Oregon Department of Fish and Wildlife, Salem, Oregon.

Oregon Habitat Join Venture-Eastern Oregon Working Group. 2005. Coordinated Implementation Plan for Bird Conservation in Eastern Oregon. Oregon Habitat Joint Venture/Intermountain West Joint Venture.

Oregon Watershed Enhancement Board. 2004. Grande Ronde Basin Priorities. Oregon Watershed Enhancement Board, Salem, Oregon. 9 pp.

Oregon Wetlands Joint Venture. 1994. Joint Venture Implementation Plans: Willamette Valley. Prepared for Pacific Coast Joint Venture. 24 pp.

Oregon Wetlands Joint Venture. 1994. Joint Venture Implementation Plans: Lower Columbia River. Prepared for Pacific Coast Joint Venture. 24 pp.

Oregon Wetlands Joint Venture. 1994. Joint Venture Implementation Plans: Northern Oregon Coast. Prepared for Pacific Coast Joint Venture. 18 pp.

Primozich, David, Richard Bastasch. 2004. Willamette Subbasin Plan. Northwest Power Conservation Council. Portland, Oregon. 3-111.

Scranton, R. 2006. The application of geographic information systems for delineation and classification of tidal wetlands for resource management of Oregon's coastal watersheds. M.S. Thesis. Oregon State University.

Sinclair, M. 2005. Willamette River Basin: Challenge of Change. Willamette Partnership. 44 pp.

Upper Deschutes Local Advisory Committee, Oregon Department of Agriculture, Deschutes Soil and Water Conservation District. 2005. Upper Deschutes Agricultural Water Quality Management Plan. First Biennial Revision. Deschutes Soil and Water Conservation District, Redmond, Oregon.

Upper Deschutes Watershed Council. 2003. Upper Deschutes Subbasin Action Plan. Upper Deschutes Watershed Council, Bend, Oregon.

USFS (U.S. Forest Service). 1994. Upper Deschutes River Instream Flow Assessment. USDA Forest Service, Deschutes National Forest, Bend, Oregon.

USFS (U.S. Forest Service). 1996a. Metolius Wild and Scenic River Management Plan. USDA Forest Service, Deschutes National Forest, Sisters, Oregon.

USFS (U.S. Forest Service). 1996b. Upper Deschutes Wild and Scenic River and State Scenic Waterway Comprehensive Management Plan. USDA Forest Service, Deschutes National

Forest, Bend, Oregon.

USFS (U.S. Forest Service). 2001. Big Marsh Creek & The Little Deschutes River Wild and Scenic Rivers Management Plan . USDA Forest Service, Deschutes National Forest, Klamath County, Oregon.

USFWS (U.S Fish and Wildlife Service). 1998a. Recovery Plan for the Threatened and Rare Native Fishes of the Warner Basin and Alkali Subbasin. Region 1, USFWS, Portland, Oregon. 86 pp.

USFWS (U.S Fish and Wildlife Service). 1998b. Recovery Plan for the Endangered Western Lily (*Lilium occidentale*). U.S. Fish and Wildlife Service. Portland, Oregon. 82 pp.

USFWS (U.S Fish and Wildlife Service). 2001a. Western Snowy Plover (*Charadrius alexandrinus nivosus*) Pacific Coast Population Draft Recovery Plan. Portland, Oregon. 630 pp.

USFWS (U.S Fish and Wildlife Service). 2001b. Oregon Silverspot Butterfly (*Speyeria zerene hippolyta*) Revised Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon. 113 pp.

USFWS (U.S Fish and Wildlife Service). 2002a. Draft Recovery Plan for the Klamath and Columbia River Distinct Population Segment of Bull Trout (Salvelinus confluentus). U.S. Fish and Wildlife Service, Portland, Oregon.

USFWS (U.S. Fish and Wildlife Service). 2002b. Bull Trout (*Salvelinus confluentus*) Draft Recovery Plan, USFWS, Portland, Oregon

USFWS (U.S Fish and Wildlife Service). 2002b. Recovery Plan for Howell's Spectacular Thelypody (*Thelypodium howellii ssp. spectabilis)*. U.S. Fish and Wildlife Service, Portland, Oregon. 47 pp.

USFWS (U.S Fish and Wildlife Service). 2003. Recovery Plan for Gentner's Fritillary. Region 1, USFWS, Portland, Oregon.

USFWS (U.S Fish and Wildlife Service). 2004-2006. Pacific Region: Fisheries Program Strategic Plan. U.S. Fish and Wildlife Service, Portland, Oregon.

USFWS (U.S Fish and Wildlife Service). 2005a. Draft Recovery Plan for *Silene spaldingii* (Spalding's catchfly). U.S. Fish and Wildlife Service, Portland, Oregon. 121 pp.

USFWS (U.S Fish and Wildlife Service). 2005b. Site information for the western lily. Unpublished data. Newport, Oregon.

USFWS (U.S Fish and Wildlife Service). 2006a. National Fish Habitat Action Plan (Western Native Trout Initative). U.S. Fish and Wildlife Service, Washington DC.

USFWS (U.S Fish and Wildlife Service). 2006b. Post-Delisting Monitoring Report for the Douglas County Distinct Population Segment of the Columbian White-tailed Deer *(Odocoileus virginianus leucurus*): 2003-2005. Prepared by the Roseburg Field Office, USFWS, Roseburg, Oregon. 25 pp.

USFWS (U.S Fish and Wildlife Service). 2006c. Voluntary Agreement For Kincaid's Lupine (*Lupinus Sulphureus* Spp. *Kincaidii*) In Douglas County. Lone Rock Timber Company, Roseburg Forest Products, Seneca Jones Timber Company, and the U.S. Fish and Wildlife Service. USFWS document, Roseburg, Oregon. 12 pp.

USFWS (U.S Fish and Wildlife Service). 2006d. Programmatic Conservation Agreement for Kincaid's Lupine (*Lupinus Sulphureus* Spp. *Kincaidii*) In Douglas County. Roseburg Bureau of Land Management, Umpqua National Forest, and the U.S. Fish and Wildlife Service. USFWS document, Roseburg, Oregon. 12 pp.

USFWS (U.S Fish and Wildlife Service). In preparation: a. Draft Willamette Valley Prairie Species Recovery Plan. Region 1, USFWS, Portland, Oregon.

USFWS (U.S Fish and Wildlife Service). In preparation: b. Draft Recovery Plan for the Rough Popcorn Flower. Region 1, USFWS, Portland, Oregon.

USFWS (U.S Fish and Wildlife Service). In preparation: c. Draft Recovery Plan For Listed Species of the Rogue Valley Vernal Pool and Illinois Valley Wet Meadow Ecosystems. Region 1, USFWS, Portland, Oregon.

Vander Schaaf, D., G. Wilhere, Z. Ferdana, K. Popper, M. Schindel, D. Rolph, P. Iachetti, G. Kittel, R. Crawford, D. Pickering, and J. Christy. 2006. Pacific Northwest Coast Ecoregional Assessment. Prepared by The Nature Conservancy, the Nature Conservancy of Canada, and the Washington Department of Fish and Wildlife with support from Nature Service, the Oregon Natural Heritage Information Center, the Washington Natural Heritage Program, and the British Columbia Conservation Data Centre.

Venture/Intermountain West Joint Venture.http://www.iwjv.org/Images/ORPlan2005.pdf. Accessed November 7, 2006.

WDFW (Washington Department of Fish and Wildlife). 2005. Washington's Comprehensive Wildlife Conservation Strategy. Washington Department of Fish and Wildlife, Olympia, Washington.

<u>References in Appendix C: Western Washington Focus Areas</u>

Cullinan, T. 2001. Important Bird Areas of Washington. Audubon Washington, Olympia, Washington. 170 pp.

Floberg, J., M. Goering, G. Wilhere, C. MacDonald, C. Chappell, C. Rumsey, Z. Ferdana, A. Holt, P. Skidmore, T. Horsman, E. Alverson, C. Tanner, M. Bryer, P. Iachetti, A.

Harcombe, B. McDonald, T. Cook, M. Summers, D. Rolph. 2004. Willamette Valley-Puget Trough-Georgia Basin Ecoregional Assessment, Volume One: Report. Prepared by the Nature Conservancy with support form the Nature Conservancy of Canada, Washington Department of Fish and Wildlife, Washington Department of Natural Resources (Natural Heritage and Nearshore Habitat programs), Oregon State Natural Heritage Information Center and the British Columbia Conservation Data Center.

Frissell c., Morrison P., Kramer J., Mentor M. 2001. Conservation Priorities: An Assessment of Freshwater Habitat for Puget Sound Salmon. Prepared for The Trust for Public Land. Seattle, WA. 138 pp + Appendices.

Lovvorn, J.R., and J.R. Baldwin. 1996. Intertidal and farmland habitats of ducks in the Puget Sound region: A landscape perspective. *Biol. Conserv.* 77:97-114.

Northwest Straits Commission. 2006. Northwest Straits Marine Conservation Initiative. Background Information. Available online at: http://www.nwstraits.org/PageID/165/default.aspx

Pacific Coast Joint Venture. 2006. Available online at: http://www.pcjv.org/focus_areas.html

Puget Sound Action Team. 2000a. Puget Sound Online. About the Sound – Where Land and Sea Meet. Available online at: http://www.psat.wa.gov/About_Sound/AboutPS.htm

Puget Sound Action Team. 2000b. Puget Sound Online. Economic and Environmental Ties. Available online at: http://www.psat.wa.gov/About_Sound/Economic.htm

Puget Sound Action Team. 2000c. Puget Sound Online. The Definition. Available online at: http://www.psat.wa.gov/About_Sound/Define.htm

Puget Sound Action Team. 2000d. Puget Sound Online. The Physical Sound. Puget Sound Index. Available online at: http://www.psat.wa.gov/About_Sound/Physical.htm

Puget Sound Action Team 2000e. Puget Sound Online. 2003-2005 Puget Sound Water Quality Work Plan. Aquatic Nuisance Species. Available online at: http://www.psat.wa.gov/Publications/workplan_03/wp03/20_ANS.htm#address_issues

Puget Sound Action Team. 2004. State of the Sound 2004. Puget Sound Action Team, Office of the Governor. Olympia, Washington. 78 pp.

Puget Sound Nearshore Partnership, 2006. Available online at: http://www.pugetsoundnearshore.org/what.htm

Smith, C. J., Manary, E., Hood, G., and the Western Washington Agricultural Association. 2005. House Bill 1418 Report: Tidegates and intertidal salmon habitat in the Skagit basin. Washington State Conservation Commission. Olympia, Washington. 133 pp.

TNC (The Nature Conservancy). 2006a. Available online at: http://www.nature.org/pressroom/press/press45.html

TNC (The Nature Conservancy). 2006b. South Puget Sound Prairies Website. Available online at:http://www.nature.org/wherewework/northamerica/states/washington/preserves/art12967.html

TNC (The Nature Conservancy). 2006c. Willapa's Ellsworth Creek Preserve. Available online at: http://www.nature.org/pressroom/press/press45.html

USFWS (U.S. Fish and Wildlife Service). 2004. Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout (*Salvelinus confluentus*). Volume I (of II): Puget Sound Management Unit. Portland, Oregon. 389 + xvii pp.

USFWS (U.S. Fish and Wildlife Service). 2005a. Nisqually National Wildlife Refuge Final Comprehensive Conservation Plan. Olympia, WA.

USFWS (U.S. Fish and Wildlife Service). 2005b. Nisqually National Wildlife Refuge Final Comprehensive Conservation Plan. Olympia, WA.

USFWS (U.S. Fish and Wildlife Service). 2006a. Willapa National Wildlife Refuge. Available online at: http://www.fws.gov/Refuges/profiles/index.cfm?id=13552

USFWS (U.S. Fish and Wildlife Service). 2006b. Protection Island National Wildlife Refuge. Available online at: HTTP://www.fws.gov/pacific/refuges/fiels/wa_protectionis.htm

USFWS (U.S. Fish and Wildlife Service). 2006c. Willapa National Wildlife Refuge Website. Available online at:http://www.fws.gov/Refuges/profiles/index.cfm?id=13552

USFWS (U.S. Fish and Wildlife Service). 2006d. Dungeness National Wildlife Refuge Website. Available online at:http://www.fws.gov/refuges/profiles/index.cfm?id=13539

USGS (United States Geological Survey). 2006e. Coastal Habitats in Puget Sound (CHIPS). Fact Sheet 2006-3081. Available online at: http://pubs.usgs.gov/fs/2006/3081/

Vander Schaaf, D., G. Wilhere, Z. Ferdana, K. Popper, M. Schindel, P. Skidmore, D. Rolph, P. Iachetti, G. Kittel, R. Crawford, D. Pickering, and J. Christy. 2006. *Pacific Northwest Coast Ecoregion Assessment.* Prepared by the Nature Conservancy, the Nature Conservancy of Canada, and the Washington Department of Fish and Wildlife.

The Nature Conservancy, Portland, Oregon.

Washington State Cooperative Extension Web Site. Available online at: http://caheinfo.wsu.edu/focus/2003fall/spartina.html

Washington Department of Agriculture. 2006. News Release, Jan. 23, 2006 Website. Available online at: http://agr.wa.gov/News/2006/06-04.htm

Washington State Department of Ecology. 2005. Coastal and Estuarine Land Conservation Plan. Washington State Department of Ecology Shorelands and Environmental Assistance Program, Olympia, WA. 33 pp.

WDFW (Washington Department of Fish and Wildlife). 2005. Washington's Comprehensive Wildlife Conservation Strategy, Final Draft. Washington Department of Fish and Wildlife, Olympia, WA 791 pp.

WDFW (Washington Department of Fish and Wildlife). 2006. Washington Biodiversity Project, Interagency Committee for Outdoor Recreation Website. Available online at: http://www.biodiversity.wa.gov/ecoregions/puget_trough/puget_trough.html

WDFW (Washington Department of Fish and Wildlife). Undated. Priority Habitats and Species Web Site. Available online at: http://wdfw.wa.gov/hab/phslist.htm

References in Appendix D: Upper Columbia Basin Focus Areas

Andonaegui, Carmen. 2003. Bull Trout Habitat Limiting Factors for Water Resource Area 62. Washington State Conservation Commission.

Columbia River Inter-Tribal Fish Commission. 1994. Columbia River Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs and Yakama Tribes

Cullinan, T. 2001. Important Bird Areas of Washington. Audubon Washington. Olympia, Washington. 170p

Ecovista, Nez Perce Tribe Wildlife Division, and Washington State University Center for Environmental Education. 2003. Draft Clearwater Sub-basin Assessment. Northwest Power Planning Council.

GEI Consultants. 2004. Intermountain Province Subbasin Plan. Northwest Power Planning Council.

Idaho Department of Fish and Game. 2005. Idaho Comprehensive Wildlife Conservation Strategy. Idaho Conservation Data Center, Idaho Department of Fish and Game, Boise, ID.

Idaho Department of Fish and Game. 2006. Idaho Landowner Incentive Program Tier 2

Application

Idaho Steering Committee. 2005. Coordinated Implementation Plan for Bird Conservation in Idaho. Intermountain West Joint Venture.

Knutson, Lea K and Virginia L. Naef. 1997. Management Recommendations for Washington's Priority Habitats: Riparian. Washington Department of Fish and Wildlife.

Latah Soil and Water Conservation District. Latah Soil and Water Conservation District Resource Conservation Plan

Lichthardt, Juanita and Robert Moseley. 1997. Status and Conservation of the Palouse Grassland in Idaho. Idaho Department of Fish and Game

Northwest Power and Conservation Council. 2004. Methow Subbasin Plan.

Noss, Reed; Edward LaRoe, and J. Michael Scott. Endangered Ecosystems of the United States: A Preliminary Assessment of Loss and Degradation. 1995. Biological Report 28. National Biological Service.

Pack River Technical Advisory Committee. 2006. Pack River Watershed Management Plan and TMDL Implementation Plan

Pend Oreille Lead Entity. 2003. Draft Strategy for Protection and Improvement of Native Salmonid Habitat in the Pend Oreille Watershed, Washington. Pend Oreille Conservation District.

Upper Columbia Salmon Recovery Board. 2005. Draft Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan

USFWS (U.S. Fish and Wildlife Service).1986. Bald Eagle Recovery Plan

USFWS (U.S. Fish and Wildlife Service). 1996. Recovery Plan for Howellia aquatilis.

USFWS (U.S. Fish and Wildlife Service). 2002a. Final Comprehensive Conservation Plan for Little Pend Oreille NWR.

USFWS (U.S. Fish and Wildlife Service). 2002b. Bull Trout (*Salvelinus confluentus*) Draft Recovery Plan

USFWS (U.S. Fish and Wildlife Service). 2002c. Birds of Conservation Concern

USFWS (U.S. Fish and Wildlife Service). 2005a. Final Habitat Management Plan for Little Pend Oreille NWR.

USFWS (U.S. Fish and Wildlife Service). 2005b. Draft Recovery Plan for *Silene spaldingii*

(Spalding's catchfly). U.S. Fish and Wildlife Service, Portland, Oregon. 121 pp.

USFWS (U.S. Fish and Wildlife Service). 2005c. Draft Comprehensive Conservation Plan Turnbull National Wildlife Refuge

USFWS (U.S. Fish and Wildlife Service). 2006. Pacific Region Fisheries Program Strategic Plan

Washington Department of Natural Resources. 2003. State of Washington Natural Heritage Plan. Blanche Sobottke, ed.

WDFW (Washington Department of Fish and Wildlife). 1994. Greater Sage Grouse Recovery Plan. Stinson, et al. Wildlife Management Program. Olympia, WA

WDFW (Washington Department of Fish and Wildlife). 1995a. Washington State Recovery Plan for the Pygmy Rabbit. Wildlife Management Program. Olympia, WA.

WDFW (Washington Department of Fish and Wildlife). 1995b. Sharptailed Grouse Management Plan. Wildlife Management Program. Olympia, WA.

WDFW (Washington Department of Fish and Wildlife). 2000. Final bull Trout and Dolly Varden Management Plan. Fisheries Program. Olympia, WA.

WDFW (Washington Department of Fish and Wildlife). 2004. Management recommendations for Washington's priority species – volume I: invertebrates; volume IV: birds. Larsen, E. M., J. M. Azerrad, and N. Nordstrom, eds. 2004. Olympia, WA. 268pp.

WDFW (Washington Department of Fish and Wildlife). 2005. Washington's Comprehensive Wildlife Conservation Strategy Final Draft.

Washington Steering Committee. 2005. Coordinated Implementation Plan for Bird Conservation in Eastern Washington. Intermountain West Joint Venture.

Weddell, Bertie and Juanita Lichthardt. 1998. Identification of Conservation Priorities for and Threats to Palouse Grassland and Canyon Grassland Remnants in Idaho, Washington, and Oregon. Idaho Bureau of Land Management.

References in Appendix E: Snake River Basin Focus Areas

Idaho Department of Fish and Game. 2005a. Idaho Comprehensive Wildlife Conservation Strategy. Idaho Conservation Data Center, Idaho Department of Fish and Game, Boise, ID. http://fishandgame.idaho.gov/cms/tech/CDC/cwcs.cfm

Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Governor's Office of Species Conservation. 2005b. Programmatic Southern Idaho Ground Squirrel Candidate Conservation Agreement with Assurances. Idaho Department of Fish and Game, Boise,

Idaho.36pp.

Idaho Sage-grouse Advisory Committee. 2006. Conservation Plan for Greater Sage Grouse in Idaho.

Idaho Steering Committee - Intermountain West Joint Venture. 2005. Coordinated Implementation Plan for Bird Conservation in Idaho. 46pp.

Oring, L.W., L. Neel, and K. E. Oring. 2007. Intermountain West Regional Shorebird Plan – Version 1.0. 55pp.

Pacific Flyway Study Committee. 2002. Pacific Flyway Implementation Plan for the Rocky Mountain Population of Trumpeter Swans. Pacific Flyway Council Study Committee, USFWS Portland, OR. Unpubl. Rept. 26 pp.

Western Native Trout Initiative U.S. Department of the Interior, Fish and Wildlife Service. 2006. National Fish Habitat Action Plan (Western Native Trout Initiative). U.S. Fish and Wildlife Service, Washington DC.