Partnerships and Cooperation on the Olympic Peninsula

A Summary of

Natural Resource Programs Relating to the Olympic Peninsula

and an Analysis of

How to Promote Cooperative Management of the Olympic Coast National Marine Sanctuary

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Preface

The idea for this project emerged from an effort by the Washington Sea Grant Program and NOAA's Sanctuaries and Reserves Division to explore cooperative endeavors. They identified a common priority interest to improve linkages with the agencies and organizations conducting natural resource activities on the Olympic Peninsula. The result was a decision to fund a joint research assistantship at the University of Washington. The assistantship was created to develop information that would assist their efforts to establish cooperative activities on the peninsula.

Part I of this report gives an overview of natural resource programs on the Olympic Peninsula conducted by federal, state, tribal and local community agencies and organizations. A summary chart lists programs, resource issues addressed, participants, decision-making processes and level of public involvement. Individual descriptions are provided for selected programs. **Part II** analyzes a collaborative approach for promoting cooperative management of the Olympic Coast National Marine Sanctuary.

The mandate of the Olympic Coast National Marine Sanctuary is to implement a comprehensive management plan using a cooperative management strategy. The plan is to be based on an ecosystem approach that results in improved protection of the area's ecological and historic resources. Other federal, state and tribal agencies are also engaged in efforts to manage natural resources on the Olympic Peninsula using an ecosystem approach. Whether referred to as watershed, landscape or ecosystem management, this approach involves cooperatively managing a wide range of resource uses, activities and values across an ecologically appropriate spatial scale. The intent of this management is to protect the ecological processes necessary for maintaining a healthy environment—one capable of sustainably producing the resources needed by society.

A fundamental challenge associated with implementing an ecosystem approach is to create new institutional arrangements. These must bring together multiple jurisdictional authorities, landowners, resource users, and other diverse interests to cooperatively manage natural resource activities. To be effective, these cooperative management arrangements must develop a shared capacity to promote common resource protection interests identified by the participating organizations. They must also be able to resolve conflicts regarding the use and management of natural resources. The success of these efforts will depend significantly on two important factors:

- Structuring the institutional arrangements for cooperative management so as to facilitate collaborative problem solving;

- Strengthening the collaboration skills of the participants involved in the cooperative management process.

Focusing additional attention on these factors holds an important key to improving our capacity to cooperatively manage natural resource uses at the ecosystem scale.

Part I

A Summary of

Natural Resource Programs Relating to the Olympic Peninsula

Glossary of Abbreviations

BC	British Columbia
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
BPA	Bonneville Power Administration
COE	U.S. Army Corps of Engineers
CSS	Center for Streamside Study
EPA	Environmental Protection Agency
GHCC	Grays Harbor Community College
METRO	King County Metropolitan Services Department
NBS	National Biological Survey
NMFS	National Marine Fisheries Service
NMSP	National Marine Sanctuary Program
NPS	National Park Service
NOAA	National Oceanic and Atmospheric Administration
NWIFC	Northwest Indian Fisheries Commission
ONF	Olympic National Forest
ONP	Olympic National Park
ONRC	Olympic Natural Resources Center
PCC	Peninsula Community College
PSWQA	Puget Sound Water Quality Authority
SCS	Soil Conservation Service
USCG	US Coast Guard
USFS	US Forest Service
USFWS	US Fish and Wildlife Service
USGS	US Geological Service
USN	US Navy
UW	University of Washington
WDCD	Washington Department of Community Development
WDOA	Washington Department of Agriculture
WDTEC	Washington Department of Trade and Economic Development
WDOE	Washington Department of Ecology
WDFW	Washington Department of Fish and Wildlife
WDNR	Washington Department of Natural Resources
WEO	Washington Energy Office
WPRC	Washington Parks and Recreation Commission
WSDOT	Washington State Department of Transportation
WSCC	Washington State Conservation Commission
WSGP	Washington Sea Grant Program
WSU	Washington State University

SUMMARY OF

Natural Resource Programs Relating to the Olympic Peninsula

PROGRAM DESCRIPTIONS

Intergovernmental

Program British Columbia/Washington Environmental Initiative

Purpose Protection, preservation and enhancement of shared BC/WA environment.

Objectives To ensure coordinated action and information sharing on environmental issues of mutual concern.

Description The British Columbia/Washington Environmental Initiative was established in May 1992 to promote and coordinate mutual efforts to ensure the protection, preservation and enhancement of their shared environment for the benefit of current and future generations. The two governments also agreed to develop an action plan reflecting mutual priorities and to enter into specific agreements necessary to address environmental problems. The Environmental Cooperation Council, consisting of the Deputy Minister of the BC Ministry of Environment, Lands and Parks and the Director of WDOE, was established to give policy direction and oversee progress on joint activities. Regional Directors of the two federal environmental agencies - EPA and Environment Canada - are formal observers. Among the priority environmental issues that have been identified for action are the following marine-related issues: Georgia Basin/Puget Sound Water Quality; Columbia River/Lake Roosevelt Water Quality; and Nooksack River Flooding. Emerging issues and issues of ongoing interest include water resource management and wetlands and habitat protection. In order to develop a common understanding of the technical information on discharges into the Georgia Basin and Puget Sound, a joint panel of Canadian and American scientists was established as the Marine Science Panel in 1993. Their charge was to provide an independent scientific assessment of the current conditions and trends in shared waters and to report their findings to the Council. Their report will provide the basis for the Council to determine priorities for future coordinated actions, including information sharing, monitoring, and research in transboundary waters. In addition, the work of the Panel will serve as the foundation for the development of public policy.

Status Ongoing

Lead Agency WDOE

Cooperating Agencies EPA, PSWQA, WSGP

Contact Carol Jolly, Special Assistant to the Director, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600, (206) 493-9111

Intergovernmental

Organization Pacific Northwest Outer Continental Shelf Task Force

Program Pacific Northwest Outer Continental Shelf Task Force

Purpose To provide advice and recommendations to the Secretary of Interior on offshore oil and gas leasing off the coasts of Oregon and Washington.

Description The task force was chartered in January 1988, after several years of organizational discussion with the Department of Interior. The task force was composed of six members representing the Governor of Oregon, the Governor of Washington, the Columbia River Intertribal Fish Commission, the Northwest Intertribal Fish Commission, and the Mineral Management Service of the Department of Interior. A Science and Technical Advisory Committee, consisting of experts from universities, the National Park Service, NOAA, Washington Department of Natural Resources and the Oregon Department of Fish and Wildlife, lent technical support expertise to the task force. The task force was concerned with studies that were necessary for the Department of Interior to make informed decisions regarding offshore oil and gas leasing. The report by the Scientific and Technical Advisory Committee, presented in February 1990, recommended that at least seven studies are necessary before any type of leasing decision is made, and, if fully funded, these studies should take from seven to ten years to complete. The task force approved a resolution stating that these studies should be performed and analyzed before any decisions were made at the federal level. The task force also recommended that the lease sale of #132 (3 miles off the coast of Oregon and Washington) be canceled, and that the task force make the decisions about any lease sales in the future. In 1992, the task force obtained an agreement from the Department of Interior that it would cancel the pending lease sale and that the area would not be considered for inclusion until after 2005, and only then after completion of the recommended studies. The task force is now disbanded.

Status Completed

Lead Agency Washington/Oregon Governors' Office

Cooperating Agencies Columbia River Intertribal Fish Commission, Northwest Inter-Tribal Fish Commission, Minerals Management Service

Contact Teri Swanson, Department of Ecology, P.O. Box 47600, Olympia, WA 98362, (206) 407-6789

Funding Sources Each agency funded participation of their own representatives; Minerals Management Service covered administrative cost of meetings.

Intergovernmental

Organization US/Canadian Pacific Salmon Treaty Commission

Program US/Canadian Pacific Salmon Treaty

Purpose Salmon allocation.

Objectives To provide a forum for establishing international quotas for salmon species caught in intercepting salmon fisheries and to negotiate annual salmon fishery regimes.

Description The Pacific Salmon Treaty Act of 1985 established a four-member Commission to represent the United States in negotiations with Canada on international quotas for salmon species originating in the waters of one country, but caught by fishermen from the other country in intercepting salmon fisheries. The Commission consists of a representative of the federal government; Alaska; Washington or Oregon; and the treaty Indian tribes of Washington, Oregon, and Idaho. The Commission's decisions are made by consensus to represent the United States' position. No decisions are made if there is a dissenting vote. Three regional panels, comprised of federal, state, and tribal fishery management officials, as well as commercial fishing representation, negotiate area-specific recommendations with their Canadian counterparts, incorporating advice from six bilateral technical committees. The reports of the regional panels are provided to the Commission for their consideration in developing an overall salmon fishery regime that is recommended to the President. The Treaty also requires both countries to conduct joint research on salmon migration and interception patterns and to share information on salmon enhancement activities.

Status Ongoing

Lead Agency NMFS

Cooperating Agencies U.S. Departments of Commerce, Interior and State; fishery management agencies for Washington, Oregon, Idaho, Alaska; Indian Tribes; Canadian agency counterparts.

Contact Chuck Walters, U.S. Coordinator, NMFS, Bldg. 1, NOAA, 7600 Sand Point Way NE, Seattle, WA 98115, (206) 526-6155; Bud Graham, Department of Fisheries and Oceans, 555 West Harrison St., Vancouver, BC VGB 5G3, (604) 666-8692

Intergovernmental

Organization Washington/British Columbia Oil Spill Task Force

Program Oil Spill Memorandum of Cooperation

Purpose International task force concerned with oil spills.

Objectives To investigate ways and means of preventing oil spills; to review oil spill response procedures; document and assess mechanisms for handling compensation claims; develop a coordinated contingency plan for preventing and responding to oil spills in the future.

Description Following the *Nestucca* oil spill off the coast of Washington in 1988, Washington State Governor Booth Gardner and British Columbia Premier William VanderZalm established an international task force to focus on oil spills. Four subcommittees were established to evaluate prevention alternatives, emergency response, compensation claims and financial recovery, and technology sharing. Following the *Exxon Valdez* oil spill, a Memorandum of Agreement was signed in 1989, stating that both governments would continue to work together regarding oil spill prevention and response. The Agreement formally established the Washington/British Columbia Oil Spill Task Force, headed by top administrators of the state's and the province's environmental agencies. Additional members include various agencies and interest groups, including the U.S. Coast Guard, private industry, as well as state, provincial and federal agencies. Oregon, Alaska and California have since also signed the Memorandum of Agreement. After completing a final report of recommendations in 1990, the Task Force was disbanded except for an annual meeting to review progress and adopt necessary changes. A joint oil spill drill will be held annually to test preparedness and evaluate the process.

Status Ongoing

Lead Agency WDOE

Cooperating Agencies ONP, USCG, WDFW, other state and federal agencies.

Contact Mary Riveland, Director, WA Department of Ecology, PV-11, Olympia, WA 98504-8711, (206) 459-6149; Richard Dalan, Director, Ministry of the Environment, Victoria, BC V8V1X5, (604) 387-5429

Funding Sources No funds established to implement the MOA (different state and provincial agencies fund implementation through their own operating budgets); industry has provided some funds for various studies.

Interagency

Plan Dungeness-Quilcene Water Resource Management Plan

Purpose Water resource management.

Objectives To increase instream water flows, to improve salmon runs, to provide more efficient management and use of water, and to protect the area's ground-water resources.

Description A state-wide cooperative planning process, called the Chelan Agreement, was developed by 190 representatives from state, local and tribal governments; business; agriculture; fishermen; recreationalists; and the environmental community to resolve water conflicts. The negotiated agreement was adopted by the legislature in 1991. The agreement recognized that actions should be guided by the Tribes' objective to achieve an overall net gain of the productive capacity of fish and wildlife habitats and the State's related objective to accommodate growth in a manner which would protect the State's unique environment. The northeastern Olympic Peninsula, including east Clallam and Jefferson Counties, was selected as one of the pilot projects for the state. The goal of the project was to produce a water resource management plan which addressed the water needs of both wildlife and human inhabitants. Delegates representing the various interests spent more than two years investigating the status of the resources, defining the problems and issues, gathering information and supportive data, crafting solutions to the problems, negotiating agreements, and developing strategies and recommendations for the plan. Technical expertise was provided by tribal, state and federal fish and wildlife agencies; the US Forest Service; Olympic National Park; local governments; and public utility districts. The planning group developed the gap concept to acknowledge the discrepancy between the quantity of water needed for optimal fish production and the needs of out-of-stream uses. While acknowledging that a gap was likely to continue indefinitely, the planning group recommended to help close the gap by participating in shared sacrifice and shared gain. During times of low flow, all sides agreed to restrict uses and to share water equitably. Conservation strategies have been recommended to make better use of available water. In addition, habitat restoration and enhancement is proposed to allow more productive use of existing flow and to provide better habitat for spawning and rearing of salmonids and other wildlife. The recommendation that may have the greatest impact on future use and management of the area's water resources is to conduct a comprehensive hydrogeologic investigation of the quantity and quality of surface and ground water in the region. A workplan for the study has been developed by the US Geological Service. The next step is to implement the plan's recommendations and to integrate then with other federal, tribal and state watershed protection programs. The Watershed Council will be the mechanism for coordination.

Status Ongoing

Lead Agency Jamestown S'Klallam Tribe

Cooperating Agencies WDOE, WDFW, USFS, ONP, local governments, tribal natural resource departments, public utility districts.

Contact Ann Seiter, Natural Resources Director, or Cindy Young, Jamestown S'Klallam Tribe, 1033 Old Blyn Highway, Sequim, WA 98382, (206) 681-4630

Interagency

Plan Skokomish River Watershed/Ecosystem Improvement Action Plan

Purpose Watershed/ecosystem protection and restoration.

Objectives To demonstrate the long-term social and economic benefits of a partnership approach to watershed improvement and protection; to synthesize and integrate all relevant past and current activities in the Skokomish River basin; to develop a strategic action plan for watershed improvements and implementation strategy; to form an intergovernmental Skokomish River Basin Coordinating Council; and to promote congressional legislation to implement comprehensive, coordinated watershed/ecosystem improvements.

Description The Skokomish Indian Tribe is initiating a comprehensive watershed/ecosystem improvement demonstration project in the Skokomish River Basin of the Hood Canal region of Washington. The Skokomish River Basin provides a unique opportunity for a regional and national model demonstrating that watershed/ecosystem improvement is necessary for long-term economic productivity and quality of life. The project will identify specific, prioritized actions and implementation strategies within a holistic, watershed context. It will provide a framework for all relevant government entities to focus protection, restoration and management of watershed/ecosystem resources. The plan will recommend legislation to implement coordinated watershed/ecosystem improvement initiatives in order to produce a continuing stream of public benefits to the Skokomish River Basin, Hood Canal, Puget Sound, and the nation. The Skokomish Tribe intends to engage as working partners all stakeholders in the Skokomish River Basin, including governmental collaborators, as well as private landowners and the general public. Activities will be coordinated with the Hood Canal Coordinating Council.

Status Incomplete

Lead Agency Skokomish Indian Tribe

Cooperating Agencies Point No Point Treaty Council, NWIFC, WDOE, WDFW, USFWS, NMFS, SCS, USFS, NPS, COE, EPA, City of Tacoma, Mason County, Skokomish River Flood Control District.

Contact Victor Martino, Skokomish Indian Tribe, 8424 NE Beck Road, Bainbridge Island, WA 98110, (206) 842-5386

Interagency

Program Timber, Fish, and Wildlife Agreement

Purpose Consensus-based agreement on timber harvest practices for private forest lands.

Objectives To provide the greatest diversity of species and habitats for native wildlife on forest lands; to provide long-term protection of fish habitat productivity and water supplies; to protect water needs of people, fish and wildlife; to inventory, evaluate, preserve, protect and ensure tribal access to traditional cultural and archeological places in forest lands; and to provide continued growth and development of the state's forest products industry.

Description The Timber, Fish, and Wildlife Agreement (TFW) was reached in 1987 between the timber industry, Indian tribes, state natural resource management agencies and environmental groups, in order to progress beyond the impasse of litigation and conflict that existed over timber harvest practices on private and state lands. TFW created an innovative approach to flexible, cooperative forest practice planning and regulation, which relied on a consensus-based decision-making process and the good faith of the cooperators to voluntarily comply with adopted rules. The traditional administrative process usually followed by regulatory agencies involves scoping of issues, developing alternatives, incorporating public input, and selecting a preferred alternative - a process which generally results in a compromise solution. In contrast, the TFW process involved stakeholders who determined the balance of all interests involved to help identify the best course of action, which could be voluntary, cooperative and recommended to regulatory bodies. The agreement established interdisciplinary teams, composed of resource managers, timber harvesters, biologists and tribal representatives to assess proposed timber harvest sites and develop an integrated harvest plan designed to minimize ecological and cultural damage. The Department of Natural Resources retained final approval authority. The TFW agreement has established protected spawning areas, wildlife corridors, and other sensitive habitat areas through set-asides. In addition, TFW provided for an Adaptive Management system to evaluate the effectiveness of the process through on-going monitoring. Cooperators are currently focused on the implementation of an assessment process based on watershed analysis to address cumulative effects to fish and water quality resulting from forest practices.

Status Ongoing

Lead Agency WDNR

Cooperating Agencies State and federal natural resource management agencies, tribes, forest land owners, timber industry, environmental groups, community representatives.

Contact Tom Robinson, Department of Forest Practices, Forest Practices Division, P.O. Box 47001, Olympia, WA 98504-7001, (206) 902-1402

Funding Sources Federal, state, industry.

Interagency

Organization Grays Harbor Estuary Management Planning Task Force

Plan Grays Harbor Estuary Management Plan

Purpose Estuarine management plan.

Objectives To develop a comprehensive, estuary-wide plan for both the protection and development of the area's economic and natural resources that improves the interpretation and the implementation of the laws, regulations and policies which govern the actions of the local, state and federal agencies that have jurisdiction over activities and resources in the estuary. To resolve inter-agency conflicts over specific issues; to manage the estuary as a whole for multiple uses, striking a balance between appropriate development of the harbor and protection of the estuary's natural resources; to guide the decision-making process of local, state and federal agencies.

Description Grays Harbor is one of two major estuaries on the Washington coast and is the only coastal estuary in the state with an authorized deep water navigation channel and major port. The Grays Harbor estuary provides an important transportation link to local, national and international markets and serves as a focal point for the regional economy. In addition, the estuary is a nursery ground and passageway for a vast array of living resources and an important link in the migratory patterns of many fish and wildlife species. Because of increasing demands on the estuary due to growing population and an expanding economic base, conflicts often occur between the groups who want to use the resources of the estuary and the agencies responsible for managing those resources. Decisions about the use of land and water resources of the estuary are the responsibility of local, state, and federal agencies - each operating from their own set of regulations, guidelines and comprehensive plans, which were usually prepared independently. The resulting process for making decisions was confusing, uncertain, and usually frustrating for those involved. In 1975, the Grays Harbor Regional Planning Commission formed the Grays harbor Estuary Management Planning Task Force. In 1976, through the Commission and the Department of Ecology, the Task Force received funds to prepare a Grays Harbor Estuary Management Plan. The Plan does not eliminate or modify any of the laws, regulations, or policies governing the actions and decision of local, state or federal agencies. Rather, the Plan improves the interpretation and implementation of those laws and regulations, while it attempts to meld the various authorities and concerns into unified estuary-wide guidelines for both protection and development of the area's economic and natural resources. The Plan helps avoid piecemeal decision making during the the permitting processes undertaken by the various local, state and federal agencies. Two important concepts were fundamental to the Plan. First, it contains management goals, guidelines and policies, as well as specific conditions designed to resolve disputes over specific issues and projects. Second, the Estuary Management Goal is that the estuary, as a whole, will be managed for multiple uses, striking a balance between appropriate development of the harbor and protection of the estuary's natural resources. By using an estuary-wide approach, some areas of the estuary have been devoted primarily to preservation of fish, wildlife, and plant resources, free of the pressures of development. Other areas are approved for certain types of appropriate development. The participating agencies have agreed to incorporate the Plan into their own policies, planning and permitting processes. The Plan includes specific procedures for reviewing and amending the plan to ensure that balance is maintained.

Status Completed

Lead Agency Grays Harbor Regional Planning Commission

Cooperating Agencies Grays Harbor County; Cities of Aberdeen, Cosmopolis, Hoquiam, Ocean Shores, Westport; Port of Grays Harbor; WDFW, WDNR, WDOE, EPA, USFWS, NMFS, COE.

Contact Grays Harbor Regional Planning Commission, 2109 Sumner Avenue, Suite 202, Aberdeen, WA 98520-3600, 206-532-8812

Interagency

Organization Northwest Ecosystem/Watershed Workgroup

Plan A Proposed Ecosystem/Watershed Approach to Natural Resource Management for the Pacific

Purpose To create a framework for an ongoing process that will encourage all stakeholders in an ecosystem/watershed to cooperate in planning and management of natural resources and to facilitate the coordination of their activities in ways that protect and rehabilitate ecosystems within each affected watershed while allowing for sustainable use.

Objectives To develop a cooperative, sustainable resource management program through building partnerships among local, state, tribal, regional and federal governments; other government entities; community groups, environmental organizations; industry and labor; residents; and other affected stakeholders in the Pacific Northwest and adjacent Canadian provinces. To protect and restore biodiversity of native flora and fauna, and the ecosystems that harbor them; to protect and restore water quality in river-basin ecosystems; to protect and restore air quality throughout the region; to establish long-term, early warning programs to monitor health of high-priority natural resources, and create innovative ways to modify management practices quickly in response to monitoring results; and to resolve impediments to ecosystem management, and the resource problems caused by the historic lack of such an approach.

Description An informal Northwest Ecosystem/Watershed Workgroup (NEWW), consisting of local, state, federal and tribal resource managers from the states of Oregon, Washington and Idaho, has been meeting since August of 1992 to formulate a conceptual framework and action strategy for promoting coordinated ecosystem/watershed management at the local, state and regional levels in the Pacific Northwest. This effort is based on the recognition that increasing political, economic and social pressures require that we find workable solutions to mounting environmental conflicts and problems. The group's belief is that the existing resource management model, which is becoming increasingly dysfunctional, must be replaced with a new paradigm that will take us into the 21st century on a sustainable basis. The intent of this proposed framework is to facilitate the development of new ecosystem and watershed management programs by providing a means for coordinating existing agencies, programs, and other public and private efforts and resources at the local, state and regional levels. Steps suggested to initiate this effort include: forming an interagency team to coordinate regional whole-basin planning efforts; using this team to establish agreements and commitments from federal, state, local and tribal governments, and other organizations to follow a coordinated ecosystem/watershed management approach; promoting a common regional knowledge base through a regional information clearinghouse; and convening summit meetings among federal, state and provincial resource agency heads, tribal representatives, major stakeholder groups, and congressional and legislative interests in the Pacific Northwest region. The purpose of the meetings would be to implement an Ecosystem Management Resolution, solicit ideas for a collaborative, consensus-based approach, create a task force to develop a detailed proposal and implementation strategy, and explore funding opportunities. The intent of this proposal is to present a "conceptual framework" and to stimulate further action to increase the integration of natural resource management throughout the Pacific Northwest.

Status Completed

Lead Agency EPA

Cooperating Agencies ONP, BLM, WDNR, Oregon Division of State Lands, BPA, WDOE, SCS, WSU Cooperative Extension, WDFW, NWIFC, NPS, PSWQA, USGS, WEO, USFWS, Tulalip Tribe, Oregon Department of Environmental Quality, USFS.

Contact Ron Lee, EPA, Region 10, 1200 6th Ave, Seattle, WA 98101, (206) 553-4013

Interagency

Organization Olympic Peninsula Information Network

Program Olympic Peninsula Information Network

Purpose To provide high quality information about the history, cultures, natural resources, conservation, recreation, learning opportunities, and natural resource management to the users/visitors of the Olympic Peninsula.

Objectives To develop a high quality communications link between members of OPIN; to develop the ability for OPIN to provide high quality public information over time; to develop and maintain a flexible five-year action plan; and to provide a model for other geographic regions in the State.

Description Visitors entering the Olympic Peninsula from the southeast, via Interstate 5 and then Highway 101 North or Highway 8 West, are left to their own resourcefulness to acquire information about the Peninsula. The Olympia area is the headquarters location of many state and federal agencies, as well as public and private organizations that attempt in many varying ways to provide information to Peninsula travelers when they visit. Visitors can easily be confused due to the complexity of ownerships, jurisdictions, agency mandates and information provided by each organization. The current situation seems to be that organizations are competing with each other for the attention of the traveler. The Olympic Peninsula Information Network is envisioned as a service that simplifies the availability and flow of information about the Peninsula to visitors and residents of the Olympic Peninsula. The intent is to provide quality information about the land and resources in order to avoid information overload and confusion. A well-informed visitor can better appreciate the Olympic Peninsula, its people and resources, and the opportunities it affords. The purpose is not to duplicate efforts of Chambers of Commerce or to promote commercial businesses. Rather, OPIN will focus on increasing visitors understanding of land and natural resource managing agencies and organizations. OPIN is in the process of developing a vision statement and a strategic framework for cooperation.

Status Ongoing

Lead Agency ONF

Cooperating Agencies NWIFC, OLP, USFWS, WPRC, WDNR, WDOE, WDFW, Columbia-Pacific RC&D, Mason County, Washington Forest Products Association, Olympic Peninsula Tourism Council and others.

Contact Tom Sayre/Colleen Adams, USDA/USFS, Olympic National Forest, 1835 Black Lake Blvd., Olympia, WA 98512-5623, 206-956-2405; Hank Warren, Olympic National Park, 600 East Park Avenue, Port Angeles, WA 98362, 206-452-4501

Interagency

Organization Olympic Peninsula Research Coordinating Group

Program Olympic Peninsula Research Coordinating Group

Purpose Research coordination for the Olympic Peninsula.

Objectives To further common interests among participants who conduct research relating to Global Change, Ecosystem Management and Marine Management on the Olympic Peninsula; to meet on a regular basis to assess research, share results of completed and ongoing studies, and review issues of common concern; and to facilitate joint research projects and to cooperate, where possible, to maximize the efficiency of research efforts.

Description Each of the institutions participating in this group conducts or supports research and monitoring programs on the Olympic Peninsula. They seek to enhance these efforts through improved coordination and cooperation. The Olympic Peninsula possesses a number of ecological and cultural attributes which offer unique opportunities for research because of the variety of different environmental conditions in close proximity which encompass both forest and marine ecosystems. The anticipated benefits of improved coordination include: facilitating joint research proposals through sponsorship of a Peninsula-wide research group; facilitating working relationships among organizations conducting research on the Peninsula; simplifying approval of project level activities by participants; facilitating the exchange of data among organizations. The initial research areas identified for potential collaboration are: (1) Global Environmental Change and Long-Term Ecological Research and Monitoring; (2) Ecosystem Management; (3) Social and Economic Aspects of Ecosystem Management; and (4) Marine Resources Management.

Status Ongoing

Lead Agency ONRC

Cooperating Agencies USFS, ONP, NOAA, Battelle, EPA, WDNR, NWIFC, UW, NBS, USFWS, PCC, GHCC, Willapa Alliance, Point No Point Treaty Council, Lower Elwah Klallam Tribe, WWU and others.

Contact Paul Ringgold, Manager, Olympic Natural Resources Center, P.O. Box 1628, Forks, WA 98331, 206-374-3220

Interagency

Organization	Oregon/Washington Interagency Wildlife Committee
Program	Oregon/Washington Interagency Wildlife Committee
Purpose	Protect and preserve wildlife and sports fish of Washington and Oregon.
Objectives	To facilitate the discussion, evaluation, and coordination of wildlife management between the two states and different agencies.
Description	The Committee is comprised of representatives from the state wildlife departments and the federal land management agencies (USFWS, BLM, NPS, SCC). The Committee meets quarterly and the directors of the involved agencies meet twice a year. When necessary, the Committee assigns a technical committee to investigate and research special issues. Their reports have formed the basis for further discussion of important topics and development of management guidelines. The spotted owl issue was the initial impetus for bringing the Committee together. The Committee serves as a clearinghouse for technical, social and political information concerning wildlife management. By working together, and addressing wildlife issues in a coordinated fashion, it is hoped that the management of fish and wildlife in Washington and Oregon will be more effective.
Status	Ongoing
Lead Agency	WDFW
Cooperating Agencies	WA , OR and federal wildlife management agencies.
Contact	Director, Washington Department of Fish and Wildlife, Olympia, WA 98504, (206) 753-2920; Rod Ingraham, Wildlife Division, Portland, OR 97068, (503) 229-5400
Funding Sources	The individual agencies fund the participation of their own representatives.

Interagency

Organization Pacific Fishery Management Council

Program Pacific Fishery Management Council

Purpose Regional fisheries management.

Objectives To prevent overfishing within the 200 mile Exclusive Economic Zone of the west coast of the United States and to maximize the fisheries yield.

Description The Pacific Fishery Management Council (representing the states of California, Idaho, Oregon and Washington) was established as one of eight regional fisheries management councils in the United States by the Magnuson Fisheries Conservation And Management Act of 1976. The Act was passed in response to pressure from various fishing industry representatives and fisheries agencies for a coordinated federal response to the presence of foreign fishing vessels in U.S. waters. Its goals are to prevent overfishing in the 200-mile U.S. Exclusive Economic Zone (EEZ) and to maximize fisheries yield. The principal activity of the Council is the development of annual fisheries management plans for the region's principal fisheries, i.e., salmon, bottomfish, and anchovies. These plans include a biological assessment of the health of the fisheries stock and an allocation plan among the various fishing groups - recreational, commercial and tribal. If a surplus exists, foreign fishers are allocated a share of the harvest. The most significant problem faced by the Council is that there are insufficient fishery stocks to satisfy all the user groups.

Status Ongoing

Lead Agency NMFS

Cooperating Agencies State Fish and Game agencies, governor appointees.

Contact Larry Six, Executive Director, Pacific Fishery Management Council, 2000 SW First Ave., Room 420, Portland, OR 97201, (503) 326-6352

Funding Sources General budgets of the U.S. Department of Commerce and NOAA.

Funding Amount 1990: $944,000

Interagency

Organization Pacific States Marine Fisheries Commission

Program Pacific States Marine Fisheries Commission

Purpose To resolve fishery issues of a transboundary nature between Washington, Oregon, California, and Alaska.

Objectives To promote and support policies and actions directed at the conservation, development and management of fishery resources of mutual concern to member states through a coordinated regional approach to research, monitoring and utilization.

Description Authorized by Congress in 1947, the Pacific States Marine Fisheries Commission is one of three interstate commissions dedicated to resolving fishery issues. Representing California, Oregon, Washington, Idaho and Alaska, five commissioners are appointed by the state legislatures, five by the states' governors, and the remaining five are state fishery directors. The Commission does not have regulatory or management authority; rather it serves as a forum for discussion, works for coastwide consensus, and represents that consensus to state and federal authorities. The Commission addresses issues that fall outside state or regional management council jurisdiction, issues that cannot be resolved within an individual state, and coastwide and national issues that affect the Pacific fisheries. The Commission addresses issues that reflect both the needs of industry and the impact of federal legislation. Recent projects have included: marine debris, reauthorization of the Marine Mammal Protection Act, listings of threatened and endangered species, marine habitat protection, thresher shark management planning, foreign high seas driftnet fishing, marine insurance, federal fishing fees, safety at sea and federal budgets. The Commission operates the Regional Mark Processing Center which maintains a computerized database of all the tags inserted into juvenile salmon and steelhead and recovered from Alaska to California. The center is also the official U.S. database for use by the Pacific Salmon Commission in regard to the U.S./Canada Salmon Treaty. The Commission coordinates the Pacific Fishery Information Network (PacFIN), which provides timely marine fish landings data to state, council, and federal fishery managers, as well as the fishing industry. The Commission has also developed a Passive Integrated Transponder (PIT) Tag Information System that marks salmon and steelhead in the Columbia River basin and provides daily electronic updates from interrogation sites at the Columbia River dams. The Recreational Fisheries Information Network (RecFIN) integrates state and federal recreational fishery sampling efforts into a single database. It will eventually provide important biological, social, and economic data for Pacific coast recreational fisheries. The Commission also provides contract services for states and other organizations.

Status Ongoing

Contact Guy Thornburgh, Executive Director, Pacific Marine Fisheries Commission, 45 SE 82nd Drive, Suite 100, Gladstone, OR 97027-2522, (503) 650-5400

Funding Sources 10% of the operating budget is provided by annual dues from the member states based on their annual fish landings; the remaining budget is covered by state and federal grants.

Funding Amount $1.1 million operating budget; $6 million in contract obligations annually.

Federal

Department	Department of Agriculture
Agency	US Forest Service
Unit	Interagency Task Group for Restoration of Aquatic and Terrestrial Ecosystems
Program	Interagency Watershed Restoration Strategy for Fiscal Year 1994
Purpose	To help federal and state agencies coordinate their prioritization of watershed restoration projects during fiscal year 1994.
Objectives	To respond to obvious, urgently needed restoration; to provide needed employment for local communities; to follow the Forest Ecosystem Management Assessment Team's (FEMAT) recommendations; to comply with the requirements of federal laws and to satisfy applicable funding appropriation language.
Description	The purpose of this strategy is to provide temporary guidance for interagency development and selection of watershed restoration projects during fiscal year 1994. The strategy follows recommendations of the Forest Ecosystem Management Team (FEMAT). Restoration strategies will be comprehensive, addressing both watershed protection of the best habitat that remain (refugia) and restoration of degraded habitats in an integrated program that moves ecosystems towards recovery and resilience. Agencies will allocate funds in accordance with appropriation language and biological priorities. Each National Forest and BLM District will form local interagency, interdisciplinary teams of resource specialists consisting of representatives of appropriate federal, state, local and tribal entities, if possible. Their task will be to identify priority watersheds where restoration can be completed in FY '94. Criteria for priority watersheds include: watersheds with overlapping, multiple ownerships; projects which can be supported by a variety of funding sources; watersheds with federally-listed threatened or endangered, petitioned or candidate species; watersheds with sensitive species identified on state, federal or tribal lists; watersheds in areas covered by treaties with federally-recognized tribes with reserved rights to natural resources; watersheds with ongoing or high potential for public/private cooperation. A "Preliminary Watershed Restoration Assessment" process will be developed to serve as a temporary guide until formal procedures for watershed analysis are available. Preliminary assessments using a local interagency team will take about two weeks for each watershed. The assessment will consist of the following steps: identify principal issues within the selected watershed that drive the need for restoration; identify existing and desired conditions; identify those processes and activities that need to be modified to achieve desired conditions; identify restoration opportunities; identify planning and coordination requirements; complete project summary. Local interagency teams will submit project recommendations to provincial level interagency teams, which will select watershed restoration projects in coordination with the state Community Economic Revitalization Teams (CERTs).
Status	Completed
Lead Agency	USFS
Cooperating Agencies	BLM, USFWS, BIA, SCS, EPA, NMFS, Skagit River Tribes.
Contact	Ron Humphrey, Forest Supervisor, Olympic National Forest, 1835 Black Lake Blvd. SW, Olympia, WA 98512-5623, (206) 956-2300
Funding Sources	Federal to agencies and the state.
Funding Amount	FY '94: USFS - $2 million; USFWS - $1 million; State 93-94 Biennium: DNR - $4.5 million

Federal

Department Department of Agriculture

Agency US Forest Service

Unit Olympic National Forest

Plan President's Forest Plan

Purpose To develop and implement a comprehensive and innovative blueprint for forest management, economic development, and agency coordination aimed at strengthening the long-term economic and environmental health of the region.

Objectives To provide a sustainable timber harvest based on a scientifically sound and legally responsible plan that ends confusion and uncertainty about federal forest policies; to provide new economic assistance for displaced timber workers, communities and businesses to strengthen the region's economy, create family-wage jobs and offer new economic opportunities; to provide an innovative approach to environmental protection that focuses on key water supplies and valuable old growth forests; to provide a comprehensive system of old growth reserves to protect old growth ecosystems; to provide new opportunities for local participation in decisions regarding management of national forests for the economic and environmental benefits they provide; and to improve coordination among federal agencies responsible for managing federal lands while ensuring that they work together with state and local officials, tribes and private landowners for the best interests of the people and communities in the region.

Description An ongoing controversy concerning management of federal lands had resulted in court rulings which enjoined the USFS and BLM from selling timber in northern spotted owl habitat until they completed an Environmental Impact Statement. Following the Forest Conference in Portland in April 1993, the Forest Ecosystem Management Assessment Team (FEMAT) was assembled at the direction of the President to prepare and assess alternative strategies that applied an ecosystem approach to forest management. The preferred alternative, which is now referred to as "The President's Forest Plan," establishes guidelines that will amend all existing management plans for lands within the range of the northern spotted owl. Key elements of the plan include: using watersheds as the fundamental building block for the plan; reserving areas based on watersheds and old growth forests and designating conservation areas to protect specific species, where only limited activities would be permitted; creating Adaptive Management Areas for intensive ecological experimentation and social innovation to demonstrate new ways to integrate ecological and economic objectives which would allow for local involvement in decision-making; and developing a new rule from the USFWS to ease restrictions on timber harvest from certain non-federal lands. The President's Plan will also provide immediate support for economic adjustment and diversification in the region - including expanded funding for business development, economic planning, infrastructure development and worker retraining - to build a foundation for long-term economic strength and environmental health. The Plan will be designed to improve interagency coordination by: focusing forest planning on watersheds and "physiographic provinces;" creating an inter-agency Geographic Information System (GIS) data base to better coordinate collection and development of research and data; creating provincial-level teams to develop analyses for physiographic provinces and particular watersheds that would include relevant federal agencies, state officials, tribes, industry, communities, and other affected parties; and revising the interagency consultation process under the Endangered Species Act to emphasize an integrated ecosystem approach and to begin interagency consultations earlier in the management planning process. The goal is that the Plan will be a comprehensive, innovative and balanced approach to the economic and environmental challenges facing the region.

Status Ongoing

Lead Agency USFS

Cooperating Agencies USFWS, NPS, EPA, WDNR, WDFW, WDOE, NMFS, NMSP, Tribes, NWIFC, Jefferson County, Grays Harbor County, Clallam County, Mason County, Conservation Districts, industry groups, environmental organizations.

Contact Ron Humphrey, Forest Supervisor, Olympic National Forest, 1835 Black Lake Blvd. SW, Olympia, WA 98512-5623, (206) 956-2300

Federal

Department Department of Interior

Agency National Park Service

Unit Olympic National Park

Plan Elwah River Restoration Plan

Purpose Restoration of the Elwah River ecosystem and native anadromous fisheries.

Objectives To fully restore the Elwah River ecosystem and native anadromous fisheries so that it emulates a natural functioning, self-regulating ecosystem; to evaluate alternatives for achieving full restoration, including the feasibility of removing the Elwah and Glines Canyon dams; and to develop additional information regarding acquisition of the dam projects including an analysis of responsibilities and liabilities, alternatives for dam removal and sediment management, plans for fish and habitat restoration and the protection of existing municipal and industrial water supplies, analysis of impacts to historic properties and the regional power supply, and alternatives for disposition of project property.

Description Since 1911, the Elwah and Glines Canyon dams have blocked anadromous fish passage to the spawning and rearing habitat of the upper 70 miles of the Elwah River and its tributaries, restricting anadromous salmon and trout populations to the lower 4.9 miles of the river below the Elwah Dam. As a result of lost access to prime, undisturbed habitat within Olympic National Park, all 10 native anadromous fish stocks of the Elwah River - including spring and summer/fall chinook, coho, chum, pink, and sockeye salmon, winter and summer steelhead, sea-run cutthroat, and native char - have experienced severe declines. These changes have significantly disrupted the natural ecosystem and affected wildlife populations within a large portion of Olympic National Park. The Elwah River dams became a highly contentious issue during the 1980's, when license applications for both dams were submitted to the Federal Energy Regulatory Commission. The Elwah Dam never had a federal license to operate and the Glines Canyon Dam's original licensing period had expired, requiring annual renewals. Neither dam had been designed with fish passage facilities, and were therefore incapable of meeting federal, state, and tribal resource goals. In addition, several national and local conservation groups planned to sue the federal government if the license applications were approved. The prospect of protracted litigation and a legalistic decision to a problem that required a comprehensive solution created the motivation to work towards a consensus-based, rational compromise. To help resolve the conflicts surrounding this issue, Congress passed the Elwah River Ecosystem and Fisheries Restoration Act in 1992. The Act authorized the Secretary of Interior to acquire and remove the dams if it is determined to be necessary in order to fully restore the Elwah River. This Act represents a negotiated approach to avoid lengthy and costly litigation, protect 300 jobs at the Daishowa America Mill (which gets 38% of its power from the dams), create new jobs throughout the region through restoration activities and increased commercial and recreational fishing and tourism, support the economic development for the Lower Elwah S'Klallam Tribe, restore an ecosystem within Olympic National Park, provide an opportunity to gain increased understanding of watershed restoration techniques, and ensure the protection of municipal and commercial water supplies. From information developed by a wide range of cooperators, the Secretary has determined that dam removal is the only alternative that would accomplish the goals of restoring the Elwah River ecosystem and its native anadromous fisheries. The Department of Interior considers this negotiated solution to be a "win-win" opportunity for all affected parties.

Status Ongoing

Lead Agency Olympic National Park

Cooperating Agencies Lower Elwah S'Klallam Tribe, USFWS, BOR, BIA, NMFS, Clallam County, City of Port Angeles.

Contact Brian Winter, Elwah Project Coordinator, Olympic National Park, 600 Park Ave., Port Angeles, WA 98362, (206) 452-0302; Lower Elwah Klallam Tribal Council, 2851 Lower Elwah Road, Port Angeles, WA 98362, (206) 452-8471.

Federal

Department	Department of Interior
Agency	U.S. Fish & Wildlife Service
Unit	Washington State Office
Division	Ecological Services
Program	Washington State Ecosystems Conservation Program
Purpose	To restore and enhance fish and wildlife habitat on private lands.
Objectives	To select projects with highest habitat benefits for planning, design and implementation; to monitor project benefits and techniques to refine and improve techniques for future projects; to select projects on which other agencies actively provide support and assistance; to create a partnership between the USFWS, WDFW and other federal and state agencies and private landowners, Indian tribes, and other organizations to preserve, protect and enhance vital fish and wildlife habitat in Washington; to actively inform and educate prospective partners and the public about the program through television, newspapers, workshops, informational brochures and word of mouth; to restore crucial habitats and their associated fish and wildlife on acquired state lands and to enhance habitat values on private lands through technical assistance, cost sharing and other incentive programs; to ensure a "good neighbor" policy regarding the stewardship of any lands acquired by the State of Washington; to work cooperatively with landowners to fund, construct and monitor wetland enhancement projects; and to inform as many individuals, organizations and agencies as possible about the program.
Description	The Washington State Ecosystems Conservation Program is a partnership between the USFWS, the WDFW and private landowners to restore and enhance fish and wildlife habitat on private land. USFW's efforts center on cooperating with private landowners to enhance and protect habitat on private lands. WDW's efforts include fee-title acquisition of small parcels of critical habitat using funds from the Washington Wildlife and Recreation Coalition. Federal funds allocated to the State are used for administration and enhancement efforts in conjunction with similar efforts on private lands. No federal lands are acquired under this program. All habitat restoration efforts involve willing landowners. Nearly 300 private landowners approached the USFWS in 1992 for assistance under this program. Forty projects have been completed that have improved or restored including 1,470 acres of wetlands and/or riparian habitat, 67 stream miles of riparian habitat, and 5,840 acres of surrounding uplands. Fifty-six projects are underway. All completed projects are placed under protective conservation agreements ensuring that they will be maintained as fish and wildlife habitat for at least ten years. Restoration will concentrate efforts on a watershed/ecosystem basis, according to their potential for the greatest habitat values following completion. The program has also encouraged public access to private lands through cooperative agreements with the State. In 1994, priority areas for ecosystem protection and watershed restoration are coastal rivers and estuaries, which include the Queets, Quillayute, Hoh and Chehalis Rivers.
Status	Continuing
Lead Agency	USFWS and WDFW
Cooperating Agencies	Other federal, state, tribal, non-profit organizations and private landowners.
Contact	David Frederick, State Supervisor, USFWS, Olympia Field Office, 3704 Griffin Lane SE, Suite 102, Olympia, WA 98501-2192, (206) 753-9440; Dan Blatt, WA Department of Fish and Wildlife, (206) 753-5710.
Funding Sources	Federal to USFWS & WDW
Funding Amount	1991: $1.75 million; 1992: $1.48 million

Federal

Department	Department of Interior
Agency	US Fish & Wildlife Service
Unit	Olympia Office
Division	Ecological Services Office
Program	Puget Sound Program
Purpose	Basin-wide approach to fish and wildlife resource protection and restoration in coastal areas.
Objectives	To serve as a catalyst by creating interagency partnerships to solve problems, increase information sharing, and allow more effective use of each partner's resources and expertise; to involve partnerships with local, state, federal, or tribal governments or non-government organizations in all program activities; to serve as focal point for implementation of USFWS's interagency Puget Sound Water Quality Management Plan; to develop a long-term interagency fish and wildlife habitat protection strategy, develop and implement watershed management plans for nonpoint source pollution control, and increase public education materials and programs; to expand monitoring of pigeon guillemots and continue the surf scoter project; to conduct follow-up evaluation of Hood Canal bald eagles; to complete construction of demonstration wetlands restoration projects in the Snohomish and Duwamish River estuaries and begin monitoring; to lead the development of habitat restoration plans and project designs for Elliott Bay and the Duwamish River; to assist Commencement Bay habitat restoration planning efforts and the development of a demonstration project in that area; and to develop and sponsor a Coastweeks public education event and other public involvement activities.
Description	Growth in the Puget Sound basin, the most populated area in Washington, continues to take a substantial toll on the area's natural resources. Fish and wildlife habitats are constantly lost to the cumulative effects of urban and suburban development and poor forestry and agricultural practices. These practices also create serious population reductions of many economically and culturally important species, such as salmon and other fish, shellfish, waterfowl and shorebirds. Recognizing these threats, the USFWS's Olympia Ecological Services Office began the Puget Sound Program in 1991 as a call for action. The Puget Sound Program focuses on four major themes: partnerships, information, education and planning for the future. The Puget Sound Program promotes a proactive, comprehensive, ecosystem-wide approach to fish and wildlife protection and restoration. Estuary-wide planning efforts for long-term habitat restoration and protection have begun in the Duwamish River, Commencement Bay and Snohomish River Estuaries. The ultimate goal of these projects is to avert species listings under the Endangered Species Act. The Puget Sound Program identifies specific solutions vital to preserving critical species or habitats and then demonstrates on-the-ground habitat restoration and project monitoring techniques. The proactive, comprehensive approach of the Puget Sound Program will be expanded to include all of Washington's coastal bays and estuaries. As funding allows, the Program will be expanded to become a component of a Washington Coastal Bays and Estuaries Program, focusing on the Grays Harbor and Willapa basins and coastal rivers, as well as Puget Sound.
Status	Ongoing
Lead Agency	USFWS
Cooperating Agencies	EPA, NOAA, NMFS, COE, USN, GSA, City of Seattle, METRO, Port of Seattle, Suquamish Tribe, Muckleshoot Tribe, WDOE, PSWQA, WPRCA, WDFW, Snohomish County, Port Townsend Marine Science Center, Point Defiance Zoo, Puget Sound Alliance.
Contact	Alissa Ralph, US Fish & Wildlife Service, 3704 Griffin Lane SE, Suite 102, Olympia, WA 98501-2192, (206) 753-9440; Dave Frederick, USFWS, (same address)

Federal

Department	Department of Interior
Agency	US Fish & Wildlife Service
Unit	Olympia State Office
Division	Ecological Services
Plan	*Nestucca* Oil Spill Restoration Plan
Purpose	Restoration of natural resources lost as a result of an oil spill, focusing on migratory birds - primarily common murres and secondly, other seabirds.
Objectives	To determine what factors are most important in regulating common murre survival and reproduction in Washington; to diminish human perturbations at Oregon and Washington seabird colonies; to educate the public and resource users about protected wildlife resources along the Washington and Oregon coasts and in National Wildlife Refuges and about the reasons for and methods of minimizing disturbances to seabirds and other wildlife; to improve habitat conditions for burrow nesting seabirds by eradicating the introduced European rabbit from Destruction Island; to determine seabird mortality resulting from the incidental take of seabirds in Washington net fisheries and identify and implement measures to reduce mortality; to monitor common murre attendance at Washington breeding colonies to determine if the selected restoration actions are successful; and to identify detriments to the survival and reproductive success of common murre and other seabirds.
Description	In December 1988, the barge *Nestucca* spilled more than 230,000 gallons of No. 6 fuel oil into the Pacific Ocean near Grays Harbor, Washington. The resulting oil slick dispersed over 800 square miles from Grays Harbor north to Vancouver Island, British Columbia and south to Oregon. Shorelines were oiled within Grays Harbor and into the Strait of Juan de Fuca. The area oiled included portions of Olympic National Park; Copalis, Flattery Rocks and Quillayute Needles National Wildlife Refuges (NWR); and Dungeness and Protection Island NWRs. More than 13,000 oiled seabirds were collected by wildlife rescue and rehabilitation operations conducted during the spill. In 1991, the federal government settled claims for natural resource damages associates with the spill. As part of the settlement, the Department of Interior receives $50,000 annually for a period of ten years. The settlement proceeds are to be used to compensate for injury, destruction or loss of natural resources within the trusteeship of the Department of Interior. USFWS proposes to restore natural resources lost due to the spill. Restoration efforts will concentrate on migratory birds, primarily common murres and secondly, other seabirds. The proposed restoration plan focuses on determining what factors are most important in regulating common murre survival and reproduction in Washington and on reducing human perturbations at Oregon and Washington seabird colonies.
Status	Ongoing
Lead Agency	USFWS
Cooperating Agencies	ONP, WDFW
Contact	Jeffrey Momot, Environmental Contaminants Specialist,US Fish & Wildlife Service, Ecological Services, Olympia State Office, 3704 Griffin Lane SE, Olympia, WA 98701, (206) 753-9440.
Funding Sources	Damage settlement.
Funding Amount	$500,000 in $50,000/year installments for ten years.

Federal

Department Department of Interior

Agency US Fish & Wildlife Service

Unit Washington Islands National Wildlife Refuges

Plan Refuge Management Plan

Purpose Documenting management objectives and short-term strategies.

Objectives To develop a data base; to provide habitat and protection for endangered and threatened species that are important in the North Pacific Coast; to protect habitat to maintain seabird populations at not less than current levels; to protect habitat to maintain population levels of waterfowl and other wildlife; to cooperate with other agencies of higher education, private organization and individuals in providing technical assistance and research opportunities; to protect and preserve scientific sites located on the refuges; to protect and preserve designated cultural sites located on the Refuges; to preserve and protect the unique ecosystem associated with the Washington Islands Refuges; to provide a quality program of interpretation and wildlife/wildlands observation.

Description Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges - known collectively as the Washington Islands National Wildlife Refuges - extend for 100 miles along the Washington coast between Cape Flattery and Copalis Beach. The refuges include approximately 870 islands, rocks, and reefs - many no more than rocky outcroppings. Only the islands themselves, which total 486 acres at low tide, are included within refuge boundaries. The intertidal zone of Flattery Rocks and Quillayute Needles Refuges is under the jurisdiction of Olympic National Park. The intertidal zone of Copalis Refuge and surrounding waters of all three refuges are administered by the State of Washington. Adjoining the Refuges on the mainland are five Indian reservations (Makah, Ozette, Quilleute, Hoh and Quinault Tribes), the coastal unit of Olympic National Park, and privately owned beaches and timber lands. The islands were originally set aside as a reserve in 1907 to preserve the habitat which supports colonies of native seabirds. They were later designated as three refuges in 1940. Approximately 100,000 breeding pairs, or 80% of the nesting seabirds in Washington, use the islands within the Refuge. All the islands except Destruction Island have been included in the National Wilderness Preservation System and are classified as the Washington Island Wilderness. The **Point of the Arches** is on the National Registry of National Landmarks. The lighthouse on Destruction Island is on the National Register of Historic Places. A wildlife biologist, responsible for wildlife census, biological research and surveillance of the islands, is stationed at the Coastal Refuges Office near Port Angeles. Current management direction is to protect the area as an undisturbed seabird nesting sanctuary. In order to protect the wildlife resources, public access is not allowed except by special permission. Management activities are restricted to surveillance, biological research, wildlife inventories and protection. No attempt is made to manipulate habitat.

Status Ongoing

Lead Agency USFWS

Contact Bill Hesselbart, Refuge Manager, Nisqually National Wildlife Refuge, 100 Brown Farm Rd, Olympia, WA 98506-2399, (206) 753-9467

Federal

Department	Department of Interior
Agency	US Fish & Wildlife Service
Unit	Washington State Office
Division	Western Washington Fishery Resource Office
Program	Chehalis River Fisheries Restoration Program
Purpose	Restoration of fishery resources in the Chehalis Basin.
Objectives	To optimize natural salmon and steelhead production while maintaining the existing genetic adaptation of wild spawners and allowing the highest compatible level of hatchery production. To maintain an emphasis on creating meaningful employment.
Description	The Chehalis River Fisheries Restoration Program (CFRP) was created by the Chehalis Basin Fishery Resources Study and Restoration Act of 1990. The purpose of the Act was to develop a comprehensive habitat restoration plan followed by basin-wide restoration efforts. The USFWS conducted a comprehensive study of Chehalis Basin fishery resources and developed recommendations for fishery resources restoration in cooperation with the State, concerned tribes and the public. The USFWS's initial report to Congress proposed the following goal for Chehalis Basin salmon and steelhead restoration: "to optimize natural salmon and steelhead production while maintaining the existing genetic adaptation of wild spawners and allowing the highest compatible level of hatchery production." The USFWS completed a survey of habitat degradation, using a GIS-based mapping system, of over 1,500 miles of anadromous fish habitat. The survey report included recommendations that will guide habitat restoration efforts being implemented through the CFRP. Project proposals were given a technical ranking through a multi-agency review process. Rankings were forwarded to the Chehalis Fisheries Restoration Steering Committee where final funding recommendations were made. Upon approval of the projects, cooperative agreements were established between various cooperators and USFWS. Project managers supervised most of the project activity, with USFWS personnel serving as technical advisors throughout the process. The majority of FY '93 projects were off-channel enhancement or restoration projects that will then be evaluated for effectiveness. The majority of FY '94 funds are expected to address restoration/improvement of natural spawning or rearing habitat. The CFRP maintains an emphasis on creating meaningful employment. During the first year of project implementation, the majority of jobs created were short-term. However, increased FY '94 funding, in combination with the completed habitat degradation report, will allow cooperators to initiate habitat restoration projects with more feasible long-term employment. A future goal is to conduct in-depth analyses of the Chehalis Basin habitat degradations by incorporating the GIS databases of other agencies to provide information needed to identify limiting factors of fish production on a sub-basin level. The CFRP uses "The Fish Ladder," the monthly newsletter of the Chehalis Basin Fisheries Task Force, as a program update. Current circulation is 5,000 issues per month.
Status	Ongoing
Lead Agency	USFWS
Cooperating Agencies	Chehalis Basin Fisheries Task Force, Grays Harbor Conservation District, Natural Resources Consultants, Inc., Lewis County Conservation District, WDFW, Confederated Tribes of the Chehalis Reservation.
Contact	Eric Knudtson, US Fish & Wildlife Service, Fishery Resource Office, (206) 753-9460
Funding Sources	Federal to USFWS; USFWS to cooperators
Funding Amount	FY-93: The Chehalis Basin Fisheries Task Force - $123,220; The Grays Harbor Conservation District - $38,000; The Lewis County Conservation District - $26,780; The WDFW - $30,000; Natural Resources Consultants, Inc. - $37,200; Chehalis Tribes - $37,200.

Federal

Department	Department of Interior
Agency	US Geological Survey
Division	Water Resources Division
Program	The U.S. Geological Survey's National Water Quality Assessment (NAWQA) Program:
Purpose	Water quality assessment
Objectives	Assess the status and trends in the nation's water quality and to develop an understanding of the major factors that affect water-quality conditions and trends.
Description	In 1991, the U.S. Geological Survey (USGS) began to implement a full-scale National Water-Quality Assessment Program. The program will evaluate water quality at spatial scales from local to national and will integrate physical, chemical and biological components. Of the 60 study units nationwide, five are in the Pacific Northwest: Central Columbia Plateau, Puget Sound Drainages, Upper Snake River Basin, Willamette Basin and Yakima Basin. The biological components of the NAWQA program include ecological studies of contaminants in biota. The ecological studies will use a community-level approach, including algae, benthic invertebrates and fish. This information will be integrated with hydrology, land use, instream and riparian habitat, and water and sediment chemistry to better assess water resources. The analysis of trace elements and synthetic organic compounds in biological tissues permits an assessment of the occurrence and distribution of contaminants in surface water resources. The results from this integrated, basin-level approach will enable resource managers to better understand and manage aquatic ecosystems and species of special concern.
Status	Incomplete
Lead Agency	USGS
Contact	Mark Munn, U.S. Geological Survey, Water Resources Division, 1201 Pacific Ave, Suite 600, Tacoma, WA 98402, (206) 593-6530

Federal

Department	Department of Interior and Department of Agriculture
Agency	US Fish & Wildlife Service and US Forest Service,
Unit	Washington State Office (USFWS) and Olympic National Forest (USFS)
Program	Watershed Alliance
Purpose	Watershed restoration on the Olympic Peninsula.
Objectives	Short-Term (one to five years): To provide local job and training opportunities in restoration work; to avert additional Endangered Species Act listings; to educate landowners and the public about new strategies in natural resource management; and to increase recreational opportunities based on healthier fish and wildlife populations. Long-Term: To restore natural ecological processes; to ensure high water quality; enhance biodiversity; to expand local economic base; restore fish and wildlife population levels; and to ensure availability of valuable natural resources for the 21st century.
Description	Problems facing watershed restoration exist on both public and private lands. The USFS and the USFWS created the Watershed Alliance to allow restoration operations to cross federal, state, and private landowner boundaries. Although a large portion of the Olympic Peninsula has been named a world biosphere, surrounding areas have been scarred by previous management practices, resulting in watershed degradation and declining fish and wildlife populations. More than a quarter of the Olympic National Forest has deteriorating watersheds. Forty-one anadromous fish stocks in the Washington Coast/Puget Sound area have been identified by the American Fisheries Society to be at risk of extinction or of special concern. Seventeen of these stocks occur in streams flowing through the Olympic National Forest. Four Olympic Peninsula species are listed as threatened or endangered. Nine others are candidates for listing, as are five plant species. Much of the area is also designated as critical habitat for the northern spotted owl. Timber harvest, the principle source of employment on the Olympic Peninsula, is being increasingly restricted partially due to degraded watersheds. In partnership with landowners, Indian tribes, industry, conservation groups, the State and local governments, the USFS and the USFWS are working to restore watersheds and accelerate the resumption of natural processes. Through these partnerships, existing watershed, fisheries, and wildlife programs are being extended across federal, state, and private lands to restore entire ecosystems. Project activities are based on local needs, which include hillside stabilization, road removal, revegetation with native species, riparian tree planting, stream improvement for fish, and restoration of wildlife habitat. Inventories of watershed recovery needs have been completed on 243,000 acres. The Watershed Alliance partnership recognizes that sharing of personnel, expertise and other resources is essential for successful restoration efforts. Watershed restoration activities on the Olympic National Forest are projected to total as much as $100 million. Similar work on private lands will require $6.75 million a year for the next ten years to train and employ up to 850 displaced timber workers and dependents. Watershed restoration projects will benefit communities, wildlife, long-term employment, and recreational opportunities.
Status	Ongoing
Lead Agency	USFS and USFWS
Cooperating Agencies	Landowners, Indian tribes, industry, conservation groups, state and local governments, WDFW, County Conservation Districts.
Contact	Ron Humphrey, Forest Supervisor, Olympic National Forest, 1835 Black Lake Blvd., Olympia, WA 98512-5623, (206) 956-2300; David Frederick, State Supervisor, US Fish & Wildlife Service, Olympia Field Office, 3704 Griffin Lane SE, Suite 102, Olympia, WA 98501-2192, (206) 753-9440.
Funding Sources	Federal to USFS, USFWS and WDFW.
Funding Amount	1993: $1 million to Olympic National Forest; $1.5 million to be equally shared between US Fish & Wildlife Service and WA Department of Wildlife.

State

Agency Office of Marine Safety

Plan Oil Spill Prevention Plan

Purpose Oil spill prevention

Description The Office of Marine Safety was created by the Washington Legislature in 1991 to coordinate state efforts to address the threats to the safety of marine transportation and the impacts of marine transportation on the environment. Part of this effort has involved developing an Oil Spill Prevention Plan. A task force appointed by the Office of Marine Safety has been examining the alternatives for positioning an emergency towing vessel that could respond to emergencies near the mouth of the Strait of Juan de Fuca and along the outer coast.

Status Ongoing

Cooperating Agencies WDOE, USCG

Contact Nick Handy, Deputy Administrator, Office of Marine Safety, P.O. Box 42407, Olympia, WA 98504-2407, 206-664-9123

Funding Sources State legislature

State

Organization Washington State Maritime Commission

Program Oil Spill Response System

Purpose Oil spill response

Description The Washington State Maritime Commission, whose members are appointed by the Governor, was created to prepare a comprehensive industry-focused oil spill response plan for all state waters. The emphasis is on establishing preventative measures and ensuring contingency planning and an adequate first response system for oil spills. The Commission is granted authority to enter into contracts to assure an immediate response to spill events. The Commission also gathers information on vessel accidents, near misses, and oil discharges for reporting to the Office of Marine Safety.

Status Ongoing

Contact Jerry McMahon, Chair; Harry Hutchins, administrative support staff, 2701 1st Ave., Suite 110, Seattle, WA 98121, 206-443-3830

State

Organization Washington Watershed Coordinating Council

Program Watershed Coordinating Council

Purpose Coordinated, watershed-based natural resource planning.

Objectives To provide mechanisms to make comprehensive watershed planning and implementation policy recommendations for consideration by the legislature; to encourage coordination and integration of existing state agency and private party watershed planning and implementation; and to develop a set of measurable objectives against which the effectiveness of watershed programs may be assessed.

Description In June 1994, the legislature established the Watershed Coordinating Council. The Directors of the Departments of Agriculture, Fish and Wildlife, and Ecology and the Commissioner of Public Lands are responsible for providing staff support and organizing the activities of the council, which is comprised of the heads of all state agencies involved in natural resource-related issues. The council is directed to coordinate its activities with federal, tribal and local governments. The council's mandate is to provide a summary of all state agency watershed programs, plans and ongoing activities on a watershed-by-watershed basis and to present recommendations to the legislature by December 1994. Their report will include recommendations on the following items: the definition of the geographical unit for watershed planning and implementation; common protocols for data collection and analysis; a central depository of information on watershed planning for use by all state agencies; available data from existing sources; ways to overcome barriers to state agency cooperation in watershed planning and implementation; ways of minimizing duplication, segmentation and overlap of watershed planning and implementation efforts; new sources of funding and reallocation of existing state funding for watershed planning and implementation. The council is slated to expire in June 1997.

Status Incomplete

Lead Agency WDNR, WDOA, WDFW, WDOE.

Cooperating Agencies WDOT, WDCTEC, WICOR, PSWQA, WSCC, and federal, tribal, and local governments.

Contact Commissioner of Public Lands, Department of Natural Resources, 201 John A. Cherberg Bldg, Olympia, WA 98504, (206) 902-1004

Funding Sources The participating agencies will fund the council's activities.

State

Department Washington Department of Ecology

Division Shorelands and Coastal Zone Management Program

Plan Coastal Nonpoint Source Action Plan

Purpose Water quality protection.

Objectives To build strong networks; to develop consistent nonpoint source pollution objectives for use by multiple agencies; to encourage more nonpoint source pollution control activities at a local level; to provide a consistent set of management tools and quality technical assistance for solving nonpoint source pollution problems; to improve agency coordination with local government staff; to develop nonpoint source alternatives for Total Maximum Daily Loads and integrate with statewide water quality assessment activities; to coordinate with Federal watershed initiatives; to coordinate cumulative effects efforts with Department of Natural Resources; to integrate stormwater management into nonpoint source program; to integrate action with Growth Management Act requirements and local comprehensive plans; to improve protection of surface water and ground water; and to build on the experience of Puget Sound watershed action plans.

Description Although great strides in controlling point sources of pollution have been made, nonpoint source pollution remains a major problem in many coastal areas. Evidence of water pollution include beach closures, prohibitions on harvesting shellfish, and the loss of biological productivity in coastal habitats. According to state water quality assessments, the leading nonpoint contributors to estuarine waters are urban runoff (including certain construction and development activities and onsite disposal systems) and agriculture. Other significant nonpoint contributors in some coastal watersheds include silviculture, marinas and hydromodification. In addition, the loss and degradation of wetlands and riparian areas has adversely impacted coastal water quality. Section 6217 of the Coastal Zone Reauthorization Amendments of 1990 (CZARA) requires the states with federally approved coastal zone management programs to develop and implement Coastal Nonpoint Pollution Control Programs to ensure protection and restoration of coastal waters. Washington is developing a Nonpoint Source Action Plan that will take a comprehensive approach involving surface water, ground water and stormwater control. The plan will include the following specific outputs: priorities for resource protection; priorities for prevention and control activities to address nonpoint source pollution; characterization of water quality condition around the state; "tools" or strategies to meet water quality needs for each major source type; agricultural management systems and practices; integration with local comprehensive plans; clear linkage between key federal, state, and local nonpoint source pollution programs in Washington; a basin/watershed context for planning and implementation; an interagency approach that focuses funding on priority nonpoint source needs; and a list of workable alternatives for public involvement and education directed at nonpoint source pollution prevention and control. Management strategies will be developed around the following major categories: agriculture, forest practices, urban areas, marinas, hydromodification, wetlands/riparian areas and groundwater.

Status Incomplete

Lead Agency WDOE

Cooperating Agencies EPA, Office of Wetlands, Oceans and Watersheds; NOAA, Office of Ocean and Coastal Resource Management; other federal, tribal, state, and local agencies.

Contact William Cambell, Coastal Nonpoint Coordinator, Shorelands and Coastal Zone Management Program, P.O. Box 47600, Lacey, WA 98504-7600, (206) 407-6799; Kahle Jennings, Department of Ecology, Water Quality Program, P.O. Box 47600, Olympia, WA 98504-7600; (206) 407-6407

Funding Sources EPA, NOAA

State

Department	Washington Department of Ecology
Division	Spills Management Program
Plan	Washington State Contingency Plan
Purpose	Oil spill preparedness and response
Description	The Department of Ecology was given broad powers by the Washington Legislature to establish a comprehensive prevention and response program to protect the state's waters and natural resources from oil spills. The Department of Ecology has developed a state-wide master spill prevention and contingency plan to complement the provisions of the federal Oil Pollution Act.
Status	Ongoing
Cooperating Agencies	USCG
Contact	Steve Hunter, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600, 206-407-6974

State

Department	Washington Department of Ecology
Division	Shorelands and Coastal Zone Management
Plan	Shoreline Management Act
Program	Shoreline Master Programs
Purpose	To protect state shorelines, while providing for appropriate uses.
Objectives	For local governments and the Department of Ecology to prepare Shoreline Master Programs for all shorelines of the state within their jurisdiction, and implement these programs through a local permit process with state overview.
Description	The Shoreline Management Act grew out of a statewide public initiative, reflecting concern by citizens and all levels of government about protecting state shorelines while also allowing appropriate uses. The Act requires local governments and the Department of Ecology to prepare Shoreline Master Programs for all shorelines within their jurisdictions. All shoreline uses and activities are then managed though city and county shoreline master plans which utilize a local permitting process under Department of Ecology overview. The Shoreline Master Programs are tailored to local issues and physical constraints, but must also meet statewide guidelines, goals and policies. Issues addressed by the programs are established primarily by local governments. The Department of Ecology provides assistance and reviews the proposed programs to ensure compliance with policies and provisions of the Act. The jurisdiction of the Act includes: lakes 20 acres or larger; streams with a mean annual flow greater than 20 cubic feet per second; all marine waters; associated marshes, bogs, swamps and river deltas; an area 200 feet landward of the water's edge; areas within 200 feet of designated flood ways; and portions of the 100-year floodplain, including all associated wetlands.
Status	Ongoing
Lead Agency	WDOE
Cooperating Agencies	Local governments (cities and counties)
Contact	Manager, Shorelands and Coastal Zone Management, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600, (206) 407-6600

State

Department Washington Department of Fish and Wildlife

Program Aquatic Education Program

Purpose Sport Fish Education

Objectives To teach kids and beginning adult anglers about fish, fishing and clean water.

Description The Aquatic Education Program was established in 1987. The program trains volunteer instructors and school teachers to teach students and beginning adult anglers about fish, fishing, and clean water. Teaching objectives focus around five basic assumptions: (1) a thorough knowledge of fish and fishing is the first step in a lifelong learning and growing process; (2) sportsmanship and ethics are the keys to continued fishing enjoyment; (3) fisheries and fish management activities are essential to the health of our fish populations; (4) fish can't live without clean water and adequate habitat; and (5) safe fishing and boating practices will lead to pleasant, memorable outings.

Status Ongoing

Lead Agency Washington Department of Fish and Wildlife

Contact Michael O'Malley, Program Coordinator, Aquatic Education Program, Washington Department of Fish and Wildlife, 600 Capitol Way N., Olympia, WA 98501-1091, (206) 586-5508

Funding Sources U.S. Fish and Wildlife Service (U.S. Sport Fish Restoration Act)

State

Department Washington Department of Fish and Wildlife

Program Salmon and Steelhead Stock Inventory (SASSI)

Purpose Identify and monitor status of Washington's naturally reproducing salmon and steelhead stocks.

Objectives To establish a standardized, uniform approach to identifying and monitoring the status of Washington's naturally reproducing salmon and steelhead stocks; to compile an inventory of all wild stocks; to scientifically determine the status of each stock, i.e., healthy, depressed, critical, unknown or extinct; to establish a baseline for measuring future actions to restore stocks to a healthy, fishable status; and to create a living document that will be regularly updated and revised as new information is available.

Description The Salmon and Steelhead Stock Inventory (SASSI) is a standardized, uniform approach to identifying and monitoring the status of Washington's naturally reproducing salmon and steelhead stocks. The inventory represents a compilation of all wild stocks and a scientific determination of each stock's status, which is rated as ***Healthy, Depressed, Critical, Unknown*** or ***Extinct***. SASSI forms the baseline measurements for evaluating future actions designed to restore stocks to a healthy, fishable status. It constitutes a starting point that will be modified as new information is available. Data from fisheries managers and biologists from WDFW and 20 tribes were incorporated into this inventory. SASSI represents the best available scientific information on the condition of Washington's salmon and steelhead resources. The inventory identified a total of 435 stocks of salmon and steelhead in the state. Of these, 187 stocks (43%) were judged to be healthy, although production levels or genetic health may still be a concern. Twelve stocks were determined to be in critical shape, needing immediate attention. One hundred and twenty-two stocks were depressed. The status of 113 stocks is unknown. Critical stocks on the Olympic Peninsula include stocks from Discovery Bay, Dungeness River, Elwah River and Hood Canal. Depressed stocks from the coastal areas include stocks from the Clearwater River, Fall River, Ozette River, Queets River, Quinault River, Satsop River and Skookumchuck/Newaukum River. Time constraints did not allow for including an assessment of hatchery stocks in the initial inventory. This and a more detailed evaluation of hatchery and wild stock interactions was completed during 1993. SASSI represents the "where-we-are-now" assessment of a three-step salmon and steelhead recovery process. Fisheries specialists, with the assistance and input of a variety of concerned individuals, will develop the "where-we-want-to-go" and the "how-we-get-there" phases. Public review and involvement will be key ingredients for success. An effective partnership with local governments, landowners, commercial and recreational fishers, and the scientific community will be required to reverse the downward trends. Existing federal and international management processes will be considered in establishing priorities and developing approaches. Specific restoration actions may include habitat restoration, modification of hatchery practices, captive broodstock projects and new harvest management strategies. The cooperation of local governments, using their authority under the Growth Management Act, will be required to strengthen watershed and riparian protection.

Status Ongoing

Lead Agency WDFW

Cooperating Agencies NWIFC

Contact Rich Lincoln, Washington Department of Fisheries, P.O. Box 43136, Olympia, WA 98504-3136, (206) 902-2700; Gary Graves, Northwest Indian Fisheries Commission, 6730 Martin Way E., Olympia, WA 98506, (206) 438-1180.

State

Department Washington Department of Fish and Wildlife

Program Washington Wild

Purpose Environmental education.

Objectives To develop awareness, knowledge, skills and commitment which will result in informed decisions, responsible behavior and constructive actions for wildlife and the environment.

Description Washington Wild is an environmental education program designed to develop stewardship for wildlife among youth and adults. It is sponsored by the Department of Fish and Wildlife and supported by the Office of the Superintendent of Public Instruction and the Governor's Council on Environmental Education. The program focuses on the issues involving wildlife in Washington, emphasizing wildlife as a way to understand our responsibilities to living things. Washington Wild offers teacher workshops on habitat enhancement for wildlife using the award-winning Project WILD supplementary curriculum.

Status Ongoing

Lead Agency Washington Department of Fish and Wildlife

Contact Margaret Tudor, Washington Wild, Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, WA 98501-1091, (206) 753-1702

Funding Sources Office of the Superintendent of Public Instruction, Governor's Council on Environmental Education

State

Department Washington Department of Fish and Wildlife

Program Washington Wild Stock Initiative

Purpose Maintain and restore healthy wild salmon and steelhead stocks and their habitats.

Objectives To conduct a statewide program to inventory and monitor the status of wild salmon and steelhead stocks; to propose and assess the impacts of recovery plans for critical stocks requiring immediate attention; and to develop comprehensive wild stock policies in consultation with the tribes.

Description The Washington Department of Fish and Wildlife, in association with the Washington Treaty Tribes, has recently developed a Wild Stock Initiative. It will identify and begin to address the range of harvest, habitat, hatchery and fish passage problems responsible for the depleted condition of a number of wild salmon stocks and their habitats within the state. The initiative includes three related components. First, an ongoing statewide inventory of wild salmon and steelhead and their status has been developed - the Washington State Salmon and Steelhead Inventory (SASSI). Ongoing monitoring will help identify changes in stock status and impacts of management actions. Second, the agencies, tribes and some stakeholders are producing detailed reports assessing impacts and proposing recovery plans for critical stocks which require immediate attention from management agencies and stakeholders. Third, recent complementary state legislation requires the agencies, in consultation with the tribes, to develop comprehensive wild stock policies which will help shape the future of wild stocks. These policies will be developed under the Washington State Environmental Policy Act (SEPA) process.

Status Ongoing

Lead Agency WDFW

Cooperating Agencies NWIFC

Contact Rich Lincoln, Washington Department of Fish and Wildlife, P.O. Box 43136, Olympia, WA 98504-3136, (206) 902-2700.

State

Department Washington Department of Fish and Wildlife

Program Watershed Stewardship Program

Purpose Citizen involvement in watershed stewardship.

Objectives To increase community awareness and understanding of watershed, fish and wildlife issues; to increase community involvement in watershed management decisions; to encourage collaborative action between community and watershed-based resource managers; to provide resource knowledge to the public relevant to growth management policy; to encourage and increase fish and wildlife protection and management on rural lands; to encourage watershed-based resource management by a coalition of citizens, the private and the public sector; and to develop a volunteer program.

Description The Watershed Wildlife Stewardship Program is a joint program, proposed by the Washington State University Cooperative Extension and the Washington Department of Fish and Wildlife, that is designed to train adults to assist citizens to become involved in watershed, fish and wildlife research, planning, and management efforts. The targeted audience for the Stewardship Program includes the general public, community activists, landowners, business, industry, youth and professionals. Program elements include: developing a Watershed Stewardship Curriculum; training volunteers in watershed stewardship; collaborating with active watershed groups; developing a monitoring program to assure the quality of volunteer involvement; developing procedures for data collection and monitoring for water quality, fish, wildlife and habitat; developing a watershed model for each watershed with the participation of citizens and the public and private sectors; and developing strategies and training to implement plans for watershed management and restoration. The Watershed Stewardship Program addresses Governor Lowry's Executive Order calling for coordinated watershed planning, implementation, and restoration efforts for fish and wildlife.

Status Incomplete

Lead Agency WDFW

Cooperating Agencies Washington State University Cooperative Extension

Contact Margaret Tudor, Wildlife Education Program Manager, Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, WA 98501-1091, (206) 753-1702

State

Department Washington Department of Natural Resources

Plan Olympic Experimental State Forest Plan

Purpose Experimental forest management to produce sustained levels of timber harvest while protecting and restoring the forest ecosystem.

Objectives To contribute to the conservation of federally protected species (including spotted owl, marbled murrelet, and fish stocks); to meet DNR's obligation to generate revenue for trust beneficiaries; to protect watersheds and fisheries resources; to manage activities and programs from an ecosystem perspective; to acquire knowledge through an active monitoring and research program; to assure technical and economic feasibility of new management practices; and to demonstrate the process by which all land management activities and programs will respond to new information.

Description The Olympic Experimental State Forest (OESF) includes all state-owned lands on the western Olympic Peninsula north of the Queets River. Located in Clallam and Jefferson counties, it totals 264,000 acres of forest lands. A state experimental forest was recommended in 1989 by the Commission on Old Growth Alternatives - a citizens' advisory group. The stated purpose was to test innovative methods of forest management designed to produce a sustained level of timber harvest, while simultaneously protecting and restoring the forest ecosystem. The listing of the northern spotted owl as "threatened" under the Endangered Species Act in 1990 reduced the options available for research and experimentation because of the need to comply with strict owl protection measures. Federal legislation provided WDNR with the option of developing a detailed plan for the conservation of listed species and still proceed with an experimental forest. The OESF will be managed as a productive, commercial forest that is designed to meet specific conservation objectives. All activities will be closely monitored to ensure compliance with conservation objectives and to build a body of knowledge regarding forest ecosystems. The forest will be a real-world testing ground for new management techniques in ecosystem protection that will allow predictable financial returns to the state's trust beneficiaries. Plan components include: species conservation (spotted owl, marbled murrelet, and fish stocks), research and monitoring, public involvement and education, SEPA/NEPA compliance, and implementation. The draft research plan for the OESF is expected to be completed by June 1994 with implementation by the end of 1994.

Status Ongoing

Lead Agency Department of Natural Resources

Cooperating Agencies USFWS, WDFW, ONRC

Contact Craig Partridge, Project Manager, Olympic Experimental State Forest, Department of Natural Resources, P.O. Box 47001, Olympia, WA 98504-7001, (206) 902-1028

State

Department Washington Department of Natural Resources

Project Washington Forest Landscape Management Project

Purpose To determine whether it is possible to integrate forest management across federal, tribal, state and private land ownerships, and thereby increase the likelihood of sustaining viable populations of sensitive wildlife species and anadromous fish stocks while reducing landowner costs and uncertainties.

Objectives To develop and test a scientifically credible approach for using landscape management techniques to conserve native wildlife in watersheds containing federal, state, tribal and private ownerships; to develop and maintain forest stand structures and placement to provide habitat for wildlife species sensitive to intensive forest management; to identify methods for producing high quality wood at a reasonable rate of return to landowners; to identify practical and viable incentives for landowners to participate in landscape management; to analyze alternatives for different degrees of species protection and economic costs and benefits; and to establish an information management system for resource planning, monitoring, and analysis.

Description The Washington Forest Landscape Management Project was initiated by the Governor's Office and the Department of Natural Resources in 1992. It is directed by WDNR and WDFW. The project's primary goal is to determine the feasibility of implementing a scientifically-based approach to management natural resources at a landscape scale across multiple ownerships. The area selected for this project is the Quilleute/Hoh River Watersheds, which comprises 770,000 acres. Currently, an interdisciplinary Scientific Committee is designing several alternative landscape strategies for the project area and evaluating their consequences. (Several members of the Committee are from the University of Washington, including: Gardner Brown, Jerry Franklin, Bruce Lippke, Chad Oliver and Margaret Shannon.) An Implementation Committee, composed of agencies, tribes, and private landowners within the project area, will be created to advise the Project Manager and the Scientific Committee on the generation, evaluation, and selection of alternatives and to work with the various landowners to implement the adopted landscape management plan.

Status Incomplete

Lead Agency WDNR

Cooperating Agencies WDFW, tribes, other federal and state agencies, private landowners.

Contact Catherine Elliott, Project Manager, Landscape Management Project, Department of Natural Resources, 1111 Washington St SE, P.O. Box 47001, Olympia, WA 98504-7001, (206) 902-1041

State

Department Washington Department of Natural Resources

Plan Habitat Conservation Plan

Purpose Conservation of threatened and endangered species on state-owned forest lands.

Objectives To develop a statewide habitat conservation plan to address species conservation issues on state-owned land that will satisfy requirements of Section 10 of the Endangered Species Act and promote the conservation of the species as a whole; to implement conservation efforts and a timber sales program from an ecosystem perspective while guarding against inadvertent, incidental take of listed species; to move the state out of crisis-by-crisis compliance with the Endangered Species Act on state forest lands.

Description A habitat conservation plan is a detailed plan promoting the conservation of species listed as threatened or endangered under the endangered Species Act. Section 10 of the Act provides a way for landowners to carry out activities on their lands, including alteration of habitat, in exchange for developing and implementing a plan that offsets any harm caused to listed species by promoting the conservation of the species as a whole. If the habitat conservation plan is approved by the Secretary of Interior, it will be followed by the issuance of permits allowing incidental take of listed species. The landowner is bound by the conditions of the permit and the habitat conservation plan for a period of generally 30 years or more. For a habitat conservation plan to be approved and an incidental take permit issued, the following criteria must be met: (1) any taking of a listed species will be incidental; (2) the plan will minimize and mitigate the impacts of taking; (3) adequate funding is available to implement the plan; and (4) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild. Of the 5 million acres of state-owned lands, 2.1 million acres are forest lands managed for long-term public benefits. WDNR also oversees the protection of public resources by regulating forest practices on more than 12 million acres of state and private forest lands in Washington. WDNR has a legal obligation to produce long-term income for state trusts used for building public schools, universities, capitol buildings and other state institutions. An approved habitat conservation plan may be the only way for WDNR to continue providing income to the trusts through its timber sales program, reduce annual survey expenses, and protect listed species. The hope is that the habitat conservation plan will serve to move the state out of the crisis-by-crisis compliance with the Endangered Species Act on state forest lands and truly towards ecosystem management.

Status Incomplete

Lead Agency WDNR

Contact John Calhoun, Habitat Conservation Plan Director, (206) 902-1024; Carol Lee Gallaghar, Project Coordinator, Department of Natural Reosurces, P.O. Box 47001, Olympia, WA 98504-7001, (206) 902-1046

State

Department Washington Department of Natural Resources

Plan Aquatic Lands Strategic Plan

Purpose To articulate a mission and goals for management of Washington aquatic lands and to define strategies for addressing major, critical aquatic lands management issues during the next six years.

Objectives To conserve and enhance aquatic lands and resources; to provide social and economic benefits while minimizing adverse effects on the ecosystem; to make full use of legal authority; to acquire adequate funding and resources to carry out the division's mission; and to cultivate better cooperation and understanding among the Division of Aquatic Lands, other state government agencies, the public and other entities.

Description The Washington Department of Natural Resources manages two million acres of state-owned aquatic lands. These aquatic or submerged lands include tidally influenced lands such as tidelands and bedlands, as well as the beds and shores of navigable freshwater bodies. These lands are managed for the benefit of all current and future citizens of the state of Washington. The mission of the Division of Aquatic Lands is to act as the steward of Washington's aquatic lands and associated resources. Aquatic lands are to be managed so as to sustain long-term ecosystem and economic viability and to ensure the public's access to the aquatic lands and the benefits derived from them. WDNR increasingly will play a pivotal role in conserving and enhancing aquatic lands and resources as development requirements continue for aquatic lands and resources. Certain public aquatic rights are maintained in trust for the people of Washington, including the public rights of fishing, navigation and commerce. These rights are public ownership interests that apply to all tidelands, shorelands, navigable waters, and underlying bedlands. The Aquatic Lands Strategic Plan sets priorities for future actions and describes strategies for addressing major, critical aquatic lands management issues. The plan also describes specific enabling actions to carry out the strategies. Implementation is projected for the next six years. WDNR will manage state-owned aquatic lands for the social and economic benefits of the public, while minimizing adverse effects on the aquatic ecosystem. These benefits include improved public access to state-owned aquatic lands. WDNR will coordinate with public and private interests to protect the values of the state's aquatic lands and resources. WDNR will ensure that the public receives fair compensation for use of, removal of resources from, or damage to state-owned aquatic lands and resources. WDNR will pursue remediation of aquatic lands ranked as areas of concern for cleanup. WDNR will actively cultivate better cooperation and understanding between the Division of Aquatic Lands, the public and other entities, through comprehensive public education and outreach. Implementation of strategies will be accomplished by seeking funding, committing additional qualified staff to carry out management responsibilities, developing the necessary policies, information and tools, and by actively asserting the public's proprietary interest in Washington's aquatic lands. Financial, legislative, constituent support and public opinion to implement the strategies will be actively cultivated.

Status Completed

Lead Agency WDNR

Contact Lisa Randlette, Division of Aquatic Lands, Department of Natural Resources, 1111 Washington St SE, PO Box 47001, Olympia, WA 98504-7001, (206) 902-7001

State

Department Washington Department of Natural Resources

Plan Forest Resources Plan

Purpose Forest land management.

Objectives To establish the Department of Natural Resource's primary policy and planning document to guide the management of state forest land during the ten-year period, 1992-2002.

Description The Forest Resources Plan was adopted in July 1992 by the Board of Natural Resources to provide policy and planning guidance to the Department of Natural Resources in managing the state's 2.1 million acres of forest land until 2002. The department has a legal duty to produce long-term income for its trust beneficiaries, which include schools and counties. The department generates income for the trusts by selling the rights to cut timber from state forest lands to private companies. The major policies of the plan include: (1) the department will give priority to its trust responsibilities; (2) the department will manage state forest lands to produce a sustainable, even-flow harvest of timber; (3) the department will manage state lands at different levels of intensity depending on its biological productivity and economic potential; (4) the department will identify areas with special significance for ecological diversity and seek legislation to convert them from trust ownership to protected status; (5) the department will limit clearcuts to 100 acres and provide green buffers with adjacent areas; (6) the department will comply with all applicable laws and in some cases provide greater protection of resources than required; (7) the department will use an ecosystem perspective to guide its efforts to protect natural resources; (8) the department will strive to respect the needs and opinions of adjacent landowners; and (9) he department will work with local governments to coordinate mutually beneficial actions designed to provide open space and forest buffers against encroaching development. In addition, the department will provide greater protection to aquatic systems, including wetlands and riparian areas, by reducing or modifying its activities in those areas. The department will also give greater emphasis to protecting wildlife and endangered, threatened and sensitive species. The department commits to analyze the cumulative impacts of its activities on water quality and quantity, wildlife, soils, and other non-timber resources within watersheds.

Status Completed

Lead Agency WDNR

Contact Art Stearns, Deputy Supervisor, Department of Natural Resources, P.O. Box 7001, Olympia, WA 98503, (206) 902-1000

State

Department Washington Department of Natural Resources

Program Washington Natural Heritage Program

Purpose Natural area protection.

Objectives To inventory existing public, state and private lands to assess possible natural areas for preservation and to establish criteria for selecting, acquiring, managing, protecting, and using natural areas within the state.

Description The Washington Natural Heritage Program was established in 1972 to preserve significant specific elements or outstanding examples of typical and rare terrestrial, aquatic and marine ecosystems, rare species and rare geologic features. Highest priority for selection and designation is given to those elements in jeopardy of being destroyed or degraded. This approach is contingent on developing an extensive inventory and classification system to prioritize elements to be preserved, based on their rarity. Approximately 36 state-owned Natural Areas have been established. The Registered Natural Area component of the Natural Heritage Program involves the voluntary registration of privately-owned areas that have been identified as meeting the program's criteria. Management remains the responsibility of the landowner.

Status Ongoing

Lead Agency WDNR

Contact Mark Sheehan, Manager, Washington Natural Heritage Program, Department of Natural Resources, P.O. Box 47046, Olympia, WA 98504-7046, (206) 902-1650.

State

Department Washington State Department of Transportation

Program Washington Coastal Corridor

Purpose Scenic highway to serve tourism and commerce.

Objectives To preserve the inherent natural, historical and cultural resources along the scenic US 101 coastal corridor route, while developing a highway that serves both tourism and commerce and to develop a long range plan for the corridor as well as policies and strategies that will shape its development and character over the next decade, using a community-based approach that creates a balance between environmental protection, economic development and mobility.

Description Highway 101 links 32 Western Washington cities and towns, six counties and 10 Indian tribes. Throughout its existence, Highway 101 has been the only route around the Olympic Peninsula, as well as the only means to market for local resource industries. Because of time and wear, the highway no longer meets current safety and speed standards. The Washington Coastal Corridor has been designated a special corridor of national significance by the U.S. Congress and the Federal Highway Administration. Four million dollars in federal funds have been authorized, which will be coupled with $1 million in state funds, to plan for and begin a number of improvements along the Coastal Corridor. The designation provides an unprecedented opportunity for a community-based effort to shape improvements that can create a balance between environmental concerns, economic development and mobility. An underlying priority assumption of the planning process is that the Corridor's scenic visual and natural resources must be protected from further degradation while opportunities for economic development and mobility are enhanced. It is recognized that education, citizen participation and voluntary cooperation of individuals and communities are all important and necessary components of the corridor planning process. The Corridor project seeks to create a legacy based on preserving the heritage and integrity of the scenic, historical, environmental and cultural resources of the area while evolving as the principal transportation route for commercial, recreational and industrial traffic. A Policy Framework to guide future development of the Corridor Master Plan is outlined around five strategic themes: Economic & Community Development, including tourism; Resource Management, including marine, forestry and wildlife resources; Scenic & Recreational Highways & Highway Heritage; Transportation; and Environment.

Status Incomplete

Lead Agency WSDOT

Cooperating Agencies Local communities, tribes, state and federal agencies.

Contact Bob Jones, WSDOT, District 3, P.O. Box 47440, Olympia, WA 98504-7440, 206-357-2644; Jeff Peacock, Parametrix, Inc., 5700 Kitsap Way, Suite 202, Bremerton, WA 98366, 206-377-0014

Funding Sources Federal (Federal Highway Administration); state (Department of Transportation)

Funding Amount Federal: $4 million through 1995; state: $1 million; additional $1.8 million in 1992-1993 for project funding.

Tribal

Organization Northwest Indian Fisheries Commission

Program Coordinated Tribal Water Quality Program

Purpose Water quality protection.

Objectives To address water quality issues affecting Indian reservation communities and off-reservation treaty-protected resources.

Description The 26 federally recognized tribes in Washington developed the Coordinated Tribal Water Quality Program as a watershed protection strategy to protect the resources on which they depend for their economic, spiritual and cultural survival. To protect their health and resources, the tribes want to exercise their treaty and other rights to protect, restore and enhance watersheds of tribal concern and their associated ecosystems. The program is designed to address water quality issues affecting Indian reservation communities and off-reservation treaty-protected resources. The tribes are confronted by serious water pollution issues because their lands border many of the state's major logging, agricultural, industrial and population centers, but lack the independent means with which to solve the problems. The tribes are committed to managing water quality on a watershed/ecosystem basis that transcends jurisdictional boundaries. To succeed, the tribes realize these efforts will require ooperative, coordinated actions in alliance with other governments. The Water Quality Program is a staged approach. Stage I involved program design and development using a cooperative watershed approach, based on detailed surveys of water quality issues facing each tribe. Stage II consisted of developing individual tribal water quality programs, beginning water quality monitoring and initiating statewide coordination. Currently, funding is being sought for Stage III, which includes expansion of tribal water quality programs and statewide coordination and water quality laboratories, as well as extension of water quality education efforts and planning of tribal watershed demonstration projects. Stage IV is full implementation of the model tribal water quality program. Participating tribes want this model program's coordinating mechanism and technical components to build on, enhance and compliment existing efforts of individual tribes and other entities to improve water quality.

Status Ongoing

Lead Agency NWIFC

Cooperating Agencies WDOE, EPA, PSWQA, WDFW, 26 federally recognized Indian tribes of Washington.

Contact Fran Wilshusen, Water Resources Coordinator, Northwest Indian Fisheries Commission, 6730 Martin Way E., Olympia, WA 98506, (206) 438-1180

Funding Sources Federal through Bureau of Indian Affairs, Environmental Protection Agency

Tribal

Organization Northwest Indian Fisheries Commission

Program Fishery Services Program

Purpose To support and promote all member tribes' fisheries programs.

Objectives To provide technical assistance to member tribes, coordinate their management programs and represent their management policies.

Description The Fishery Services Program provides technical assistance to member tribes in four areas. The Fishery Management Planning Division deals with both annual and long-range harvest management planning. Responsibilities include: annual harvest management planning and monitoring, US/Canada Treaty technical assistance, watershed planning, Pacific Fishery Management Council technical assistance, regional management assistance, shellfish management and litigation assistance, and coastal habitat coordination. Coordination of cooperative management efforts with WDFW continues to be a high priority. The Environmental Division coordinates fish habitat and other environmental issues among tribes, and between tribes and other government entities, to ensure that tribal concerns are addressed. Responsibilities include coordinating the Timber/Fish/Wildlife Ambient Monitoring Program and the Coordinated Tribal Water Quality Program processes, as well as representing and assisting the tribes in other planning and implementation processes, to ensure consideration of tribal concerns and positions. The Quantitative Services Division's objective is assisting tribal fishery management program by providing relevant data, quantitative tools and analyses, and technical consulting services to tribal and Commission projects. The Commission serves as a clearinghouse of environmental information for the tribes. The Commission administers and coordinates the Treaty Indian Catch Monitoring Program, whose objective is to develop a harvest database so that catch statistics can be generated for future management planning. The Enhancement Services Division provides tribal support services in enhancement planning, hatchery coordination, coded wire tagging and fish health. The Information and Education Services Division provides comprehensive public relations and education services to the public on behalf of the tribes.

Status Ongoing

Lead Agency NWIFC

Cooperating Agencies WDFW

Contact Jim Anderson, Executive Director, Northwest Indian Fisheries Commission, 6730 Martin Way E., Olympia, WA 98506, (206) 438-1180

Funding Sources BIA, EPA, USFWS

Tribal

Organization Northwest Indian Fisheries Commission

Program Northwest Indian Fisheries Commission

Purpose Fisheries management.

Objectives To coordinate an orderly and biologically sound treaty Indian fishery in the Pacific Northwest and provide member tribes with a single, unified voice on fisheries management and conservation matters.

Description The Northwest Indian Fisheries Commission was established in 1974 by treaty Indian tribes in Western Washington, as a result of the U.S. v. Washington litigation that affirmed fishing rights reserved by the tribes in treaties signed with the federal government in the 1850s. Tribes served by the Commission include: Jamestown S'Klallam, Lower Elwah S'Klallam, Port Gamble S'Klallam, Lummi, Makah, Muckleshoot, Nisqually, Nooksack, Puyallup, Quileute, Quinault, Sauk-Suiattle, Skokomish, Squaxin Island, Stillaguamish, Suquamish, Swinomish, Tulalip and Upper Skagit. The Commission's role is to coordinate an orderly and biologically sound treaty Indian fishery in the Pacific Northwest and provide member tribes with a single, unified voice on fisheries management and conservation matters. Member tribes select eight commissioners from each of eight major watershed basins, who provide policy and direction to the staff. An executive director supervises the Commission's staff to implement the policies and fisheries management activities approved by the commissioners. Funding for the Commission is provided by congressional appropriations through the Bureau of Indian Affairs, the Administration for Native Americans and the U.S. Fish and Wildlife Service. The Commission is based in Olympia, with regional offices in Marysville and Forks.

Status Ongoing

Cooperating Agencies Treaty tribes.

Contact Jim Anderson, Executive Director, Northwest Indian Fisheries Commission, 6730 Martin Way E., Olympia, WA 98506, (206) 438-1180

Funding Sources BIA, EPA, USFWS and others.

Tribal

Tribe Hoh Tribe

Program Coordinated Tribal Water Quality Program

Purpose Water quality protection.

Objectives To address water quality issues affecting reservation lands and treaty protected resources and to develop best management practices that will allow timber harvesting to co-exist with healthy salmon runs.

Status Ongoing

Lead Agency Hoh Tribe

Cooperating Agencies NWIFC

Contact Jim Hatten, Environmental Biologist, Hoh Tribe, HC-80, Box 917, Forks, WA 98331, (206) 374-6582

Funding Sources BIA, EPA, NWIFC

Tribal

Tribe Makah Tribe

Program Coordinated Tribal Water Quality Program

Purpose Water quality protection.

Objectives To address water quality issues affecting their reservation lands and treaty protected resources; to develop reservation-wide water quality standards. Conduct wetland delineation study; and to assess water quality and salmonid habitat quality in streams within the tribe's Usual and Accustomed Fishing Area.

Status Ongoing

Lead Agency Makah Tribe

Cooperating Agencies NWIFC

Contact Ned Currence, Environmental Biologist, Makah Tribe, P.O. Box 115, Neah Bay, WA 98362, (206) 645-2205

Funding Sources NWIFC, BIA, EPA

Tribal

Tribe Makah Tribe

Program Makah Cultural and Research Center

Purpose Repository for archeological artifacts from the Makah coastal village of Ozette.

Description The Makah Museum is the nation's sole repository for archeological artifacts discovered at the Makah coastal village of Ozette. This centuries-old village was located 15 miles south of present-day Neah Bay. In 1970, tidal erosion exposed a group of 500-year-old Ozette homes that had been preserved when covered by an ancient mudslide. The thousands of artifacts subsequently discovered have helped to recreate the Makah's rich and exciting history as whalers, sealers, fishermen, hunters, gatherers, craftspeople, basketweavers, spinners, and warriors. The Ozette dig, one of the most significant archeological finds in North America, was closed in 1981, after 11 years of continual excavation by Washington State University. In addition to displays of artifacts, the Museum also feature dioramas depicting marine environments, as well as a full-sized longhouse.

Status Ongoing

Lead Agency Makah Tribe

Contact Director, Makah Cultural and Research Center, P.O. Box 160, Neah Bay, WA 98357, (206) 645-2711

Funding Sources Admission fees and memberships.

Tribal

Tribe Makah Tribe

Program Shellfish Toxin Monitoring Program

Purpose To monitor shellfish on tribal beaches for toxins.

Description Past outbreaks of domoic acid and paralytic shellfish poisoning have put tribal people at risk. Last year, Pacific coast and Strait of Juan de Fuca beaches were closed to harvesting because of these naturally occurring and potentially fatal toxins. The tribe has received funding from the Indian Health Service to monitor the shellfish along their beaches. With regular beach surveys and consistent testing, the tribes will be able to harvest clams, mussels and crab for their traditional subsistence and ceremonial uses with greater assurance of safety. The tribe has delayed plans for any commercial fisheries of shellfish until water quality studies are completed.

Status Ongoing

Lead Agency Makah Tribe

Cooperating Agencies Quileute Tribe

Contact Ned Currence, Environmental Biologist, Makah Tribe, P.O. Box 115, Neah Bay, WA 98357, (206) 645-2205

Funding Sources Indian Health Service

Funding Amount $50,000 for 1994, split with Quileute Tribe

Tribal

Tribe Quileute Tribe

Project Quileute Natural Resources Department Facility

Purpose To consolidate the tribe's fisheries, environmental, wildlife and water quality programs under one roof.

Description The Quileute Tribe plans to build a new facility to house the tribal staff for their fisheries, environmental, wildlife and water quality programs under one roof. The proposed two-story, 6,254 square-foot longhouse-inspired structure will be located near the mouth of the Quillayute River, just north of the U.S. Coast Guard Base on the reservation. Construction is scheduled for completion in the fall of 1994.

Status Incomplete

Lead Agency Quileute Tribe

Contact Mel Moon, Director, Quileute Natural Resources, P.O. Box 187, La Push, WA 98350, (206) 373-6163

Funding Sources BIA

Funding Amount $418,000

Tribal

Tribe	Quileute Tribe
Program	Coordinated Tribal Water Quality Program
Purpose	Water quality protection.
Objectives	To address water quality issues affecting reservation lands and treaty protected resources and to develop and implement a baseline monitoring program in the Quillayute Watershed.
Status	Ongoing
Lead Agency	Quileute Tribe
Cooperating Agencies	NWIFC, other federal, state and county agencies.
Contact	Ron Barnes, Ecologist, Quileute Natural Resources, P.O. Box 187, La Push, WA 98350, (206) 374-6163
Funding Sources	NWIFC, BIA, EPA

Tribal

Tribe Quileute Tribe

Program Shellfish Toxin Monitoring Program

Purpose To monitor shellfish on tribal beaches for toxins.

Description Past outbreaks of domoic acid and paralytic shellfish poisoning have put tribal people at risk. Last year, Pacific coast and Strait of Juan de Fuca beaches were closed to harvesting because of these naturally occurring and potentially fatal toxins. The tribe has received funding from the Indian Health Service to monitor the shellfish along their beaches. With regular beach surveys and consistent testing, the tribes will be able to harvest clams, mussels and crab for their traditional subsistence and ceremonial uses with greater assurance of safety. The tribe has delayed plans for any commercial fisheries of shellfish until water quality studies are completed.

Status Ongoing

Lead Agency Quileute Tribe

Cooperating Agencies Makah Tribe

Contact Mel Moon, Natural Resources Director, Quileute Tribe, P.O. Box 187, La Push, WA 98350, (206) 374-6163

Funding Sources Indian Health Service

Funding Amount $50,000 for 1994, split with Makah Tribe

Tribal

Tribe Quinault Indian Nation

Plan Quinault Indian Nation Shorelines Management Master Program

Purpose Implement a process for shorelines management on the Quinault Reservation based on community and cultural values that promotes the best possible pattern of water, shoreline and upland uses; to assure a minimum of conflict between uses; and to generally devise a pattern of use beneficial to the natural and human environments.

Objectives Goals of the plan include: nature conservation, historical and cultural conservation, rational shoreline use/restoration, shoreline access, recreation, circulation and transportation, and economic development.

Description The Quinault Indian Nation Shorelines Management Master Program is meant to strengthen and extend the 1979 Quinault Indian Nation Coastal Zone Management Plan to include rivers, lakes and streams. The Shoreline Management Master Program will serve to combine policy and procedure into one document, creating a manageable system that provides protection of all lands within the historic reservation boundaries. The management plan was developed by incorporating aspects of the federal Coastal Zone Management Act, the Washington State Shoreline Management Act, the Washington State Growth Management Act, and the Master Plans for Jefferson and Grays Harbor Counties. The general intent of the program is to ensure preservation, to the fullest extent possible, of the ecosystems within the tribe's natural shoreline environments. The specific purpose of the document is to establish in a practical, useful framework, goals, policies, regulations, planning/design parameters and application procedures relating to development in shoreline areas. Shorelines are classified into specific "environmental designations," based on each shoreline's physical, biological and development characteristics. The Program includes development regulations for specific shoreline "use categories," such as agriculture, aquaculture, mining, commercial, industrial, recreation and marinas. Shoreline modification activities, i.e., dredging, piers, bulkheads, etc., are addressed specifically. The Program establishes administrative procedures for determining jurisdictional applicability, processing permit applications, handling appeals, and enforcement.

Status Incomplete

Lead Agency Quinault Indian Nation

Cooperating Agencies WDOE, WDCADepartment of Ecology, Department of Community Affairs, Jefferson County, Grays Harbor County.

Contact Richard Wells, Director, Quinault Office of Planning and Development, Quinault Indian Nation, P.O. Box 189, Tahola, WA 98587, (206) 276-8211

Funding Sources BIA

Tribal

Tribe	Quinault Tribe
Program	Coordinated Tribal Water Quality Program
Purpose	Water quality protection.
Objectives	To address water quality issues affecting the reservation lands and treaty protected resources and to determine productivity changes in the Lake Quinault system.
Status	Ongoing
Lead Agency	Quinault Tribe
Cooperating Agencies	UW, NWIFC
Contact	Bruce Jones, Environmental Protection Director, Quinault Indian Nation, P.O. Box 189, Tahola, WA 98587-0189, (206) 276-8211
Funding Sources	BIA, EPA, NWIFC

Local Gov't

Organization Overall Economic Development Program Committee

Program Overall Economic Development Program

Purpose Economic development planning for Grays Harbor County.

Objectives To diversify the economic base of the region in order to stabilize and increase employment; to develop the three great renewable resources of the region (forestry, fisheries and agriculture) and the industries which use these resources to provide a permanent and growing sustained base for employment; to strengthen existing firms to maintain diversified economic activities and provide increased growth in jobs and business income; to protect the environment of the region, increasing the area's attractiveness to industry, tourists and its own young people thereby providing a permanent, desirable environment for both living and making a living; to effectively manage growth to optimize the benefits and minimize the costs which may result from development activities; and to encourage partnerships between business, labor and government to promote economic and community development.

Description The Overall Economic Development Program Committee is a quasi-public body, originally created by the Grays Harbor County Board of Commissioners in 1961. The Committee was given responsibility for economic development planning for the county. The Committee is composed of representatives from local government bodies, industry, business, public services, educations, professions, transportation, utilities, tribes and minority groups. The Committee receives administrative support from the Grays Harbor Regional Planning Commission. They periodically prepare new editions of the Program plan, as well as annual progress reports, which is a statutory requirement before financial assistance for any industrial project can be granted from the Economic Development Administration. Diversification, infrastructure improvements, resource development and management, and environmental protection remain the priority goals of the Program. However, improvement in higher education and training opportunities to enhance the regional human infrastructure is gaining additional attention.

Status Ongoing

Lead Agency Grays Harbor Regional Planning Commission

Cooperating Agencies Local government entities, industry, business, public services, educations, professions, transportation, utilities, tribes, and minorities.

Contact Bill Banks, Executive Director, Grays Harbor Regional Planning Commission, 2109 Sumner Avenue, Suite 202, Aberdeen, WA 98520, (206) 532-8812

Local Gov't

Organization	Dungeness Watershed Management Committee
Department	Clallam County Department of Community Development
Unit	Water Quality Office
Plan	Dungeness River Area Watershed Management Plan
Purpose	Prevent and correct nonpoint source water pollution of Dungeness River.
Objectives	To develop a community stewardship ethic; to maintain and improve water quality in the Dungeness River area watershed to support all beneficial uses; to improve knowledge and understanding of watershed processes; to encourage interagency cooperation, coordination, and management among different levels of government - tribal, federal, state, and local - to protect water quality; to fully implement the actions and intent of the watershed management plan to achieve its goals and objectives.
Description	In 1988, the Dungeness River Area Watershed was ranked highest in priority in Clallam County for preventing and correcting nonpoint source pollution. Using funds provided by the Washington Department of Ecology's Centennial Clean Water Fund, the county convened a Watershed Management Committee to develop a watershed management plan. The plan was developed by a citizen's committee from 1990-1993, under the direction of the Clallam County Department of Community Development, Water Quality program. The committee included landowners, teachers, real estate professionals, farmers, tribal and agency representatives, and others. The Plan was adopted by the Board of Clallam County Commissioners in November 1993. It received approval from the Department of Ecology in January, 1994. Clallam County has been designated lead agency for implementation. The overall strategy is to focus on widespread community education to develop an individual and collective stewardship ethic. Incentive programs will be used to correct and prevent pollution problems and to enhance water quality. In addition, high-visibility, high-impact projects of short duration will be conducted at first, while the Committee establishes long-term projects and programs to meet water quality goals. Source control strategies will focus on four primary pollutants: bacteria, chemicals, nutrients and sediment. Five source control programs would address agriculture, forestry, on-site sewage disposal, stormwater and groundwater protection.
Status	Ongoing
Lead Agency	Clallam County Department of Community Development
Cooperating Agencies	Numerous local, state, federal, and tribal agencies, agricultural and real estate associations.
Contact	Leanne Jenkins, Water Quality Planner, Clallam County Department of Community Development, Water Quality Program, Clallam County Courthouse, 223 East Fourth Street, Port Angeles, WA 98362-3098, (206) 417-2000.
Funding Sources	WA Department of Ecology's Centennial Clean Water Funds (for planning).

Community

Organization Chehalis Basin Fisheries Task Force

Program Chehalis Fisheries Restoration Program

Purpose Fisheries restoration.

Objectives To provide central coordination and support services for fisheries enhancement efforts in the Chehalis River Basin.

Description The Chehalis Basin Fisheries Task Force was established in 1980 by the Port of Grays Harbor to bring together diverse interest groups which shared a common goal of enhancing and protecting the area's fisheries resources. Membership includes recreational, tribal, and commercial fishermen; concerned citizens; businesses; environmental organizations; economic development interests; organized labor; local governments; tribes; and management agencies. The Task Force takes a balanced approached to fisheries restoration that includes: basin-wide habitat restoration and protection efforts focused on increasing fish production, native and wild stock restoration, cost-effective and efficient hatchery programs, and community involvement and education that is focused on the grassroots citizenry. The Task Force sponsors, coordinates, and/or assists in salmon enhancement efforts which release approximately 1.3 million fry and 3.5 million smolts annually. In order to address fisheries restoration in a comprehensive manner, the Task Force and associated partners sought federal assistance to conduct a comprehensive habitat assessment of the entire Chehalis River Basin, to develop a comprehensive habitat restoration plan, and conduct basin-wide restoration activities. The USFWS completed an initial assessment under the Chehalis Fisheries Resource Restoration Act of 1990. Their recommendations included: stream bank stabilization, riparian zone restoration, stream bank fencing, artificial spawning channels, mainstem rearing habitat, off-channel development, obstruction removal, and culvert improvements. Restoration work is being conducted by displaced timber workers and other local residents affected by the area's economic decline. The Washington State Legislature created 12 regional volunteer Fisheries Enhancement Groups across the state in 1990, modeled after the Chehalis Basin Fisheries Task Force. The Task Force is particularly interested in restoration efforts that will simultaneously help improve the resource, benefit the environment, and strengthen the local economy. It initiated and co-sponsored the Pacific Coast Economic Recovery Program, which outlined a plan to improve the economy of the region by building a tourism and nature-oriented recreational infrastructure through salmon and shellfish restoration and enhancement.

Status Ongoing

Lead Agency Chehalis Basin Fisheries Task Force

Cooperating Agencies Conservation districts, Quinault Indian Nation, the Chehalis Tribe, counties, cities, industry, salmon restoration groups, environmental groups, USFWS. WDFW, GHCC, Long Live the Kings, Trout Unlimited.

Contact Diane Ellison, President, Chehalis basin Fisheries Task Force, 2109 Sumner Avenue, Suite 202, Aberdeen, WA 98520, (206) 533-1766.

Funding Sources Grants from USFWS, State of Washington, memberships, donations, contracts.

Community

Organization Columbia-Pacific Resource Conservation and Development

Program Columbia-Pacific Resource Conservation and Development Program

Purpose Resource conservation and development.

Objectives To develop, improve and conserve natural resources and to provide employment and other economic opportunities for the people in Grays Harbor, Pacific, and Wahkiakum Counties.

Description Columbia-Pacific Resource Conservation and Development (RC&D) is a non-profit corporation that was formed in 1972 to enhance the social, economic and environmental conditions in rural Grays Harbor, Pacific and Wahkaikum Counties. Its motto is "making things happen." The RC&D functions by securing technical assistance and funding for community-based, volunteer projects designed to meet locally-identified needs. The RC&D program is governed by a local Council consisting of representatives from its member organizations, which include counties, cities, ports, tribes, conservation districts, economic development councils and non-profit organizations. The principle objective of the Columbia-Pacific RC&D is "the wise use and economic development of our natural resource-based industries." This encompasses forestry, agriculture, fisheries, wildlife, aquaculture and tourism. RC&D projects have included: repairing harbor facilities, constructing overwintering ponds for salmon, installing water supply systems, fishery enhancement projects, market feasibility studies, natural resource education, business loans and forest product development. Congress authorized the establishment of Resource, Conservation, and Development (RC&D) areas under the Food and Agriculture Act of 1962. The USDA Soil Conservation Service supplies a portion of funding to RC&D Councils throughout the nation. Each council defines its own goals and objectives to meet local needs. Program areas emphasize land conservation, community development, water management and environmental concerns.

Status Ongoing

Lead Agency Columbia-Pacific RC&D Council

Cooperating Agencies Soil Conservation Service; Grays Harbor, Pacific, and Wahkaikum Counties, local cities, tribes, ports, industry, conservation districts, economic development councils, non-profit organizations.

Contact James Walls, Executive Director, Columbia-Pacific RC&D, 303 South "I", Suite 102, Aberdeen, WA 98520, (206) 533-4648.

Funding Sources 80% from membership dues and grants; 20% from Soil Conservation Service.

Community

Organization Pacific Coast Economic Recovery Plan Task Force

Plan Pacific Coast Economic Recovery Action Plan

Purpose For the state to invest in new economic infrastructures for Washington's coastal communities, developing the area for tourism and recreation as an alternative to creating welfare-dependent communities.

Objectives To create a world class commercial and recreational fishery, as well as tourism and natural recreational programs for the economic benefit of residents and the enjoyment of all the state's citizens and visitors; to provide jobs, employment training and social services to raise the standard of living and social conditions of coastal residents; to create a decision-making organization; to secure adequate funding to accomplish the program; and to raise the per capita retail sales and property valuations for Pacific & Grays Harbor Counties to the statewide average within ten years.

Description The economic vitality of Washington coastal communities in Pacific and Grays Harbor Counties have been severely impacted by declines in the timber industry, declines in the allowable salmon catch, and disease and other problems in the commercial and recreational shellfish harvests. The area has a narrow economic base, dependent primarily on timber and timber products, and commercial and recreational fishing. Tourism and outdoor recreation are largely undeveloped. Washington State citizens have a choice to make about the economic future of the coastal communities. If the current economic depravation continues, high taxpayer costs for welfare programs, as well as social costs for the residents, will ensue. The other choice is for taxpayers to invest in new economic infrastructure for the coastal communities. The investment program is being called the Pacific Coast Economic Recovery Action Plan. Under the plan, both wild and hatchery salmon and steelhead populations would be restored and enhanced, along with commercial and recreational shellfish. The goal is for the Washington coast to become a world class tourism destination area, and in the process, provide family wage jobs and increase tax revenues for the state. Elements of the plan include wild salmon stock revitalization and enhancement; riparian habitat restoration; modification of wild stock management policies; use of hatcheries to create selective fisheries; construction of new salmon production facilities; implementation of a private, non-profit hatchery program; modification of US/Canada Salmon Treaty provisions so that production increases due to enhancement accrue to Washington; shellfish enhancement, including creation of a recreational fishery for oysters and hardshell clams; establishment of a razor clam hatchery; establishment of a Coastal Resource Center in Pacific County; development of an expanded coastal tourism program; implementation of Highway 101 tourism infrastructure developments; establishment of a coastal ecotourism program for watchable wildlife; cooperation in the development of a tourism program for the Quinault Indian Nation; expansion of coastal educational opportunities; establishment of a coastal environmental education program; streamlining administration of social service programs; provision of habitat restoration jobs at family wages; provision of relocation grants for displaced timber workers; and establishment of a one-stop retraining center.

Status Proposed

Lead Agency Columbia-Pacific Resource Conservation and Development

Cooperating Agencies Chehalis Basin Fishery Task Force, GHCC, USFWS, Pacific Mountain Private Industry Council, Quinault Indian Nation, Long Live the Kings, County Commissioners, Port of Grays Harbor and others.

Contact Jim Walls, Director, Columbia-Pacific RC&D, 303 South "I", Aberdeen, WA 98520, (206) 533-4648

Funding Amount Proposed capital budget for 1993-95: $23.2 million; operating budget of $60.0 million.

Community

Organization Wild Olympic Salmon

Purpose Help preserve wild salmon.

Description Wild Olympic Salmon is a non-profit, community based organization dedicated to helping preserve wild salmon. Their principal activities include habitat restoration projects, bi-annual salmon celebration festival, community education about the watershed restoration needs for people and salmon, and sale of local arts and crafts to support restoration projects.

Status Ongoing

Contact Wild Olympic Salmon, P.O. Box 585, Chimacum, WA 98325, (206) 385-9329.

Funding Sources Membership fees, sale of local arts and crafts.

Community

Organization Willapa Alliance

Program Willapa Alliance

Purpose Sustainable development.

Objectives To enhance the diversity, productivity and health of Willapa's unique environment; to promote sustainable economic development; and to expand the choices available to the people who live there.

Description The Willapa Alliance was founded in 1992 with primary financial support from two conservation organization: Ecotrust and The Nature Conservancy. It is an independent, non-profit organization dedicated to developing and implementing strategies for sustainable, conservation-based economic development in the Willapa ecosystem. The Alliance is composed of local residents, landowners and the Shoalwater Bay Indian Tribe. The Alliance was created to promote research and understanding of the ecosystem, to support education in the community, to foster communication among its residents and with its visitors, and to encourage local enterprises that conserve and enhance its lands and waters. Current projects include developing Willapa Indicators for a Sustainable Community and a GIS atlas of the Willapa Bay area.

Status Ongoing

Lead Agency Willapa Alliance

Cooperating Agencies Ecotrust, The Nature Conservancy, Washington Department of Fish and Wildlife, Weyerhauser.

Contact Dan'l Markham, Executive Director, P.O. Box 278, South Bend, WA 98586, (206) 875-5195

Funding Sources Ecotrust, The Nature Conservancy, trusts, and foundations.

College/University

Organization Grays Harbor College

Project Lake Swano Model Watershed Project

Purpose Watershed education.

Objectives To educate kindergarten through college students, local citizens, tourists, and local and state officials about the importance of watersheds for clean water and fisheries enhancement in southwest Washington. To develop a small but comprehensive watershed learning model; to restore the Lake Swano/Alder Creek watershed by repairing erosion and storm runoff problems which threaten water quality for the College's aquaculture center; to develop an interpretive nature trail around the lake; and to develop K-12 and adult integrated watershed curricula.

Description Grays Harbor College will construct 1.5 miles of interpretive nature trail within the Lake Swano watershed. Habitats and conditions around the lake range from pristine to highly impacted. Interpretive signs will describe relationships, features and operational principles of a watershed. These narratives will describe the effects of soil erosion and runoff; the beneficial role of native plants and other vegetation; the cumulative adverse effects of logging and other disturbances; and the need for enhancing fish and wildlife habitat. Collectively, the message provided will educate people about the concept of a "watershed" and its relationship to water quality. The Lake Swano Model Watershed Project - with its fully developed interpretive nature trail, stream enhancement area, environmental learning center and Native American cultural center - will be a valuable year-round asset along the highway 101 corridor. Its educational value is augmented by the fact that it is located close to the major tourist route from Aberdeen to Westport, providing an enhanced opportunity for increasing public awareness of, and appreciation for, the importance of watershed protection. The model watershed project is planned in three separate but integrated phases, which will require additional funding. Partial funding has been obtained for Phase I.

Status Incomplete

Lead Agency Grays Harbor Community College

Contact Don Samuelson, Project Supervisor, Grays Harbor College, Edward P. Smith Drive, Grays Harbor College, Aberdeen, WA 98520, (206) 532-9020

Funding Sources WDOE's Centennial Clean Water Fund

Funding Amount FY 92-93: $250,000

College/University

Organization Peninsula College

Unit Arthur D. Fiero Marine Laboratory

Program Fiero Marine Lab

Purpose Marine science education.

Description The Fiero Marine Lab is a small teaching laboratory operated by Peninsula College. It is located on the Port Angeles waterfront on the City Pier, one block from the ferry terminal serving Victoria, Canada. The lab contains an extensive collection of marine animals and plants native to the Port Angeles area. Exhibits include a large "touch tank", wet tables, and numerous small aquaria. The lab also operates a small gift shop. The lab is used for marine-related classes for the Peninsula College Fisheries Technology Program, for teaching the marine science program for the Port Angeles School District, and for senior citizen classes offered through Peninsula College's Continuing Education Department. Group tours are also available by appointment. In addition, during the summer, the lab serves as a tourist and information facility with approximately 21,000 visitors during the four month summer period. Two summer naturalists are hired through funding by the City of Port Angeles from the Hotel/Motel Tax. Friends of the Lab, a non-profit organization, raises funds to support the lab and provides trained docents for tour guides. The lab is open to the public every day from mid-June through Labor Day and week-ends during the rest of the year.

Status Ongoing

Contact Terry LaDuron, Lab Director, Peninsula College, Fiero Marine Lab, 1502 E. Lauridsen Blvd., Port Angeles, WA 98362, (206) 452-9277

Funding Sources Admission Fees: $1 for adults, $.50 for under 12 and senior citizens; memberships in Friends of the Lab; donations; gift shop; Peninsula College.

College/University

Organization University of Washington

Unit Washington Cooperative Fish & Wildlife Research Unit

Project Washington State Gap Analysis Project (WAGAP)

Purpose Protection of biodiversity.

Objectives To identify and protect geographic areas and habitats that are critical to individual species or groups of species before their existence is threatened and to provide land managers with information on a local, state, and regional scale that can be used in land use planning to better manage natural resources and avoid/minimize conflicts between land managers and resource users.

Description The Washington State Gap Analysis Project (WAGAP) was initiated in 1991, with primary funding provided by the USFWS through the Cooperative Fish and Wildlife Research Unit at the University of Washington. Gap Analysis is a proactive approach to preserving biodiversity that focuses on maintaining viable populations of native species in their native habitats. The analysis involves the use of satellite imagery to create a current vegetation map of the state, on which the distribution of amphibians, reptiles, birds and mammals are overlaid, as well as land ownership. Areas that are important to individual species or groups of species, or are of high biological diversity can then be identified and the degree of necessary protection assessed. Gaps refer to those areas identified as being important to maintaining biodiversity, but which are not protected through land ownership or management. This type of analysis provides land managers with important information to improve land use planning and management of natural resources, while minimizing conflicts with resource users. The initial analysis is scheduled for completion in September, 1994. The implementation phase, involving the development of management plans to protect biodiversity, will begin in the fall of 1994. Plans are underway to initiate a comparable gap analysis for fish in the state (WAFISHGAP).

Status Incomplete

Lead Agency University of Washington, Cooperative Fish and Wildlife Research Unit

Cooperating Agencies WDFW, WDNR, ONRC, WSU, USFWS, CSS and many other who have shared data.

Contact Karen Dvornich, Gap Analysis Project, Cooperative Fish and Wildlife Research Unit, 220 Fisheries Center, University of Washington, Seattle, WA 98105, (206) 543-6475

Funding Sources USFWS, WDFW, WDNR, ONRC

College/University

Organization	University of Washington
Unit	School of Fisheries
Program	Big Beef Creek field station
Purpose	Research and education.
Objectives	Provide opportunities for teaching and research in fisheries and other fields.
Description	The Big Beef Creek site is located on the east side of Hood Canal and comprises 400 acres. The facility is a rich resource that includes rain forest, fresh water streams, bogs and swamps, an estuary, a salt marsh, and tide flats. Big Beef Creek is an indicator stream for Coho salmon in Hood Canal. The creek is in excellent condition and flows through a deep canyon with forest typical of western Washington. A series of beaver dams has created about 20 acres of swamp and alder forest that add to the diversity of freshwater wetlands. Emerging from the swamp, the creek flows over a weir and into a small estuary with mud flats, grassy meadows, and a small salt marsh. The estuary drains into Hood Canal. The UW also owns about 40 acres of tidelands at the mouth of the creek which are rich in invertebrates. Three species of salmon spawn in the stream. Teaching and research activities have focused on natural history, artificial rearing studies, and whole-life-history studies of organisms that alternate between fresh and salt water. Emphasis is on behavioral and ecological studies and the effects of increased urbanization in the Puget Sound basin. Studies on artificial propagation are expected to enhance fish stock production and help develop culture techniques for endangered and threatened fish species.
Status	Ongoing
Lead Agency	School of Fisheries
Cooperating Agencies	NMFS, USFWS, WDFW, Hood Canal Fisheries Enhancement Group.
Contact	Richard Kocan or Gary Farris, School of Fisheries, WH-10, University of Washington, Seattle, WA 98195, (206) 543-4270
Funding Sources	Research grants and contracts, UW general operating funds.

College/University

Organization	University of Washington
Unit	Center for Streamside Studies
Program	Center for Streamside Studies
Purpose	Research and education on streamside systems.
Objectives	To integrate the disciplines of forestry, fisheries, hydrology, geology, sociology and economics to enhance the understanding of the structure and dynamics of streamside systems and to provide the necessary information for resolving management issues related to the production and protection of forest, fish, wildlife and water resources associated with the streams and rivers in the Pacific Northwest.
Description	As a result of the escalating controversy over the management of forest, fish, wildlife and water resources in the Pacific Northwest, the Center for Streamside Studies was created in 1987 as a unique partnership of state and federal agencies, Native American tribes, the forest products industry, environmental organizations, and the University of Washington's Colleges of Forest Resources and Ocean and Fishery Sciences. The mission of the Center is to provide information for resolving management issues related to the production and protection of forest, fish, wildlife and water resources associated with the streams and rivers in the Pacific Northwest and to develop innovative approaches to stream and riparian management. The Center operates from the premise that the riparian forest is the key area regulating ecological health in the watershed. An interdisciplinary approach to understanding the complexity of the structure and dynamics of stream and river ecosystems is used, integrating forestry, fisheries, hydrology, geology, sociology and economics. The Center provides a forum for discussing environmental issues, conducting cooperative research, and offering educational opportunities in stream and riparian management for university students and professionals. Research is solution-oriented, with the goal of developing predictive models and resource management guides that will provide a foundation for resolving resource management conflicts through research and education.
Status	Ongoing
Lead Agency	College of Forest Resources and College of Ocean and Fishery Sciences
Cooperating Agencies	USFS's Pacific Northwest Research Station's Aquatic/Land Interaction Program, the Center for International Trade in Forest Products, the Olympic Natural Resources Center, the UW Fisheries Research Institute, the Long Term Ecological Research Network, and the Consortium on the Social Values of Natural Resources, timber industry, tribes, WDFW, WDNR.
Contact	Robert Naiman, Director, Center for Streamside Studies, AR-10, University of Washington, 98195, (206) 543-6920
Funding Sources	Federal, state, industry, grants.
Funding Amount	1992: $1.6 million

College/University

Organization	University of Washington
Department	Zoology
Unit	Friday Harbor Laboratories
Program	Friday Harbor Laboratories
Purpose	Research and instruction in marine biology and oceanography
Objectives	Provide direct access to diverse intertidal areas and to salt waters that are relatively free from pollution for research and instruction.
Description	The Friday Harbor Laboratories provide facilities for research and instruction on many aspects of marine biology and oceanography. The UW owns 1,727 acres and leases 129 acres, involving several sites throughout the San Juan Islands. Representatives of nearly all major groups of marine algae and invertebrates are found in the intertidal zone and in adjacent waters, with depths down to 1,000 feet. A tidal range of 12 feet exposes diverse intertidal areas of rock, sand and mud. Research facilities are located on a 484-acre site on the east side of San Juan Island, north of Friday Harbor. The facilities total 78,586 square feet in 61 buildings. Extensive laboratories for marine biology are provided. A large dock provides moorage, storage and diving facilities. Lecture halls can accommodate audiences of up to 75 persons. The library contains 15,000 volumes. A 42-foot boat and other equipment are available for specimen collection. Low-cost housing of various types is available. Primary use occurs between April and Labor Day.
Status	Ongoing
Lead Agency	Department of Zoology
Contact	Dennis Willows, Director, Friday Harbor Laboratories, NJ-22, 620 University Road, Friday Harbor, WA 98250, (206) 378-4775
Funding Sources	UW general operating funds and research grants/contracts.

College/University

Organization	University of Washington
Unit	Olympic Natural Resources Center
Program	Olympic Natural Resources Center
Purpose	Natural resource research and education.
Objectives	To conduct research and education in natural resource management practices that integrate the generation of economic benefits with the maintenance and enhancement of ecological values.
Description	The Center is in the process of constructing facilities, to be completed in 1994-95, in Forks, located on the west side of the Olympic Peninsula. The Center will focus on research and education related to forest and marine resources of the peninsula. Much of the Center's work will be conducted cooperatively with other research institutions, state and federal agencies, resource owners, and interest groups. Biological, physical and social scientists will cooperate on projects ranging from basic scientific research to public policy assessment. The location of the Center is directly adjacent to the 264,000-acre Olympic Experimental State Forest operated by the Department of Natural Resources. The facility will consist of approximately 20,000 square feet with labs, two conference rooms and dormitory-style housing for visiting researchers.
Status	Ongoing
Lead Agency	UW, College of Forest Resources and College of Ocean and Fishery Sciences
Cooperating Agencies	WDNR, USFS and private industry.
Contact	Paul Ringgold, Manager, Olympic Natural Resources Center, P.O. Box 1628, Forks, WA 98331, (206) 374-3220, (campus #: 5-9477)
Funding Sources	General operating funds, research grants/contracts
Funding Amount	1993-94 Biennium: $560,000 from the state for operations; 1993: $1.68 million all sources (except capital facilities), including $1.3 million from USDA Forest Service for research.

College/University

Organization	University of Washington
Unit	School of Oceanography
Division	Marine Operations
Program	*RV Clifford A. Barnes*
Purpose	Oceanographic and fisheries research in local waters
Objectives	To carry out various types of oceanographic and fishery research projects in local waters.
Description	The *RV Clifford A. Barnes* is a 65-ft. wooden research vessel that presently supports various types of oceanographic and fishery research projects in Puget Sound. Most voyages are one day in length, although voyages as long as six days occur. The vessel has overnight capacity for six scientists and carries a crew of two. Equipment includes a working deck, crane and small laboratory space. Scientists provide their own specific scientific equipment needed for research projects. Present usage is lower than the goal of 120 days/year minimum operation. The State sponsors 13 days/year for instruction. Non-UW use is encouraged. The vessel is owned by the National Science Foundation (NSF) and is leased to the UW. Day rate usage fee is negotiated between NSF and institutions.
Status	Ongoing
Lead Agency	UW, School of Oceanography
Contact	Robert Hinton, Manager, Marine Operations, School of Oceanography, WB-10, University of Washington, Seattle, WA 98195, (206) 543-5062
Funding Sources	Research grants and contracts, UW general operating funds, self-sustaining revenue.

College/University

Organization University of Washington

Unit *RV Thomas G. Thompson*

Program *RV Thomas G. Thompson*

Purpose Oceanography research.

Objectives Multi-purpose research vessel with specialized facilities to support a variety of biological and physical oceanographic and atmospheric studies by investigators from institutions around the country.

Description The *RV Thomas G. Thompson* is a 274-foot state-of-the-art, ocean-going research vessel commissioned in 1991. The ship is intended for use in sponsored oceanographic research projects by scientists from throughout the country. It can accommodate 36 scientists during cruises which typically last 40-50 days, with a range of 12,000 miles and 60 days. The multi-purpose research vessel has specialized facilities for a variety of biological and physical oceanographic and atmospheric studies. The vessel is owned by the Office of Naval Research, part of a consortium involving 50 universities. The vessel is currently at sea 275-280 days/year (the maximum). Forty-five days/year are allocated for graduate and undergraduate instruction. Priority use is for consortium members, usually under the auspices of the National Science Foundation (NSF). Private use is possible but with a lower priority than sponsored university research. Rates are negotiated between NSF and institutions.

Status Ongoing

Lead Agency Office of Naval Research

Cooperating Agencies Consortium of 50 universities

Contact Robert Hinton, Manager, Marine Operations, School of Oceanography, WB-10, University of Washington, Seattle, WA 98195, (206) 543-5062

Funding Sources Research grants and general operating funds

College/University

Organization	University of Washington
Unit	Washington Cooperative Fish and Wildlife Research Unit
Program	Washington Cooperative Fish and Wildlife Research Unit
Purpose	Fish and wildlife research.
Objectives	To conduct or support research that addresses the needs of management agencies in the Department of Interior and the State of Washington; to actively participate in the training of graduate students in fisheries and wildlife science by supporting graduate student research and by teaching; to disseminate research results to the scientific community, management agencies, and the general public; and to gain national and international recognition for specific areas of technical expertise and research accomplishments.
Description	The Washington Cooperative Fish and Wildlife Research Unit is one of 44 comparable units within the United States established to facilitate cooperative efforts between the federal government, colleges and universities, states, and private organizations to improve the management of the nation's fish and wildlife resources. The Cooperative Fish and Wildlife Unit conducts natural resource management research, provides educational opportunities for students in conducting research related to the natural resource management needs of federal and state agencies, and disseminates research findings to individuals and agencies. The Unit's fisheries research program focuses on the management of aquatic habitats for shellfish and warm and cold-water fish, including anadromous salmonids. Research focuses on the requirements of individual species, the effects of habitat alteration on individuals, populations and communities, and fish/wildlife interactions. Expertise of Unit staff includes freshwater, estuarine, and near coastal marine habitats. The Unit's wildlife research also includes habitat requirements. Staff have expertise in both terrestrial and aquatic wildlife within crop and forest lands, and wildlife within near-coastal communities. Marine mammology and wildlife toxicology are major interests of the wildlife staff.
Status	Ongoing
Lead Agency	94-95 WDOE; 96-97 WDNR
Cooperating Agencies	NBS, USFWS, NMFS, NPS, UW, WDOE, WDFW, WDNR
Contact	Christian Grue, Unit Leader, Washington Cooperative Fish and Wildlife Unit, 220 Fisheries Center, WH-10, University of Washington, Seattle, WA 98195, (206) 543-6475
Funding Sources	USFWS (primary funding), WDFW, WDOE, WDNR, UW
Funding Amount	1993 Total Operating Dollars: $496,000

College/University

Organization	University of Washington
Unit	School of Fisheries
Program	Westport House
Purpose	Housing for faculty and student researchers.
Objectives	To accommodate faculty and student researchers working on projects in the coastal region of southwest Washington.
Description	This house was purchased to accommodate UW faculty and student researchers working on projects in the coastal region of southwest Washington. It is ideally located for access to Grays Harbor tidelands and wetlands, the John's River State Wildlife Recreation Area, Bowerman Basin National Wildlife Refuge, Bottle Beach, Westlands and Twin Harbors State Park, Willapa Bay, and Ocean Shores regions. The three-bedroom, fully furnished house can accommodate 5-10 people. A detached garage serves as a lab facility. It is used extensively March through November to study crab biology in and around Westport.
Status	Ongoing
Lead Agency	School of Fisheries
Contact	Gary Farris, Administrator, School of Fisheries, WH-10, University of Washington, Seattle, WA 98195, (206) 543-4270
Funding Sources	Self-sustaining from rentals
Funding Amount	Usage fee is $1,275/month or $42.50/day.

College/University

Organization	Western Washington University/Huxley College
Division	Port Angeles Center
Program	Environmental Policy and Assessment Program
Purpose	Undergraduate B.S. degree program in Environmental Sciences offered through Western Washington University, with classes held at Peninsula College in Port Angeles.
Objectives	To give students understanding and skill in assessing the nature and magnitude of the economic, political and social changes associated with environmental problems.
Description	Beginning in the Fall of 1993, Western Washington University's Huxley College has initiated a B.S. degree program in Environmental Policy and Assessment with courses offered in Port Angeles at Peninsula College. Graduates will be qualified to work with land-use planning agencies, federal and state agencies, consulting firms and other organizations in the areas of environmental administration, policy formation and environmental regulation enforcement. Courses focus on U.S., state and international environmental policies and regulations; economics; social and environmental impact assessment; environmental design and risk assessment; and the philosophical and ethical issues raised by environmental constraint. Internships, special projects and field study will be included in the program. Clallam County residents who are certified by Employment Security as "timber dependent" are eligible for full tuition waivers.
Status	Ongoing
Lead Agency	Western Washington University, Huxley College
Cooperating Agencies	Peninsula Community College, Battelle Marine Sciences Laboratory
Contact	Dr. Walter Pearson, Program Director, The Environmental Science Program at Port Angeles, Western Washington University Port Angeles Center, 1502 E. Lauridsen Blvd., Port Angeles, WA 98362, 206-452-9277

Non-profit

Organization Battelle Pacific Northwest Laboratory

Program Marine Ecosystem Processes

Objectives Applied research in marine ecosystems.

Description The Marine Ecosystem Processes group concentrates its research on ecotoxicology of coastal resources and wetlands, through field sampling and analysis use of its state-of-the-art seawater laboratories. Projects on the Olympic Peninsula include: Monitoring Plan for Wetlands and Water Quality; Mitigation Plan for Wetlands; Spartina Ecology in Willapa Bay; Eelgrass Physiology and Transplanting; Sea Level Rise Effects on Coastal Marshes; Carbon Dioxide Enrichment of Coastal Plants; Neah Bay Marina Environmental Studies; *Tenyo Maru* Oil Spill Effects on Kelp; Eelgrass Surveys of Ediz Hook Coast Guard Station; Dungeness Crab Studies in Grays Harbor; and Eelgrass Transplanting in Grays Harbor.

Status Ongoing

Contact Ronald M. Thom, Battelle Marine Sciences Laboratory, 1529 W. Sequim Bay Rd., Sequim, WA 98382, (206) 681-3657

Funding Sources Jamestown S'Klallam Tribe, Washington Sea Grant

Funding Amount Jamestown S'Klallam Tribe - $15,000; Washington Sea Grant - $20,000

Industry

Organization Battelle Pacific Northwest Laboratory

Unit Marine Sciences Laboratory; Integrated Earth Studies

Program Olympic Peninsula Initiative: Sustainable Use of Natural Resources on the Olympic Peninsula

Purpose Sustainable development.

Objectives To demonstrate how the concept of sustainable development can be translated into a practical set of goals and activities; to integrate economic goals with the conservation or preservation of natural resources to best meet the needs of local communities; to develop approaches to economic development that avoid further resource deterioration and that sustain the use of natural resources and maintain or improve the quality of life, economic viability, and job opportunities on the Peninsula; to create a base of knowledge for decision making and a way for stakeholders to gain access to that information; to demonstrate how sustainable development can be brought from a theoretical concept to a practical set of goals and activities; to develop a stakeholder involvement process to facilitate communication among diverse groups and to encourage appropriate practices that foster sustainable natural, social, and economic systems on the Olympic Peninsula.

Description Battelle proposes to work with local, state and federal agencies and other interested individuals to gain a thorough understanding of the specific issues and problems related to natural resource use on the Olympic Peninsula. The project would demonstrate how sustainable use of natural resources could be achieved on the Olympic Peninsula through community action supported by natural, social and information science. By using this framework, decision makers and stakeholders would be able to integrate economic goals with the conservation or preservation of natural resources to best meet the needs of local communities. Stakeholders would participate in setting goals leading to the development of a consensus concerning the most pressing problems of the Peninsula. A fact-finding agenda would emerge from the initial problem definition and characterization of information gaps. An integrated agenda would likely involve research, outreach and educational activities focused on six types of issues: stakeholder involvement; characterization of natural and social systems; indicators of natural and social system health; prediction of consequences; transfer of appropriate practices and technologies; and regulatory and institutional analysis. The proposed products of this process include: creating a decision framework; developing computerized tools for accessing and interpreting data for use in decision making and planning; evaluating management options; setting and modifying goals for research, outreach and education; monitoring progress towards goals; obtaining information on markets, economic forces and social structures for use in education efforts; developing curricula for local academic institutions on leadership, conflict management and sustainable development. Potential participants would be enlisted from the Olympic Peninsula Research Coordinating Group, including: Olympic National Park, Bureau of Land Management, U.S. Forest Service, University of Washington, Washington Department of Natural Resources, Environmental Protection Agency, Olympic Peninsula Tribes, Port of Port Angeles, and others.

Status Future

Lead Agency Battelle's Pacific Northwest Laboratory

Cooperating Agencies Local, state, federal agencies; tribes; industry; academic institutions; stakeholder groups.

Contact Denise Lach, Battelle, Human Affairs Research Center, 400 NE 41st, Seattle, WA 98105, (206) 528-3319; Jeff Brandt, EPA Corvalis Lab, 200 SW 35th St., Corvalis, OR 97333, (503) 754-4328

Funding Sources Not yet identified.

Funding Amount Proposed budget for first year of project is $.5 million; costs for subsequent years are projected to be approximately $2 million or less.

Non-profit

Organization Clallam County Economic Development Council

Purpose Economic development.

Objectives To establish business assistance programs; to promote industrial retention and growth; to maintain a strong organizational infrastructure; to establish a relevant marketing plan for Clallam County;to function as a primary resource and referral organization for economic development information; and to solidify funding support.

Description The Clallam County Economic Development Council (CCEDC) is a private, non-profit corporation created to enhance and stabilize the economic environment of Clallam County. The Council encourages business and industrial investment to maintain and create jobs and expand the tax base. It serves as a central source of economic development information, and offers confidential financial packaging information. Its goals include: encouraging and supporting business retention, growth and development, and the creation of new businesses in Clallam County; encouraging a diverse and accessible education and training system that responds to workforce and community needs; promoting Clallam County as a good place to live and do business; facilitating communication and cooperative interaction between all public and private sector entities related to economic development issues; attracting new corporations and investors to Clallam County to expand and diversify its economic base.

Status Ongoing

Lead Agency Clallam County Economic Development Council

Cooperating Agencies A wide range of business, government, industry organizations are supporting members.

Contact Executive Director, Clallam County Economic Development Council, 102 E. Front, P.O. Box 1085, Port Angeles, WA 98362-0204, (206) 457-7793

Funding Sources Membership dues, grants, WDTED.

Non-profit

Organization Health to the Salmon!

Program Health to the Salmon!

Purpose A water quality-watershed protection and restoration campaign.

Objectives To build partnerships among corporate, government and nonprofit sectors; to fund watershed restoration projects and the publication and distribution of educational materials; to stimulate public awareness of the importance of watersheds; and to encourage individual involvement in watershed protection and restoration.

Description *Health to the Salmon!* is a nonprofit organization designed to complement current and future efforts in watershed protection and restoration in the Northwest. Through a partnership of corporations, government and nonprofit groups, *Health to the Salmon!* will work to bring human, financial and other resources of the region to bear on the urgent and long-term issue of watershed function. *Health to the Salmon!* is regional in scope, addressing upland and riparian area function, as well as the function of streams and the quality of fish habitat throughout the Pacific Northwest. Its services, including financial and administrative assistance and a volunteer workforce, are available to all landownerships. It will function outside the political aura of any particular agency, group or agenda. The ultimate goal of *Health to the Salmon!* is to develop public awareness and to help bring about positive change in individual behavior on the part of resource consumers, through environmental education, corporate marketing and advertising campaigns, and individual involvement.

Status Ongoing

Cooperating Agencies BLM, USFWS, USFS, NMFS, EPA, BPA, Pacific Rivers Council, Trout Unlimited, Pacific Fisheries Legislative Task Force, State of Oregon natural resource agencies.

Contact Craig Dent, Coordinator, or Ellen Lanier-Phelps, Health to the Salmon!, P.O. Box 2965, 1300 NE 44th Ave., Portland, OR 97208, (503) 335-6060

Funding Sources Bureau of Land Management, corporate donations

Non-profit

Organization Long Live the Kings

Purpose Restoration of wild salmon.

Objectives To restore wild salmon populations in specific Northwest rivers, to enhance their habitat, and to rebuild regional salmon economies.

Description Long Live the Kings, a private, non-profit corporation, was created in 1986 to provide opportunities for private citizens to get involved in salmon restoration activities. The impetus for its creation was the decision by the State of Washington and treaty tribes to work together as co-managers of Washington's salmon fisheries following the "Boldt Decision" (*United States v. Washington*) and the provision in the US/Canadian Pacific Salmon Treaty which allowed either nation to accrue additional allocation quotas through enhancement efforts. The organization represents sport, tribal and commercial fishermen; businesses; local communities; and individuals who want to get involved in restoring salmon. In the last eight years, Long Live the Kings has invested over $2.5 million in private funds donated by foundations, corporation and individuals in salmon restoration projects. The group emphasizes the use of low technology enhancement techniques, which can be duplicated by individuals, organizations and communities throughout the region. The strategy is to maintain wild fish gene pools through the use of protected ponds while degraded riparian habitat is restored over the next two decades. Another strategy is to create hatcheries and new runs of fish on private lands with good water sources. Additional fish could be produced without interfering with wild fish production. Through the establishment of new terminal fish sites, tribal and commercial fishing could continue, while wild stocks recover in rivers that have been managed primarily for hatchery harvest. Long Live the Kings also worked to achieve passage of the Regional Salmon Enhancement Group Act in 1991, which established a legal structure allowing private citizens to become involved in salmon enhancement.

Status Ongoing

Cooperating Agencies Tribes; federal and state agencies, foundations, corporations, private citizens; regional salmon enhancement groups.

Contact John Sayre, Executive Director, 19435 184th Place N.E., Woodinville, WA, (206) 788-6023

Funding Sources Foundations, corporations, individuals, contracts with state agencies and tribes.

Funding Amount $2.5 million during the last eight years.

Non-profit

Organization Northwest Renewable Resources Center

Purpose To help resolve natural resource disputes.

Description The Northwest Renewable Resources Center was founded in 1984 by leaders of industry, Indian tribes, and environmental organizations to create forums for cooperative problem-solving to resolve disputes over use and management of natural resources. It serves as a neutral third party to help resource managers and policy makers from corporations, tribes, government agencies, and environmental organizations negotiate the creation of mutually agreeable, lasting solutions to natural resource disputes. This approach provides an alternative to expensive and lengthy litigation, stalemates, and political face-offs in which often no side wins and the resources lose. The Center provides services that include conflict assessment, process design, mediation and facilitation, strategic planning, and training in dispute resolution and cross-cultural decision-making. The Center has served as a catalysts in helping representatives of diverse interests create effective solutions for a number of disputes. These have included: The *Timber/Fish/Wildlife Agreement* which developed a consensus-based approach to flexible, cooperative forest practice planning and regulation; the *Chelan Agreement* which developed a consensus-based, cooperative planning process to resolve water conflicts; *Tribes and Counties: Intergovernmental Cooperation and Indian Land Tenure and Economic Development* which is developing institutional linkages between federally recognized tribes and counties regarding land use planning/regulation, ground water protection, and solid waste management issues; and *Jefferson County Growth Management Public Input* which involved facilitating a series of meetings to solicit public input and involvement in the development of Jefferson County's Growth Management Plan.

Status Ongoing

Contact Amy Solomon, Executive Director, Northwest Renewable Resources Center, 1411 Fourth Avenue, Suite 1510, Seattle, WA 98101-2216, (206) 623-7361.

Funding Sources Fee-for-services, private contributions, foundations, and government grants.

Non-profit

Organization Olympic Park Institute

Purpose Environmental education.

Description Olympic Park Institute was established in 1987 as a private non-profit organization committed to promoting environmental literacy. It offers a variety of environmental education programs, including a Residential Field Science program for primary and secondary students, Elderhostel programs for seniors, and Field Seminar programs for adults and families involving weekend and week-long courses on a variety of natural and cultural topics. Programs use the Olympic National Park and the region's forests, mountains, marine and freshwater habitats as their classrooms. The Institute's facilities are also available for conference groups with an agenda related to environmental education or the resources of the Olympic Peninsula. The Institute operates from the Rosemary Inn adjacent to Lake Crescent under a cooperative agreement with Olympic National Park. The Olympic Park Institute is a campus of the Yosemite National Institutes, a nationally recognized environmental organization that has serves the community since 1971.

Status Ongoing

Contact Olympic Park Institute, HC 62, Box 9T, Port Angeles, WA 98362, (800) 775-3720.

Non-profit

Organization Olympic Peninsula Foundation

Purpose Promote a sustainable, environmentally sound economy.

Description The Olympic Peninsula Foundation is a non-profit organization established in 1992 to support the development of a profitable, sustainable, environmentally sensitive timber industry on the Olympic Peninsula. Their emphasis is on small woodlot owners, who can provide a reliable source of timber for high value-added, local, secondary wood products. The organization favors reversing the conversion of forest land to residential uses in order to sustain the Peninsula's ecosystem and to reduce local pressure to increase timber harvests on state and federal lands. In addition, the Olympic Peninsula Foundation offers strategic planning, research, entrepreneurial, and administrative support for local partnerships. Programs include: LEARNING OPPORTUNITIES FOR THINKING PEOPLE (LOFT) - an educational program for secondary school students that examines the future of small woodlot forestry in East Jefferson County; RESTORATION TRAINING PROGRAM - which will coordinate proposal development and grant administration for watershed restoration job training through the Washington State Jobs for the Environment program; OLYMPIC SMALL WOODLOT OWNERS COOPERATIVE NETWORK - a network of small landowners practicing ecologically sensitive forestry; DEMONSTRATION FOREST - a proving ground for small-scale alternative forestry.

Status Ongoing

Cooperating Agencies USFWS, USFS, Conservation Districts, Wild Olympic Salmon, Point No Point Treaty Council, North Olympic Salmon Coalition, Hood Canal Salmon Enhancement Group, Port Gamble S'Klallam Tribe, Port Townsend School District.

Contact Betsy Carlson, Executive Director, The Olympic Peninsula Foundation, 1200 West Sims Way, Suite 201, Port Townsend, WA 98368, (206) 379-9421

Funding Sources Foundations, grants, donations.

Private Non-profit

Organization Port Townsend Marine Science Center

Program Port Townsend Marine Science Center

Purpose Marine environmental education, preservation and research.

Objectives To promote and encourage a greater understanding of the marine sciences through education and research and to help preserve the local marine environment.

Description The Port Townsend Marine Science Center is dedicated to understanding and helping preserve the local marine environment. It is staffed by environmental educators, certified science instructors and trained volunteers. Situated at the end of a dock at Fort Warden State Park in Port Townsend, the Marine Science Center is bordered by rocky and sandy beaches near the juncture of the Straits of Juan de Fuca and Puget Sound. It offers tours of exhibits, interpretive programs, and classes for youths and adults, which are designed to explore marine and freshwater environments. A fully equipped classroom with projecting and dissecting microscopes can accommodate up to thirty people. A multi-purpose room is available as a meeting space for public presentations and workshops. The Marine Science Center has two boats for off-shore studies. Other activities include: week-end Coastal Zone Management beach walks, Port Townsend Bay water quality monitoring program involving citizens, annual Port Townsend Bay fish trawl abundance surveys, Port Townsend Bay habitat utilization surveys, cooperative pollock research project with Oregon State University's Hatfield Marine Science Center, Marine Science Summer Camps, contracts with schools for marine education services, docent training program, and special programs on request. The Marine Science Center works to develop a sense of respect for all life forms and an interest in their preservation. The Center networks with other organizations involved in marine science education with the goal of sharing resources and facilities.

Status Ongoing

Contact Anne Murphy, Co-Director, Port Townsend Marine Science Center, Fort Warden State Park, 200 Battery Way, Port Townsend, WA 98368, (206) 385-5582

Part II

An Analysis of

How to Promote Cooperative Management of the Olympic Coast National Marine Sanctuary

Introduction

At the recent dedication ceremony for the Olympic Coast National Marine Sanctuary, speaker after speaker emphasized the importance of fostering interagency cooperation, public involvement and partnerships to accomplish the goals of the sanctuary. The sanctuary's management plan also highlights the need for interagency cooperation and coordination. The plan gives high priority to the task of establishing liaisons with other agencies to ensure a cooperative management approach. The sanctuary is currently in the process of creating a Sanctuary Advisory Committee, which will serve as the formal mechanism for both public involvement and coordination with other organizations.

To build effective partnerships and enhance interagency cooperation, the sanctuary must convince others to work together toward common goals that are consistent with the sanctuary's mandate of resource protection and compatible use. The success of these efforts will depend significantly on two factors (1) structuring the interactions of the Sanctuary Advisory Committee (or any other institutional arrangements developed for implementing cooperative management) to facilitate collaborative problem solving; and (2) strengthening the collaborative interaction skills of the participants involved in the cooperative management process. The sanctuary can best address these considerations by developing its expertise in convening the parties affected by sanctuary issues and helping them to negotiate and carry out collaborative decisions.

Collaborative Problem Solving

Collaborative problem solving is a process of resolving disputes, reconciling interests and reaching agreement through cooperative, face-to-face interaction among the parties affected by an issue. With collaborative problem solving, decisions are reached through consensus. Consensus is a mutually acceptable agreement or decision reached by the affected interests through a negotiation process that reconciles and integrates the interests of all concerned parties. A consensus process depends on the good will of participants. All parties must be motivated to work together to reach a decision, even though they're aware that a consensus agreement may not necessarily satisfy all their interests equally. Although unanimous consent is usually the ideal goal of consensus decision-making, participants in a collaborative process can develop whatever operational definition of "consensus" they wish, as long as everyone agrees to the definition.

It's possible that not every participant will support the consensus agreement to the same degree. If a participant strongly disagrees with a proposed decision, however, that person has the responsibility to explain clearly why and how the interests he or she represents would be affected by the proposed decision. If a convincing case is made, the rest of the group has the obligation to make a collective effort to address the concerns that have been raised. Dissenting parties often are satisfied after having had the opportunity to voice their objections, if they feel that others have heard and acknowledged their concerns. If dissenting parties do not succeed in convincing the group of the merits of their objections and also feels that it's not possible to live with the group's decision, then the dissenting parties may choose to withdraw from the consensus process.

With consensus decision-making, parties participate as equals. Each participant has equal power to prevent an agreement that does not address the legitimate concerns of his or her group. This tends to encourage the involvement of important interest groups that might otherwise not participate for fear of being outvoted. With a consensus process, the focus is not on forging a majority coalition. Rather, participants are freer to develop innovative solutions that will meet everyone's interests.

Non-Collaborative Approaches

A collaborative process based on consensus decision-making differs significantly from processes that use other modes of decision-making. The legislative process, for example, based on majority rule, was used to force a reluctant administration and NOAA to designate the Olympic Coast National Marine Sanctuary. Legislation also was used to prohibit offshore oil and gas leasing in the sanctuary, after NOAA decided to maintain that option in the Draft Environmental Impact Statement/Management Plan. Legislative control over appropriations provided an opportunity to increase the proposed budget for the sanctuary through the exercise of political power. The legislative process of decision-making involves intense lobbying by interest groups that seek to exert political pressure on elected representatives to vote in a group's favor on a particular issue. The majority is accorded the right to impose its will over minority interests.

Another approach, consultative decision-making, was used by NOAA in developing the Management Plan for the sanctuary. NOAA followed the procedural requirements of the NEPA process by holding public hearings, requesting written comments and consulting with other agencies. The defining characteristic of this approach is that the lead agency maintains control of the decision-making process, incorporating any input received at its own discretion.

NOAA could have used the NEPA process as an opportunity to promote dialogue and more productive negotiation among the interested stakeholders potentially affected by the sanctuary. Using such an approach would have produced a much better foundation from which to build partnerships and promote cooperation than currently exists. The structure of the public hearings process as conducted by NOAA (and most agencies) encourages participants to assume polarized positions and engage in adversarial confrontations instead of providing a forum for facilitating collaborative negotiation to address the many legitimate concerns of stakeholders.

Authoritative decision-making was used by the Secretary of Interior, albeit after intensive lobbying efforts, to rescind the Navy's permit and resolve the controversy over the bombing of Sea Lion Rock. This approach relies on the exercise of political power to persuade a high government official to use his or her authority to make a decision that will resolve a conflict. Litigation by environmental groups provided additional pressure to resolve the situation through an authoritative decision by the Secretary. Had this not occurred, the judicial decision-making system ultimately would have been called upon to impose a legal resolution of the conflict.

These non-collaborative modes of decision-making are essential elements of the complex governance system we use to resolve conflicts and make public decisions. In a collaborative process they can be used as a fallback approach when attempts to reach consensus fail and a decision still needs to be made. However, if essential goals are to build partnerships and enhance cooperation, a collaborative problem-solving approach that uses a consensus-based decision-making process should be relied upon primarily.

Advantages of a Collaborative Approach

There are many potential benefits of using a collaborative problem-solving approach for the management of the Olympic Coast National Marine Sanctuary. Involving stakeholders in the process of identifying issues, analyzing problems and finding solutions leads to greater support and commitment for the decisions that are reached, even if NOAA retains the ultimate authority for making the decision. When a decision is made collaboratively it has more credibility with the parties involved. Furthermore, stakeholders will also be more willing to modify a decision in the future in response to new information or changing conditions, because they are familiar with the assumptions upon which the original decision was based. By contrast, when stakeholders aren't provided a meaningful opportunity to participate in a decision-making process, they often resist an externally imposed solution, whether good or bad.

Involving stakeholders in collaborative problem solving helps bring local knowledge and expertise into the decision-making process. This is particularly valuable when little scientific information is available or when social and economic impacts are a significant concern. Involving stakeholders brings more creativity to bear on solving a problem, resulting in a broader range of potential solutions.

By participating in collaborative problem solving, affected parties gain a better understanding of the options available to resource managers and the implications of the choices that are made. By considering how they might be affected by a decision, stakeholders learn more about their own interests. Negotiations can then become more focused on meeting these real interests. By hearing the points of view of others, all parties develop a more complete understanding of an issue. Stakeholders also gain a greater appreciation of the dilemmas that resource managers face in trying to predict and then interpret the outcome of management actions.

The polarization, bitterness, hostility and desire for retaliation that often accompany decisions made by the courts, legislation or higher authorities can be avoided through the use of a collaborative approach. The hardening of positions is also avoided. Compromise becomes more feasible. Instead of focusing on winning or losing on an issue, affected interests work together to develop "win-win" solutions. Conflicts have a better chance of being conclusively resolved with a collaboratively reached solution. Because the parties are more committed to the decision, it is less likely to be appealed, protested or undermined.

Most important, a collaborative problem-solving approach helps build partnerships and promote cooperation. Previously opposing interests work together to develop solutions to commonly defined problems. This process helps create the necessary incentives and institutional arrangements to ensure that the solutions are implemented. New networks of information exchange emerge, bringing about improved communication. Positive personal relations develop, and valuable experience is gained in how to make decisions collaboratively. These benefits can establish a strong foundation for cooperation and provide the motivation to work together in resolving other conflicts that arise in the future.

Disadvantages of a Collaborative Approach

Using a collaborative approach to decision-making and problem solving is certainly no panacea that can solve all natural resource disputes. Often the appropriate conditions do not exist for a successful collaborative process. Parties may not perceive an urgent need to resolve a given issue if they don't see how it may affect them. Some issues are so strongly values-based that compromise and accommodation are impossible. There will continue to be the need for authoritative and consultative decision-making as well as the use of political power to resolve difficult issues.

It is commonly presumed that collaborative processes are time-consuming and costly to undertake. These perceptions, however, are often short-sighted. For agencies under political pressure to take action quickly to solve a problem, the collaborative process can be quite frustrating. In such a situation, an agency may prefer to consult informally with representatives of key constituent groups and then make an authoritative decision unilaterally. This approach is certainly quicker and more efficient than using collaboration, and it may be appropriate for the many routine decisions that agencies must make. It should be recognized, however, that using a consultative decision-making approach will not build partnerships or promote cooperation. Furthermore, stakeholder resistance, engendered by resentment over the lack of opportunity for participation, can seriously undermine the implementation of an agency's decision.

Although the short-term costs of using a collaborative approach may initially appear to be significant, the long-term costs may be much lower than those associated with non-collaborative decisions. For example, using a collaborative approach can greatly reduce the likelihood of costly litigation and prolonged deadlock.

Prerequisites for Collaborative Problem Solving

The most important prerequisite for collaborative problem-solving is that the full range of key agencies, interests and stakeholders be motivated to participate in the process. They must be sufficiently dissatisfied with the way decisions affecting them are being made that they're willing to commit to a consensus-building process. There must be a feeling that "we're all in this together, so we need to come up with workable solutions that will keep us on neighborly terms." The prospect of working together to achieve mutually compatible agreements must seem more attractive than trying to force one group's will on others. If a stakeholder group feels that it can lobby higher officials or use political power to obtain a better deal, it won't be fully committed to collaboration and could undermine the process. This situation could arise with environmental interest groups since they have become accustomed to using political power to address their concerns about the sanctuary.

In order to be effective, elected officials, administrative officials of federal and state agencies, public and private leaders, and especially NOAA must support the use of a collaborative approach to cooperative management for the sanctuary. In addition to rhetorical support of cooperation and partnerships, they must be willing to provide adequate resources including time, staff support and funding to conduct a meaningful and effective collaborative process. If this support is not provided, or if the results of a collaborative problem-solving process are overturned or ignored, the process will be undermined. The participants will become disheartened and likely will withdraw from further involvement.

The sanctuary must succeed in overcoming the reluctance and suspicion generated by the EIS process on the part of stakeholders who perceive NOAA as overly bureaucratic, unresponsive to their concerns, unwilling to share power and authoritarian in its approach to decision-making. To change this impression sanctuary personnel must engage in open communication with reluctant potential partners. It may be helpful to acknowledge past mistakes on the part of NOAA and admit to ignorance of the political cultures of state and local agencies, tribes and organizations. A dose of humility is also effective in eliciting cooperation. It's important that the sanctuary show a genuine interest in learning about and responding to stakeholders' concerns. Sanctuary staff must consistently display a cooperative attitude.

Tools for Collaborative Problem Solving

Negotiation, consultation, facilitation and mediation are the principal tools for collaborative problem solving. Negotiation is a process in which two or more parties voluntarily come together to learn about each other's needs and interests. They do so to reconcile their differences on a particular issue in a manner that is acceptable to all. The outcome of negotiation may be an agreement or a decision that is reached through collaboration. While negotiation can be used to resolve existing conflicts, it also can be used to structure comprehensive management or planning processes so conflicts are raised and resolved in their early stages. Although negotiation is involved in virtually all public decision-making processes, it is rarely conducted explicitly with mutually determined ground rules.

Consultation includes a variety of "public involvement" activities such as public hearings, requests for written comments, scoping meetings, workshops and public forums. Consultation also includes referral processes that involve permit concurrence or review of proposed decisions by other agencies that may share jurisdiction or have a particular interest in the outcome. Although these processes provide opportunities for public and agency input, the decision-making agency retains control of the process and determines the degree to which any input is incorporated into its final decision.

Facilitation involves the use of a neutral third party with special skills in promoting effective information exchange, negotiations and collaborative decision-making. The facilitator should be acceptable to all participants

and mutually respected for his or her fairness and impartiality. The facilitator has no decision-making authority but may propose solutions that accommodate all the participating interests. A facilitator focuses on the task of managing the group process to promote negotiation that will lead to consensus decisions and the resolution of conflicts. Facilitators can be used in a variety of situations including meetings, forums, workshops and symposiums. The use of a skilled facilitator can be especially helpful in promoting dialogue whenever stakeholders with diverse interests and backgrounds are involved. An effective facilitator can be a determining factor in the success of a collaborative process.

Mediation is an extension of facilitation in which a neutral third party meets privately and confidentially with the disputants to explore opportunities and obstacles to a negotiated settlement. Mediators usually convene the disputing parties and help them define the terms and conditions of the negotiation process. The mediator facilitates face-to-face meeting of the disputants, but also may shuttle back and forth clarifying the needs, interests, concerns and suggestions of one party to another. Often the mediator also serves as a coach and instructor to the parties, helping them learn how to communicate and negotiate more productively.

Characteristics of a Successful Collaborative Process

The people of Washington state have been leaders in advancing the use of collaborative approaches to resolve environmental disputes. Prominent examples include the Commission on Old Growth Alternatives for Washington's Forest Trust Lands; the Timber, Fish, and Wildlife Agreement; the Chelan Agreement; the Dungeness River Area Watershed Management Plan; and the Dungeness-Quilcene Water Resource Management Plan. The tribes have consistently played a leadership role in promoting these collaborative processes. Helpful lessons from these processes and many other efforts to resolve disputes through negotiation have emerged. The prerequisite conditions for using a collaboration approach are outlined above. In addition, several other factors should be considered when developing a collaborative process.

A fundamental principal of collaboration is to ensure that all the affected interests are represented in the process. This encourages ownership in the decisions reached and increases the chances for successful implementation. Obviously, it's not feasible for every interest to be represented at the table. Judgments must be made about which parties are necessary to legitimate the process, which will be implementing the decisions reached and which can interfere with implementation. Government agencies with regulatory jurisdiction should participate to ensure that agreements will meet legal and administrative requirements. Flexibility is desirable, so that different groups of stakeholders can be included depending on the issues to be addressed.

Clear criteria should be established for selecting stakeholder groups and individuals to include in the process. The convener should be able to explain why one stakeholder group was included and not another. When several organizations represent similar interests, it may be necessary to treat them as a caucus and help them decide on an acceptable arrangement for their participation. It is critical that participants representing particular interests be held accountable for their decisions to their constituencies as well as the other participants.

Explicit terms of reference must be provided for a collaborative process. Are there minimum criteria for acceptable alternative decisions, such as level of protection afforded or legislative mandates? Participants need to know the bounds of their authority and understand the decision-making process to be used. If the goal is consensus, how is consensus defined? What is the fallback arrangement if consensus can't be reached? How will disputes over procedural matters be resolved? How will the agreements reached be used in other decision-making processes? Clear and direct answers to these questions will lend legitimacy and credibility to the process and help ensure that participants have appropriate expectations.

The collaborative problem-solving process should be designed by the potential participants and the end

users of the decisions reached through the process. The use of a professional facilitator or mediator can be very helpful in identifying and choosing appropriate process elements and deciding how best to structure them to meet the goals of the process. Sessions can be facilitated by a professional, a public employee or a private individual with the necessary skills and experience. It is essential that their independence and neutrality be ensured and protected. The facilitator must maintain his or her neutrality to preserve the faith of participants and the public in the process.

It's a good idea to go slowly until participants become familiar with the process and establish trust among themselves. It takes time for participants to develop an understanding of each other's important interests and concerns. Each participant will have a different perception of an issue. To come up with a common definition of a problem will require joint exploration of the evidence available. Start by addressing easier, less contentious issues. As mutual understanding and trust develop, tougher issues can be addressed without threatening the cohesiveness of the group.

Participants in a collaborative process should represent comparable levels of authority within their organizations. The higher the level represented the greater will be the investment in the success of the process. It may be necessary for agency officials to delegate responsibility and authority. That way, a representative can be appointed who has direct knowledge of the issue. By defining the scope of discretion for the agency representative, an appropriate balance can be struck between delegated responsibility and ultimate authority. NOAA seems to be particularly reluctant to devolve responsibility and delegate authority to the local sanctuary level, a pattern that may create an obstacle to productive negotiation.

Interaction Skills Necessary for Productive Collaboration

Although the institutional arrangements and structural design of the collaborative process are important, the most critical factor determining the success of the sanctuary's cooperative management efforts is the interaction skills of the individual participants. The interaction skills most important for successful collaborative are the ability to communicate effectively, to challenge the arguments of others constructively and to negotiate productively. Ideally, individuals with good interaction skills should be selected as participants. In any case, training sessions should be planned early in the process to provide all participants with an opportunity to learn and develop their negotiation skills and to increase their understanding of how to make a collaborative process work. Because participants will be coming from different backgrounds, the training sessions can help equalize their abilities to participate meaningfully in the process. These sessions also will help develop rapport and trust among the participants before they have to tackle difficult issues.

Effective communication is essential for cooperation and conflict resolution. To communicate effectively means to be able to convey and receive information in ways that are appropriate to the different cultures, attitudes, perceptions, needs and comprehension of others. The range of others might include natural scientists, social scientists, resource managers, politicians, fishermen, forest workers, economists, business people and the general public. Using bureaucratese or legalese or scientific jargon with someone from another background and culture does not promote communication. Yet, complex scientific information from various technical disciplines must be shared between scientists and non-scientists. Each must strive to be understood and to understand the other. Good communicators cannot be self-centered. They must constantly adjust their language and manner of communication to meet the needs of their intended receivers. Good communicators focus on what they need to say and do to help the receivers understand what they are trying to communicate and then to help the receiver communicate back to them what they mean. Good communicators must be active listeners who strive to identify and overcome barriers to communication.

When parties disagree, destructive arguments often result. Although the intent in questioning another's

assertion may simply be to clarify the assumptions and logic behind the assertion, challenges have a way of being perceived as personal attacks resulting in defensiveness and hostility. For parties to develop a mutual understanding of an issue, they must be able to collaboratively address discrepancies in information and reconcile differences in perception. To do this, they must develop the ability to challenge each other constructively without prompting an adversarial reaction. The difficulty of doing so is compounded by the great complexity of socio-economic and ecological systems and the uncertainty about the causal relationships involved. For instance, no one knows with certainty how much salmon populations would increase if logging were curtailed in riparian zones and watersheds were restored. Successful strategies to resolve disagreements over widely divergent answers to this kind of question can be developed only when individuals are able to discuss and challenge constructively rather than criticize the assumptions and values that underlie various assertions.

To reach agreements for resolving conflicts involving competing interests, it will usually be necessary to make trade-offs. Negotiation among affected parties can be an effective means of balancing these trade-offs and minimizing the total losses. In order to best meet the needs and interests of participants, the concerned parties must be able to negotiate effectively and successfully. The common approach to negotiation involves opponents taking divergent positions. Each party then tries to get the other to make concessions as they move toward a compromise. This approach is often considerably less productive than an interest-based approach to negotiation. An interest-based approach focuses on jointly exploring the underlying interests of each party and then working together to seek a solution that maximizes the interests of a party and still meet the needs of the other. Another principal of interest-based negotiation is the use of explicit criteria to evaluate options instead of insisting on a particular position. Reasoning is used to develop options that will lead to the best outcome as defined by these criteria.

To be most productive, participants in a negotiating process must be well-informed. Parties must be able to identify their interests in a given situation and to understand how these interests will be affected by possible alternative solutions. Often the information is not available to predict consequences of management options with any degree of certainty. As a result, parties have little factual basis on which to make informed decisions. They must rely instead on prejudiced assumptions. The negotiation process can be improved through collaboratively conceived adaptive management experiments designed to yield functional knowledge. This knowledge in turn can be used to generate predictable alternative management outcomes. Research designed to produce functional knowledge would allow participants in a negotiation process to inform themselves about their own best interests and the potential consequences of collaborative solutions that also meet the needs and interests of others.

Evaluating the Success of Collaborative Efforts

Several measures can be used to evaluate the success of collaborative efforts: Were agreements reached? Were the agreements implemented? Were relationships among the participating parties improved? Even if agreement was not reached, did communication improve? Was new information generated? Did trust develop among diverse interest groups? Did participating parties develop working relationships?

The Role of the Sanctuary in a Collaborative Process

Because the sanctuary has its own interests that would be affected by the outcome of any decisions reached by the Sanctuary Advisory Committee, it should consider itself the convener of a collaborative problem-solving effort as well as a participant and facilitator of the process. It is not appropriate, however, to serve as the "official" impartial facilitator of the process. Rather, the official facilitator should be a neutral person or persons whose independence could be ensured. The sanctuary must keep foremost its responsibility to represent to the other participants the nation's interests in carrying out the sanctuary mandate of protecting the marine resources of the area. This concern should serve as a minimum criterion for any decisions made by the committee. At the same time, the sanctuary must recognize that the goals of the sanctuary can be achieved only through the cooperation of other federal and state agencies, the coastal tribes, user groups, local communities, other interest groups and the public.

The sanctuary's essential role then must be to encourage and promote a collaborative process. This can be accomplished by identifying the stakeholders who should be involved and ensuring that they participate or are represented. The sanctuary can educate parties about the collaborative process and its role in the cooperative management of the sanctuary. The sanctuary can provide training in effective negotiation and guide the development of ground rules for the committee's decision-making process. The sanctuary can also help parties identify and define their interests in relation to various sanctuary issues and the potential management options that are available. The sanctuary can mediate between parties to resolve conflicts and help identify mutually acceptable solutions. An important task of the sanctuary will be to enhance communication by ensuring that all interested parties are kept informed of sanctuary issues and committee developments.

The sanctuary should promote jointly conceived investigations to help develop management options and evaluate their outcomes. It will be the sanctuary's responsibility to monitor the condition of the resources so that management partners can be alerted to potential concerns and issues. As much as possible, management activities should be conducted collaboratively. The sanctuary can create incentives for this kind of cooperation by providing flexible funding that parties must negotiate over to determine specific project allocations.

Conclusion

This paper has considered how a collaborative problem solving approach can be used to promote cooperative management of the Olympic Coast National Marine Sanctuary. Although described as a process for resolving conflicts and achieving consensus agreements, collaboration is really an attitude that should pervade all aspects of the sanctuary's activities and relationships with other agencies, organizations and the public.

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