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**RPWG Marine Habitat Protection
Workshop Summary Report**

Submitted to:

**United States Environmental Protection Agency
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RESTORATION PLANNING WORK GROUP WORKSHOP MARINE HABITAT PROTECTION OPTIONS

On August 1 and 2, 1991, the oil spill Restoration Planning Work Group (RPWG) held an informal workshop in Anchorage, Alaska, to address potential restoration strategies for state and federal lands impacted by the Exxon Valdez oil spill which occurred on March 24, 1989. The workshop provided a forum for discussions between RPWG and the managers and administrators of lands under protective status, both regionally and nationally. The objective of the workshop was to determine the potential of implementing a land use designation, such as a protective status, to facilitate the restoration process.

The workshop participants provided RPWG with information related to existing protected lands, their administration and management, and the applicability of using protective land use designations in the context of current restoration efforts.

The format for the workshop was informal. Each speaker was asked to provide the workshop with introductory information on the designated area each represents and to participate in a round-table discussion related to potential restoration strategies for the Exxon Valdez spill.

This document is a summary of presentations and discussions from the workshop. A list of speakers is included as Appendix A, and a list of persons attending the workshop is included as Appendix B.

INTRODUCTION Stan Senner, ADFG

The RPWG has been charged with making recommendations for long-term restoration of Prince William Sound, Gulf of Alaska, lower Cook Inlet, and other areas affected by the Exxon Valdez oil spill.

RPWG is a multi-agency task force that includes representatives from: the Environmental Protection Agency (EPA), National Oceanographic and Atmospheric Administration (NOAA)/National Marine Fisheries Service (NMFS), National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), U. S. Forest Service (USFS), Alaska Department of Environmental Conservation (ADEC), Alaska Department of Fish and Game (ADFG), and Alaska Department of Natural Resources (ADNR).

RPWG's purpose is not to assess the damages, but rather to identify and evaluate an array of restoration opportunities and recommend an appropriate restoration strategy.

However, restoration cannot occur until a funding source is secured either from Exxon, or from the government in anticipation of money coming from a responsible party. In the settlement proposed last spring, the money that was to be for restoration was in the hundreds of millions of dollars. Although this proposal was not accepted, it presents a good example of the potential funding for the restoration program. RPWG needs to be prepared to develop a restoration program that might entail one or two billion dollars.

Detailed results of the oil spill damage assessment are being held confidential due to the pending litigation. The criminal trial is scheduled to begin October 7, 1991. A copy of the 18 page summary document (dated April 1991) prepared by state and federal governments and released by the federal government has been provided to each participant in this workshop. This summary is a public document summarizing injuries from the Exxon Valdez and is not confidential.

The RPWG recommendations for restoration will likely take the form of long-term protection programs for marine habitats, and the fish and wildlife that are dependant on those habitats. A number of options currently exist, including the designation of national marine sanctuaries and state marine parks. The creation of new designations specifically suited to this situation is also possible.

Ultimately, RPWG's obligation is to determine appropriate designations, either existing or yet to be conceived, which will meet the restoration needs of the resources that were impacted by the oil spill. A reasonable relationship of cost in proportion to value of damage must be developed to determine the most cost-effective alternative in the restoration process.

MODEL OF THE OIL SPILL Art Weiner, ADNR

As an introduction to the workshop, Art Weiner showed a computer-model based video developed by NOAA, which depicted the dispersal of the oil spilled along the Alaskan coast. The model, which incorporated a mix of mathematical modeling and observations made during the spill, graphically illustrated the extent of the spill. The model estimated that the spill encompassed approximately 28,500 square kilometers along Cook Inlet and the Gulf of Alaska by June 20, 1989. This video is available through the HAZ-MAT division of NOAA.

REVIEW OF THE RESTORATION PROCESS Stan Senner, ADFG

Even though Exxon advertises that everything is fine in Prince William Sound, there are lingering effects from the spill. Although the beaches received most of the attention in

the press, the intertidal and near-shore biota were hit especially hard. Invertebrates and plants were impacted from the oil spill as well as the cleanup efforts. People tend to forget about the creatures at the base of the food webs. The effects on a number of the species have gone far beyond the immediate effects of the spill and restoration need to be viewed in an ecosystem context.

Some of the existing protected areas affected by the oil spill include: the Chugach State Forest, State Marine Parks scattered throughout the area, Kenai Fjords National Park, Kachemak Bay State Wilderness Park, part of the Alaska Maritime Refuge, including the Barren Islands, Kodiak National Wildlife Refuge, Afognak State Refuge, Katmai National Park, Sharoff Refuge, and Aniakchak National Monument. A total of 19 state marine parks, two state parks, a state wilderness area, a state recreation area, three national park units, and four national wildlife refuges were impacted by the spill.

There are three basic phases to contending with the Exxon Valdez oil spill: response, the Natural Resource Damage Assessment (NRDA); and restoration. Response, involves documenting the impact of the spill on beaches and in the open water areas, then using this information in the cleanup. Determining what kinds of technology are needed for cleanup is probably the primary initial effort that is directed toward the spill. The second step, the NRDA actually occurs concurrently with the cleanup. This process is the litigation-sensitive research that goes into building the case against Exxon. The third step is restoration, which is the focus of this workshop.

RPWG's purpose is to determine the best way to mitigate the damages to the natural resources through a restoration process. Restoration is defined by the NRDA regulations as being either direct restoration, in-kind replacement of the damaged resources, or the acquisition of equivalent resources. State and federal agencies are attempting to assess the damage to resources within the affected area and determine whether natural recovery will be adequate. If it is determined that natural recovery is not adequate, then other alternatives would need to be addressed, such as accelerated restoration, replacement, or acquisition of equivalent resources.

One of the most important things that can be done is to prevent further degradation of the habitats on which an injured species depend. By designating these areas as protected areas, an authority becomes responsible for maintaining the habitat and protecting it from disturbance or a conflict of resource uses. If a population is recovering slowly, protection may aid in the recovery by preventing further injury. The creation of a protected area may not speed up the recovery of a species, but may give it added protection over the period of time it needs to recover.

NATIONAL MARINE SANCTUARY PROGRAM (NOAA)
Miles Croom, Site Evaluation List Manager

The National Marine Sanctuary program is set up to enhance the existing regulatory management authorities and fill gaps that are identified in resource protection. The philosophy of the program is not to duplicate, but to identify ways the resource can be better protected. The program's intention is to work with existing authorities to accomplish that goal.

There are currently nine national sanctuaries and an additional site in the process of being designated. The Florida Keys is the largest national marine sanctuary at 2,600 square nautical miles, followed by Monterey (2,200 sq nautical miles), Channel Islands (1,252 sq nautical miles), Gulf of the Farallones (948 sq nautical miles), and Van Kelley Bay (0.25 sq nautical miles).

Title III of the Marine Protection, Research, and Sanctuaries Act is the enabling legislation for the National Marine Sanctuary Program. The Goals of Title III are:

- resource protection,
- research to aid in resource management decision making, and
- environmental education and information transfer.

Priorities of the NOAA Sanctuaries and Reserves Division are to designate new sanctuaries and reserves, make existing designated sites fully operational, and develop or improve research and monitoring, education and interpretation, and resource protection programs. The results of the research are applied to determine appropriate sanctuary boundaries; monitor and predict resource and habitat changes; plan for compatible future uses and developments; predict and assess regulatory impacts on resources; interpret resource values; and identify activities that directly or indirectly affect resource values. The educational programs include design and production of printed materials, such as posters and brochures; development of marine-related curricula and teacher training workshops; sanctuary excursions and lecture series; design and production of exhibits; and outreach programs.

The purpose of creating sanctuaries is to guarantee control (i.e., protection) of key areas and habitats. An evaluation is conducted before acquisition of an area, to determine what methodologies are appropriate to create a particular type of sanctuary. Most acquisitions are all fee-simple. Up until last year, the procedure precluded land ownership by the sanctuaries. However, it has now been determined that land cannot be purchased for sanctuaries, but can be acquired through donations. The National Marine Sanctuary program is up for re-authorization next year. Hopefully, the reauthorization will include language that authorizes land purchases for sanctuaries.

The Site Evaluation List (SEL) is the first step in identifying a site for consideration under the program. Sites selected for listing possess qualities which make them of special national significance. However, it is important to note that sites listed on the SEL do not have to be pristine. A site listed on the SEL may not necessarily become a marine sanctuary, because part of the evaluation process involves assessing the potential threats, impacts, and activities that might require regulation and evaluation of the relative benefits of the designation. Design of the management plan may be based on potential threats to the site. The evaluation process is used to determine whether a marine sanctuary designation is needed.

The SEL and criteria for getting on the SEL are being revised. SEL Criteria are divided into four categories:

- (1) natural resource values: habitat protection, fisheries resources, ecological qualities, and conservation qualities;
- (2) human use values: historical, educational, and aesthetic qualities;
- (3) estimated impacts and threats to resources: pollution, and exploitation of resources; and
- (4) socioeconomic costs: costs versus benefits.

Part of the process in completing the SEL involves inspections of potential sites by six or seven regional teams that conduct preliminary evaluations. There is then a series of public meetings and other public involvement processes to review the nominations. Those sites which seem to be of the highest value after being evaluated by the listed criteria will be placed on the SEL. Based on these reviews, some sites are picked to become active candidate sites for sanctuary designation. Once the site is selected as a candidate, the NEPA process begins and a draft environmental impact statement, a management plan, and draft regulations are initiated. It also initiates the formal consultation between NOAA, the regional fishery management councils, and other federal, state, and local entities that have interests in the area. In the case of the proposed North Puget Sound Marine Sanctuary, the boundary would be the deep water mark at Padilla Bay, so there will need to be a number of cooperative programs. The proposed sanctuary is totally within state waters and includes 38 different interested parties including tribes, port districts, cities, and counties.

Some potential sites in Alaska will be considered for addition to the SEL. However, if there was a legislative act that required designating a specific site, such as in Prince William Sound, then that would fall outside the SEL process.

In the past, sites have not been prioritized on the SEL, but this is being considered. The problem with using a priority system is that it would be difficult for agencies to designate non-priority sites for candidacy.

It costs approximately a quarter million dollars to designate a national marine sanctuary. The cost is primarily review of existing materials, travel, and consultation. To date, sanctuary and reserve designations have not been used in combination to encompass deeper marine areas. The closest example is the Monterey Bay Marine Sanctuary, which will be contiguous with the Elk Horn Slough Reserve; although, they will be managed separately.

The latest re-authorization of Title III specifies how monies from fines are to be distributed. There are separate accounts ranging from restoration and improved management in the sanctuary where the damage occurred, to using the monies in other sanctuaries, to using the money for better administration at headquarters level. The money from fines does go back into the program, not into the general fund. Before 1986, the money did go back to the U. S. Treasury.

In 1981, the budget for the sanctuary and reserves program was around \$4.8 million and there were only three smaller and two fairly large sanctuaries. By the end of the Reagan Administration, the budget was down to about \$3 million, but there were seven or eight sanctuaries. By 1994, under the Bush Administration, the per sanctuary expenditures should be back to what they were in 1981. At the Gulf of the Farallones, the operating budget is roughly \$500,000. An attempt is made to keep staffing down to about 65 % of the budget to allow monies for research.

The Florida Keys National Marine Sanctuary was recently created and adjoins Biscayne National Park, John Pennicamp State Coral Reef Park, Everglades National Park, and Fort Jefferson National Monument. Two existing national marine sanctuaries in that area, Loew Key and Key Largo, will be incorporated into the largest national marine sanctuary when the management plan is finalized. "Areas to be avoided" is another new designation set up through the Coast Guard and will help to control shipping and vessel traffic through the sanctuary. This, however, does not apply to military vessels.

The Florida Keys National Marine Sanctuary may be a good example for this group to examine. In this case, it was a separate piece of legislation that established the Florida Keys National Marine Sanctuary. It requires NOAA to prepare a comprehensive management plan and environmental impact statement by May 1993. The legislation directed EPA and the State of Florida to prepare a Comprehensive Water Quality Protection Plan by May 1992. NOAA is also working as part of this effort and is required to establish an advisory council to assist the U.S. Secretary of Commerce in developing and implementing the management plan. The act prohibits oil and gas development and hard minerals mining, and restricts commercial vessel traffic within "areas to be avoided". The Comprehensive Management Plan should facilitate all uses consistent with resource protection; consider Ocean Area Zoning for the sanctuary; incorporate regulations to enforce water quality protection programs; ensure cooperation between sanctuary management and other federal, state, and local authorities; promote education about coral reef conservation and navigational safety; identify research needs and long-term monitoring programs; identify funding sources; and incorporate the two existing, smaller sanctuaries into one large structure.

In the Florida Keys, a diverse group will participate, along with the advisory council, in sanctuary management. This group includes: NOAA, EPA, Florida DNR, Florida Department of Environmental Regulation, Florida Department of Community Affairs, Florida Marine Fisheries Commission and the various regional fishery management councils, south Florida Water Management District and Monroe County government. A series of regional scoping meetings has been held. Technical workshops are being planned for this summer to devise water quality studies; set up liaison offices; establish liaisons with the federal, state, and local agencies; sign agreements with The Nature Conservancy for educational and scientific activities; and solicit private donations.

Although some groups may have complaints about the designation of these sanctuaries, most people, if asked, would not like to see them removed. In an area like Alaska, that is dependant on its fishing industry; the support of fishermen is essential in developing a sanctuary. If the area is to be managed for traditional uses, like commercial fishing, Alaskans will need to determine what they need in a sanctuary program. Sanctuaries cannot be all things to all people. The sanctuaries are not set up to control specific activities, or protect individual resources, but to look at an ecosystem or regional holistic approach. Based on the previous NOAA attempt in Alaska, it is important to prepare the constituency, conduct public meetings to inform the people, and get public comments early in the process.

National Estuarine Reserve Research System
Terence Stevens
Padilla Bay National Estuarine Research Reserve, Washington

The National Estuarine Reserve Research System (NERRS) is a partnership program, cooperative between federal and state governments. It is authorized under the Coastal Zone Management Act Section 315. Funds are available and the current budget is about \$3.4 million in state pass-through monies. These monies are available for site acquisition, development, monitoring, education, and construction. There are now more sanctuaries, but the budget is smaller now than it was seven or eight years ago.

A national estuarine research reserve is an area that is a representative estuarine ecosystem suitable for long-term research which may include all or the key land and water portions of an estuary and adjacent transitional areas and uplands constituting, to the extent feasible, a natural unit. The reserve is set aside as a natural field lab to provide long-term opportunities for research, education, and interpretation on the ecological relationships within the area. Monitoring and protection are stressed. Within our national office, a three tiered monitoring program has been established where funds can be obtained for characterization studies, evaluating what exists within the reserve, community profile documents, and, on an annual basis, long-term monitoring projects. A state may apply for federal funding for site selection, preparation of documents, and research necessary to complete basic characterization studies. The total federal share for this group of

predesignation tasks may not exceed \$100,000 of which up to \$25,000 may be used for site selection, staffing, etcetera.

Estuarine research reserves are open to the public to the extent permitted under state and federal law (Section 315). Most of the control is left up to the management plan development. Multiple uses are allowed to the degree compatible. For example, clamming, hunting, and crabbing are all grandfathered into the Padilla Bay Management Plan. Use levels are set by individual states and analyzed in the management plan. The management plan can be designed by the diverse use elements being addressed for the reserve. The research reserve management plan describes the uses and establishes priorities. In the plan, a permitting system can be established for regulating activities.

Reserves can be multi-site, but the budget for that reserve must be distributed between sites. For each reserve, the budget is \$70,000 a year for operations, \$20,000 for monitoring, and \$20,000 for education. This is set in the guidelines, not in the congressional act. Congress determined overall dollars available to states to be \$5 million per state.

Up to \$100,000 in federal funds can be used just to get the site designated and established. An additional \$40,000 can be provided to develop the management plan. This is all prior to designation. Those are all federal dollars and they are all a 50-50 federal-state match. Operational funds are available up to \$70,000 dollars per year, per reserve, and are matched 70-30.

The unique thing about the National Estuarine Reserve Research System is the state prepares a management plan and a draft environmental impact statement (EIS), which is then eventually adopted by NOAA. Padilla Bay is known as a national reserve managed by the Washington State Department of Ecology (WDOE). The management plan provides the authority for what is allowed within the reserve. Across the 19 reserves, there is a huge variation as to which state and local agencies are involved. Of the 19 reserves, only about eight are fully developed, Padilla Bay Reserve being one. There are facilities, programs, and activities on-site at Padilla Bay Reserve. Some non-profit groups are actually directly involved in operations and there are some contracts with universities for research and monitoring programs. There are tremendous variations in how a program can be implemented consistent with the federal guidelines. The Padilla Bay Management Plan specifies that activities cannot degrade water quality, salinity, food regimes, etcetera. It also delineates all existing codes and regulations used to protect the resource, including the state Shoreline Management Act and the federal Clean Water Act.

The National Estuarine Reserve Research System is set up to provide for long-term research in areas of representative estuarine ecosystems. Although restoration of degraded systems is not a primary purpose of the system, such activities may be permitted to improve the representative character and integrity of a reserve. Restoration activity must be carefully planned and approved by NOAA and the reserve management plan. An area does not have to be pristine to be designated.

Although university research is conducted at Padilla Bay, the reserve has not attracted large scale research projects. Historically, there has not been much research conducted in Padilla Bay and therefore, there is not much baseline data available. About 50% of management time is spent promoting research activities in the Padilla Bay Reserve. The physical facilities at the reserve were built with the idea of attracting research activities. These include an overnight bunk room, kitchen facilities, and a wet lab onsite. This especially enhances the prospect of attracting students to do graduate studies. There have not been many large, government-funded projects.

An estuary is allowed within a marine sanctuary, but an estuarine research reserve cannot be in a marine sanctuary. The statute says specifically that national marine sanctuaries and estuarine reserves may not overlap.

The guidelines have a narrowly defined process by which the state applies; develops the management criteria, draft management plan, draft EIS, final EIS, and final management plan; and at what points acquisition or site development starts. The time period for applying for funds is well defined. Designation time is actually fairly short. Padilla Bay Reserve came on-line in two years.

Public participation is encouraged in a number of ways. At Padilla Bay Reserve, the local Board of County Commissioners is used in management functions. Many of the reserves have advisory committees to oversee their management. Public participation starts early in the site selection process. As part of the application process, methodology for holding public meetings must be identified. One public hearing is required after the draft EIS is published. Another must be held on the final management plan.

The Washington State Department of Ecology Shorelines and Coastal Zone Management (CZM) Program initiated the proposal for the Padilla Bay National Estuarine Research Reserve. Under the state CZM program, potential sites were evaluated several years ago. The Governor set up a steering committee and a technical advisory committee which was supervised by the Washington State Department of Wildlife. The committee established different sub-committees for boundary selection, research, education, and interpretation. Recommendations from the committees were used in developing the Draft Management Plan.

The state evaluated 20 different sites. Padilla Bay was one of the only large, near-shore habitats with significant seagrass beds and without any designation for protection. Because of Washington's long history of selling second class tidelands, of the 10,000 acres of second class tidelands in Padilla Bay, about 9,500 acres were in private ownership. The reserve has been buying privately owned tidelands. Litigation began in 1982 with a major investment firm that owns 7,000 acres in Padilla Bay. The state purchases and takes title to the property, then the WDOE manages it. The state DNR manages timber, tidelands, and bedlands. The State Parks Department has two islands within the Padilla Bay Reserve boundary, which they manage under a memorandum of agreement.

How can we solve the problem of the general population accepting a national reserve in their area? In the case of Padilla Bay, farmers were especially concerned that their land use practices, pesticide, chemical usage, etcetera would be affected or shut down. The management plan responded to these concerns by including an understanding that the surrounding uses are historic in nature and that unless these practices were shown to be damaging the resources, that they would continue to fall under on a grandfather clause. To deal with concerns of citizens in the vicinity of Padilla Bay, an Oversight Committee was established consisting of the local Board of County Commissioners. Any concerns or criticisms from the local citizens can be directed to the Oversight Committee. A "hands-on working with the locals" approach has been the best approach for the Padilla Bay Research Reserve.

The budget for Padilla Bay is \$350,000 every 2 years from WDOE. These funds are used for matching funds because almost all of the funds out of NOAA grant programs (state-pass through funds) require a 50-50 match. A few of them require 70-30, which is better for the state. Acquisition and development funds are all 50-50. At Padilla Bay, about \$175,000 state funding per year is used to run facilities, educational programs, etcetera. Federal funding of \$70,000 per year is for operational costs. Non-profit organizations contributed about \$10,000 to \$20,000 this year.

All Padilla Bay staff are state employees. Currently, there are five state positions, plus another five or six that are involved in research projects, education projects, etcetera, who are actually state employees but are funded either federally or privately. There is a non-profit foundation, the Padilla Bay Foundation, that was established in 1988. Most reserves find themselves working hand in hand with local or regional environmental organizations that may develop their own groups.

To designate a research reserve in Alaska, to have the regulatory handle under state law, it may be desirable to overlay a state designation such as a state refuge or sanctuary and have it be a component in the national reserve system.

Alaska now, under its Coastal Zone Management Act, has a designation called Areas Meriting Special Attention (AMSA). It is not a regulatory mechanism, but it suggests the need for special regulation. It must then be decided what type of status such as a reserve or sanctuary is appropriate. This is similar to Washington's Shoreline Management Act which has a classification called Shorelines of Statewide Significance.

National Marine Sanctuaries (NOAA)
Ed Ueber, Manager of Gulf of the
Farallones National Marine Sanctuary

The Gulf of the Farallones National Marine Sanctuary is the largest protected marine area in the United States. Oil and gas production, discharge of materials, dredging, and dredge disposal activities are prohibited within the sanctuary. There is incredible support

for this sanctuary from the local community. Another advantage for the sanctuary is that almost the entire shoreline is either national or state park lands.

Commercial fishing was one of the major support groups for the sanctuary. The sanctuary regulations prohibit it from regulating fisheries. The California Department of Fish and Game (CDFG) manages the fishery resource. This site was selected because of its high biotic productivity. It is the highest producing fisheries area on the West Coast (excluding Alaska) and also has the largest producing seabird and marine mammal populations.

The sanctuary attempted to establish a buffer zone around the islands to protect Steller sea lion populations. What resulted was a closure around parts of the island for half of the year, which included areas that were sensitive to the declining murre population. This was actually initiated by the CDFG. One of the problems with the closure, was that the Fish and Game Commission could only regulate activities related to fish and game, so things like sightseeing were still allowed. These activities had just as much impact as the fishing industry. The major problem may be noise activity, along with urchin and abalone diving. To try to alleviate some of these problems, a speed restriction and a noise restriction were established.

In contrast, the Alaska Maritime Refuge would not be able to close the water to activities, but could prohibit access to the island. The Gulf of the Farallones Sanctuary would have to close the water to everybody, not just to fisherman. Title III states that the first authority of fishing regulation goes to regional fishery management councils. If NOAA determines that those regulations are not adequate, then the sanctuary program can implement its own regulations in those for the sanctuary. However, this has never been done. Title III gives the sanctuary the authority, while the regulations define what actions can be taken. Each sanctuary is different. For example, the Florida Keys have some restrictions, including regulation of spear fishing and trapping, mostly because of the damage anchoring mechanisms cause to coral. A sanctuary can also apply different regulations within different areas of the sanctuary.

The U. S. Coast Guard in San Francisco is charged with monitoring oil tanker movement through the sanctuary. In addition, NOAA's hazardous materials division (HAZMAT) works on this, and now California has its own oil plan. The state has been charged with developing a contingency plan for the entire coast. The state has not yet hired the 140 positions planned for this new program. Under current protocol, the Coast Guard contacts the sanctuary in the event of a spill. Although the sanctuary has some oil spill equipment inside the bay, it is not sufficient to handle large spills within the sanctuary. The sanctuary has no policy on the use of dispersant and therefore can do very little except to assess the damage. The CDFG has never allowed the use of dispersant anywhere in the state and would most likely deny use within the sanctuary. The EPA always differs decisions on when to use dispersant to the states and state lands commissions. The boundaries for the sanctuary do include state waters.

Enforcement of sanctuary regulations are aided by the authority to fine violators. Fines for violations are now \$50,000 a day. The new legislation will increase this amount to a ceiling of \$250,000 per day. Violations include discharging of materials, running aground, damaging coral, and anchoring. Additionally, if something is discharged outside of the sanctuary but material drifts into the sanctuary, a fine can be imposed for each day until the material is removed. Some vessels have actually been impounded.

UNITED STATES NATIONAL PARK SERVICE
Sandy Rabinowitch, NPS

The National Park Service administers about 354 national parks and about 80 million acres around the United States and its territories. There are 15 national parks and approximately 54 million acres of park lands in Alaska. Kenai Fjords, Katmai, and Aniakchak National Parks were impacted by the Exxon Valdez oil spill. Katmai National Park was the most severely impacted. National parks are governed by old legislation and language which has been interpreted and reinterpreted, but the key words are "to conserve the scenery and the natural and historic objects and the wildlife therein unimpaired to the Park Service for future generations." There were two significant amendments to the legislation made in 1970 and 1978. The 1970 amendment stressed a unification of the park system. The 1978 amendment, the Redwoods Amendment, stated that the parks shall not be used in degradation of the resource values. There is a lot of legislation pertaining to the parks and there are differences within each park's legislation. There are also specific references to specific species. The primary purpose of the National Park Service can be summarized as a role of stewardship of the nation's most protected lands. Although people assume the National Park System administers only uplands, there are at least three examples of marine waters being included in the National Park System. These are Glacier Bay National Park in Alaska, Everglades National Park in Florida, and Fort Jefferson National Monument off the Florida Keys.

National parks are actually described in terms of both gross and net acres. Gross acres are the total number of acres within a park's designated boundary. The net acres are those that are federally owned. Private land use within park boundaries is not statutorily controlled, but there is enough case law now that uses can be controlled on a case by case basis, if there is a threat or imminent threat. The exception is through Section 22D of the Alaska Native Claims Settlement Act.

Kenai Fjords National Park has two resource people and law enforcement averages 1.3 people, including seasonal employees, through the year. The total annual operating budget is roughly \$569,000. Katmai National Park has three resource people, two law enforcement people, and an operating budget of almost \$1 million. Aniakchak National Park has 0.25 people, no law enforcement and an annual budget of about \$125,000.

The National Park Service also administers 466 national wildlife refuges nationwide, encompassing 91 million acres. Of these, 16 units and 77 million acres are in Alaska. Four

refuge units were hit by the spill. The statutory authority is the 1966 Refuge Administration Act, the Refuge Act of 1942, and other acts. The refuges have very specific stated purposes and tend to focus on species, treaty obligations, subsistence responsibilities, and water quality. Many private lands within refuges are subject to the regulations within the refuge.

The total staff in the four refuges is 44 people, and the budget is \$3.5 million. Research is conducted by the Park Service, universities, etcetera. There are two to three law enforcement people at each refuge, plus assistance from special agents.

A significant difference between the refuges and the parks is that the refuge mandate is geared more toward wildlife, conservation, and the resources. Although the park mandate includes these mandates as well, they also need to be balanced with visitor use and enjoyment. A refuge can close down when there is an endangered bird nesting or some kind of critical resource need. The National Park Service would have to go through many "hoops" to close a park because of public access requirements. In the lower 48 states, the national wildlife refuges are closed to any use unless specifically opened, in contrast to the national wildlife refuges in Alaska.

Channel Islands National Park, California
Mack Shaver, NPS

There are many similarities between Channel Islands National Park and the other management units discussed at this workshop. When national parks are created, they create a great deal of political interest and national interest. This is not something that is done in response to one perceived need. It would be difficult for a coalition of people in Southern California to have created a national park to prevent oil drilling in the Santa Barbara Channel, but actually, the Channel Islands National Park was created, in part, because there was a threat of oil production in some very sensitive habitats.

Channel Island National Park is only about 10 years old; however, Channel Islands National Monument was created in 1932. Within the National Park System, only national parks must be created by an act of Congress. All of the other designations e.g., national monuments, national seashores may be created by presidential proclamation. For an example of the cost of creating the park, Santa Rosa Island, which is about 54,000 acres, cost \$29 million to purchase. Right now, Santa Cruz Island, 62,000 acres, is 90% owned by The Nature Conservancy and managed as part of the park; but if the park service was to purchase it, it would cost roughly \$170 million. The cost of national parks today can be rather high, because, for the most part, they do not come out of the public domain.

Channel Islands National Park is 250,000 acres, and the operating budget is about \$3 million. There are about 35 permanent employees and about 30 seasonal employees. The park is about half staffed and half developed. It is as much a growing park as the Alaska parks are. But because it has been around longer and is surrounded by 17 million

people, it has received more attention from Congress. As a result, the operating budget is higher.

There are approximately 30 agencies that have management responsibility in or immediately adjacent to the park, including the Channel Islands National Marine Sanctuary. The park encompasses all five Channel Islands, plus 1 nautical mile of water around them. The National Marine Sanctuary, when it was created, included the waters to 6 nautical miles outside the islands, but not the islands themselves. The state has territorial waters for 3 nautical miles out from the islands. Thus, there are three very distinct, overlapping jurisdictions involved. In addition, the U. S. Navy operates the Pacific Missile Test Range, which includes everything south of all the islands. Even though the Navy has no true management responsibility within these waters, it carries clout as to what goes on because of the sensitive and hazardous nature of its activities. In addition, the National Marine Fisheries Service is very active in the area because of the dense marine mammal populations.

There are shipping lanes running north-south from Los Angeles to San Francisco between the islands and the mainland. They actually enter the Channel Islands National Marine Sanctuary and the park. An average of 11 tankers a day travel through the shipping lanes. In addition, there are 14 oil platforms in that same area, not within the shipping lanes, but some are very close. One thing that the marine sanctuary designation does is it creates a 6 mile buffer between the platforms and the sanctuary. If the sanctuary was not there, the platforms would probably be 1 mile from the islands. The closest response facilities are on platform Gail, but all of the harbors have major response facilities. There are none on the islands. It would take approximately one hour to respond from Santa Barbara, assuming the response team was ready to go.

National Park Service has jurisdiction on the water's surface within 1 nautical mile of the island. This includes law enforcement, fish and game regulations, and search and rescue in conjunction with the Coast Guard. The state has jurisdiction on the sea floor and in the water column. The CDFG regulates protection and harvest of marine resources. The National Marine Sanctuary has jurisdiction on the sea floor and water column for such items as disturbance of the sea floor, discharge of hazardous materials, and protection of shipwrecks. The Park Service has been tracking the decline in abalone around the islands for five years now, and may be able to establish one or more of the islands as a harvest refuge and completely close those islands to harvest of abalone. It appears that the state is going to support this action and establish a state zone. The sanctuary authority does not include the ability to regulate the fishery, so although the Park Service has used its resources to evaluate the situation, the state needs to provide the regulation.

The park has the first and perhaps the only completed inventory and monitoring program within the National Park Service. An inventory and monitoring handbook has been produced that lists the 12 significant biomes within the park and protocols for inventorying and monitoring the resources within those biomes. Preparation of the handbooks cost \$13 million. They are a model that can be used in any park. Only five of them are in action right now. Both of the marine handbooks, the intertidal and the kelp forest, currently are

in use. The others now in use are seabirds, land birds, and other land resources. There is also an inventorying and monitoring system for underwater cultural resources (shipwrecks). They are extremely time consuming and very expensive to produce. For example, the kelp forest monitoring program is done every other week for five months. Each trip consists of about 10 people out for one week, making three dives a day. About two thirds of the divers on the trips are volunteers from universities or other agencies. To pay everyone involved in the kelp forest monitoring program, would cost an estimated \$1.5 million, including the boat.

There were no additional aids to navigation added to the area when the sanctuary was formed. An extensive system of navigational aids was already in place. The Navy has some radar coverage outside the Channel Islands in the Pacific Missile Test Range. There is also some radar coverage within the shipping lanes and all of the platforms have radar which is kept on at all times.

The sanctuary can restrict air traffic over the area. NOAA ordered some very stringent minimum altitudes particularly over pinniped rookeries, seabird colonies, and over all of the islands. NOAA has ordered it and it has not been challenged by the Federal Aviation Administration.

Marine law enforcement is a joint operation between the marine sanctuary and the Park Service. NOAA officers cannot write citations for fish and game violations and for Park Service infractions, but they provide a boat and two ranger positions. The National Park Service marine law enforcement is performed in a NOAA boat with uniformed park rangers. This program has worked very well.

Local support and political timing were ideal for making the islands public land. People were interested in the islands after having them off limits for so many years. The military was running out of uses for its parts of the islands and it was getting very expensive for private landowners to maintain ranches on the islands.

Kenai Fjords National Park, Alaska
Anne Castellina, NPS

Kenai Fjords National Park encompasses 570,000 acres. In addition to the manager, there is one full-time resource management specialist and one part-time resource management specialist. There is no substantial inventory and monitoring program except for what is now being done for the oil spill. Current studies include some work on eagles and goats, oil spill research on intertidal areas and vegetation, and an interagency wolverine study with Forest Service, Fish and Wildlife Service, and State Parks. Other agencies conduct research within the park. This is permitted and the Park Service benefits by getting some baseline data. A fledgling glacier positioning study has also been started.

The state has recently conveyed the title to Nuka Island to the Park Service. Pye and Chiswell Islands are part of the Alaska Maritime National Wildlife Refuge, as are most of the islands along the coast. There are also numerous state and federal protected lands around the park including: Kenai National Wildlife Refuge, Chugach State Forest, Cain's Head State Recreation Area, and Kachemak Bay State Park.

The area is relatively pristine. Aialik Bay is heavily used by traffic from the Seward area, including sailboats, recreational boats, and tour boats. The other bay that receives traffic from the Homer area is Nuka Bay. This includes commercial fisherman, shrimpers, and fly-in sport fishermen and boaters. The fjords in between these areas receive very little traffic because they are so far away from everything.

Gold mining operations within the park could have an impact on the quality of the marine environment. The park keeps track of mining claims within its boundaries, but none are currently being mined, so it is not a concern right now.

The Bureau of Land Management (BLM) is in the process of conveying 77,000 acres of lands within the park to two nearby native villages. The 77,000 acres basically include all of the fjords, many of the better anchorages, and other prime areas. The two native villages were given selection rights to these lands under the Alaska Native Land Settlement Act (ANLSA) because there was no other land available near them. The BLM may be taken to court on the grounds that the entire conveyance package for the two villages is inappropriate. The native villages have said that they would be more than willing to sell the park this land, or trade it for land in the Arctic National Wildlife Refuge (ANWR), or for as yet not designated land in the lower 48. The native-selected lands are not a recent traditional use area and there is no subsistence use in Kenai Fjords National Park. It is the only national park in Alaska which does not have subsistence use. These lands will be managed by the National Parks until actual conveyance takes place. Once conveyance has been completed, the natives can do anything they want e.g., logging, aquaculture, mining, building. The selected lands are in the most heavily visited areas of the park. There are archaeological sites within the conveyance property. These will have to be managed as cultural-archaeological sites, which have strict guidelines.

The biggest problem is that the park does not own these lands. If the restoration process could include acquisition of lands, or a way to retain ownership of lands, they could be protected. The fjords are the park and the heart of the fjords are about to be conveyed away. Eighty-eight percent of the park has been recommended by the National Park Service for wilderness designation, including all 77,000 acres of the selected land.

Another big problem in this park, as well as all other parks in Alaska with the exception of Glacier Bay, is that the park does not have jurisdiction over the water. The management boundary is the high tide mark and landward. The state owns all of the water. This is a significant problem because of the water-oriented activities that affect the park (i.e., commercial ice collection operations). ADNOR is responsible for permitting these operations. They have never denied a permit for ice collection, but do place certain restrictions on them. The Park Service, as the upland manager, can voice concerns to the

DNR but does not have any actual authority. If any portion of the ice collection operations were shore-based, the park would have jurisdiction; this is not the case. During the oil spill, whenever there were cleanup questions that involved the intertidal and the uplands, the state usually deferred to the upland manager. That was a good, cooperative effort.

Alaska Maritime National Wildlife Refuge
John Martin, NPS

The Alaska Maritime National Wildlife Refuge is part of the National Wildlife Refuge System. The refuge is very spread out, from southeast Alaska, to the Aleutian Islands, to Barrow. It is made up of about 3,500 different islands, rocks, and reefs and totals about 4.9 million acres. Of that, about 783,000 acres is in the marine environment, including tidelands, submerged lands, and the water column. Park control of marine areas has been contested by the state. This is one of the few refuges in the nation that claims ownership of the water.

The Maritime Refuge is often thought of as pristine, isolated highlands, but the only battle of World War II fought on American soil took place on Attu Island. Kiska Island was also occupied by the Americans and the Japanese during the war. There is a lot of wartime debris (artifacts) scattered along the islands. In addition, this is probably the only national wildlife refuge to have been used for nuclear ordinance testing.

The main emphasis in the Maritime Refuge is the protection of marine bird populations. There is currently an extensive monitoring program examining the feeding regions of the bird populations in the refuge. The other aspect to the program is the eradication of fox populations which prey on marine bird colonies. Both arctic and red foxes were introduced to the islands. Each year, the eradication program focuses on removal of the fox populations from one island.

In addition to the concentrated effort in the first year, return trips are needed each year for about three or four more years to check for strays that may have been missed. This means that it actually takes 4 or 5 years to ensure the complete removal of foxes from a single island.

The refuge also monitors marine mammal populations around the islands. There is also a strong endangered species program because of the Aleutian Canada goose which used to be an endangered species, but is now a threatened species. Geese from the sanctuaries population are now being transplanted to other islands in the Aleutian chain. The endangered Aleutian shield fern is also found within the refuge.

As in the other sanctuaries discussed today, there are overlapping jurisdictions within the Maritime Refuge. There are four military bases on the refuge. The USFWS has jurisdiction over all fish and wildlife conservation issues on the refuge. The Aleutian Islands are also within the Biosphere Reserve.

Any crucial activity occurring on the national wildlife refuge must have a special use permit. Some of the basic regulations for this refuge are derived from the Marine Mammal Act, Migratory Bird Treaty Act, and Endangered Species Act. These are regulations that can be enforced anywhere. In addition to these, there is another set of refuge regulations, which add another layer, so there are actually two layers of regulations on refuge lands which can be applied to protect the resource. For instance, a permit is required for charter boat operations only within refuge waters or if refuge land is entered. The one exception to the special use permitting process is commercial fishing. The permitting process ADFG uses functions as the special use permit. However, the refuge does not completely ignore commercial fishing. If a use is proposed that the refuge feels would be detrimental to the resource, it can get involved and impose restrictions. It is very difficult for the refuge to manage the islands when the park has no authority over the marine environment.

The comprehensive management plan for the refuge describes four different management categories: intensive, moderate, minimal, and designated wilderness. The uses listed in the marine management plan are the ones that were identified through public meetings and included uses that were going on at the time of plan development. Under the Land Management sections, there is a much larger listing. Oil and gas leasing is not permitted in wilderness or in minimal management category lands. In the intensive and moderate categories, it may be permitted subject to assessment of a potential national interest determination and a compatibility determination.

There are several other regulatory processes in the refuge. The ADFG statute that prohibits harassment of wildlife is not preventative. In contrast to a National Marine Refuge, a National Marine Sanctuary can have restrictive zones to prevent harassment. ADNR can establish a special use area through an administrative action to regulate activities on a more restrictive level. Any critical habitat for endangered species can be made totally off limits.

A refuge naturalist works the ferry that runs from Homer to Kodiak and down the chain. There is a small visitor's center in Homer. Funding has been appropriated for acquisition and planning for a new headquarters and visitor's center in Homer. The center will be about 13,000 square feet and will include a large seabird exhibit. This facility is estimated to cost \$20 million. This year the budget was about \$2 million. The payroll includes about 50 to 55 people, plus another 20 or 30 volunteers. A 120-foot vessel is used for getting around the islands.

One of the purpose statements for the Alaska Maritime Refuge is the protection of marine mammals, marine birds, etcetera and other marine resources upon which they rely. Marine mammals and birds do not feed on the refuge, so the limits are starting to stretch out.

The effects of tour boats on seabirds has been questioned. It seems that the birds become acclimated to the visitation. There are concerns about helicopter operations, but once acclimation occurs, helicopter activity does not seem to be a problem. Disturbance is a concern if it is something they are not acclimated to.

The Exxon Valdez oil spill was the thirty-first oil spill to hit the refuge. Most spills are not even looked at due to lack of access and often there are no real concerns at the time. Introduction of rats due to shipwrecking is considered to be a bigger threat than an oil spill. Rats can exterminate an entire species on an island.

Each year, the refuge participates in a seminar on seabirds for tour boat operators. The operators are very cooperative in adhering to the rules for not disturbing the birds and other wildlife. They actually provide a substantial amount of information on wildlife because the refuge does not have any way to do it. If there was some kind of biological problem, a limit on the number of tour boats could probably be imposed. It is very difficult to get special regulations because of the congressional delegation. There are some special regulations in the Swan Lake System of the Kenai Peninsula which prohibit landing an airplane on the lakes, but this is not common.

ALASKA STATE PARKS, STATE MARINE PARKS (ADNR)

Jack Sinclair, Alaska State Parks

Alaska State Parks are administered by the ADNR. Lands that are classified as park lands in the state are given a special land use designation, which means, according to the state attorney general, that these lands are withdrawn from public domain and are no longer available for multiple use.

The Alaska Constitution, Section 7, is the enabling legislation providing for special purpose sites. The purpose of the State Parks System is to provide for the outdoor recreational needs of present and future generations, to preserve and protect areas of natural significance, to preserve and interpret Alaska's cultural heritage, to protect and manage areas of significant scientific and educational values, and to provide support to the state's tourism industry.

Within the Division of Parks, there are several different types of management units. The marine parks in Prince William Sound are all small. They were actually created as part of a linkage with the State of Washington and Provincial Government of British Columbia Marine Parks Systems. The intention was to provide anchorages or small parks enabling recreational boat travel up the entire coast of Washington to Alaska. The state parks in Prince William Sound and outside of the Gulf of Alaska affected by the spill are Kachemac Bay State Park, Kodiak State Park, and Cain's Head State Recreation Area.

There are three main purposes of the Alaska Marine Parks:

- maintain natural, cultural, and scenic values;
- maintain existing lawful use of fish and wildlife resources; and
- promote and support recreation and tourism in the state.

The Division of Land and Water Management helped coordinate the management plan for all state lands within the Prince William Sound area. The plan helped determine what uses were appropriate. All tidelands within Prince William Sound are lands of the state. Some of the highlights from the plan regarding commercial development were that the majority of economically valuable mineral resources were located on privately owned land at the time of plan development; timber will be harvested on private land and U.S. Forest Service land only; future resource transfer sites will be protected across state tidelands near mineral and timber resources; and traditional commercial fishing grounds adjacent to state tidelands and near fish hatcheries will be protected. Wilderness values on state tidelands which are adjacent to proposed wilderness areas in the Chugach National Forest will be maintained. This is a large concern for upland managers that do not own the tidelands. There is a concern for what kind of mineral entries will be allowed, or leases that might take place within the tidelands. The Prince William Sound Management Plan recommended that the lands adjacent to the proposed wilderness areas be consistent with those recommendations of wilderness values. Under the plan, the marine state parks control the waters and uplands that it owns and can permit or restrict certain activities, such as commercial projects, and construction of structures.

When the marine parks were created, the acreage was kept to a minimum, so the largest is about 1,000 acres. Most of that is tideland rather than upland. Generally the uplands go halfway up a mountainside in a scenic view from that anchorage. The intended purpose behind this strategy is that since the land is withdrawn from public domain, mining or timber activities are not allowed within that view.

A legislative process is necessary to designate parks exceeding 640 acres. Areas that are critical to management and are less than 640 acres could be administratively created by an Interagency Land Management Assignment (ILMA). This has been done in many areas in the state parks through an application with the Division of Lands. These are not permanent conveyances, but are usually 99-year assignments with renewal options. This process can be accomplished within a year. It is ideal if the entire watershed is included in the designation.

Public participation in creating these parks is very important in both the affected communities near the area and in Anchorage which has many of the potential users. Designation costs vary. Management costs, based on having a ranger for 8 months per year, are about \$30,000 per year.

In order to maintain values, those values need to be determined. Alaska State Marine Parks are a relatively new organization. In late 1960s, the Alaska State Park System was created and it wasn't until the late 1970's that the idea of a state marine park was developed. This is the first full year that a marine park has been in operation. There is just one ranger, stationed in Whittier, who is responsible for all of Prince William Sound. There are seven marine parks near Whittier that are heavily used. Valdez is visited several times a year, but Cordova has yet to be visited. The furthest marine park is Kayak Island to the east, which is actually out of Prince William Sound.

The ADNR develops a management plan for each marine park unit of the Alaska State Marine Park System to determine the specific purposes and uses for the unit. During the preparation of the management plan, the commission will consult with the ADFG, municipalities, private land owners, U.S. Forest Service, organizations concerned with conservation, recreation and tourism, and other interested parties. A management plan required under this subsection will be completed by June 14, 1995, for each marine park unit established before June 14, 1990, and within 5 years of establishment for marine park units established after June 14, 1990. Those management plans determine what will be in the park as far as facilities, shelters, latrines, docks, and ranger stations, etcetera. The planning process includes public comment and agency review. In order to stop further resource damage in Alaskan marine parks, several things can be done, such as building platforms for tents, adding latrines, and mooring buoys.

The governor has vetoed the budget for the marine parks operation; consequently, there will be no operation after August 30, 1991. The marine parks are the most recent addition to the State Parks System. This does not mean that management of the marine parks will stop, although there will not be a park ranger located in the marine parks. Hopefully, in the next legislative session, there will be a push to get an operating budget again.

There are no regulations prohibiting commercial vessels from anchoring within a marine park. However, any buoy anchored as a permanent structure in the park would need a permit. This may be prohibited if it becomes a problem in the future. Commercial fishing in a state park is specifically allowed.

There is not enough information available now to determine if designations attract more people to an area. There has not been much advertisement about the marine parks. There has been a substantial amount of historical use in these areas. The marine parks have some of the best anchorages and they are more of a draw than the actual establishment of the park.

Facility development is based on indications from users. A user survey was conducted this year to assess what people really want. The State Parks shifts its development a little to accommodate user changes. By going through the management plan process, ideally, the information gathered during its development can be used rather than just being reactive. There is not an overall philosophy to try to increase visitation in the parks. The Bureau of Lands is actually proposing floating lodges, refueling areas, and docks in appropriate areas.

South Ester Island Marine Park has the world's largest fish hatchery within its boundary. As a result, there is specific language to accommodate permitting aquaculture operations within a State Park as long as development is compatible with park statutes. The actual definition of aquaculture in State Park terms is still being determined. It must be a public, non-profit operation. State Parks is not required to allow aquaculture, but can permit it.

One of the most alarming situations about the oil spill, aside from the physical oiling impacting the resources, was that there was only a vague idea of what resources were at risk. Although the purpose in managing the marine park system is to provide anchorages, the parks also have many vital resources that are basically unknown. This year, Alaska marine park personnel have gone through the marine parks around Valdez and near Whittier to assess the intertidal and terrestrial resources. There will then be a basis upon which to access any future development.

Only one marine park was impacted by the oil spill, Horseshoe Bay at Latouche Island, specifically Chicken Island. That area is still being cleaned up. This site is very remote and gets very little visitation. It is not typical to advise recreational users about oiled beaches, although if people asked, they would be told. To date, the parks have not closed any areas due to oil on beaches.

There are not any user designations, such as a kayak only area. There are some areas where only a kayak could go, but there is no special designation. Some areas are physically limiting. Within the planning process, zoning classification could prohibit certain activities, such as helicopter drop-offs, if a wilderness designation was appropriate.

Alyeska requested and obtained permission from the State Parks Department to set up permanent anchors in south Ester Island to protect the hatchery and to set up a curtain boom. After getting the permit, it also requested to amend the permit to locate two large container cars on the shore, visible to the marine park. Instead, these were located in Whittier.

Rangers that are in the field are commissioned under the ADFG to enforce fish and game harvest regulations. They are not commissioned to enforce habitat violations, but can assist ADFG in citing these. State park rangers have three commissions under which they have enforcement authority: ADNR, Department of Public Safety (all are special officers with the Alaska State Troopers and can enforce all state regulations within state parks), and ADFG. The State Parks manage the water, submerged lands, and tidelands underneath. In Alaska, the ADNR (which includes the State Parks) is actually the land manager for the submerged lands, so in that sense, it is consistent.

ALASKA STATE REFUGES, SANCTUARIES AND CRITICAL AREAS (ADFG)
Debbie Clausen, ADFG Habitat Division

Alaska has a system of state refuges, critical habitats, and sanctuaries that are collectively called special areas. These multiple use state lands were established by the legislature for the protection of productive fish and wildlife habitats, the conservation of fish and wildlife populations, and public use and enjoyment of those resources. Special areas in Alaska have a history that is as old as the state itself, the first two of which were established in 1960. There are now 30 areas encompassing approximately 3 million acres. Land management responsibilities are shared between ADFG and the ADNR. In addition to the

usual activities managed by the ADNR, such as permits and leases, the ADFG Habitat Division issues a special area permit which is required for any land use activity in these areas. Field inspections are conducted year-round on those activities. Activities that are encouraged and do not require a special use permit include: hunting, fishing, trapping, non-motorized public access, hiking, skiing, camping, boating, and berry picking. Multiple uses which predate the creation of special use area or that fulfill an important public need are permitted, as long as they can be conducted in a manner that is compatible with the purposes for which that particular area was established. Most of these areas have a purpose statement in the statutes that create them. State-owned uplands, tidelands, and submerged lands are all eligible for designation. In addition, critical habitat areas can also include private lands.

Most of the special areas are coastal and include tide and submerged lands, although this is not particularly by design. They are still state lands, but the ADFG oversees them through a direct permit authority (special area permit). The legislation that creates these areas comes with a purpose statement that specifies that it is to be managed to maintain habitat and conserve the fish and wildlife populations and manage those resources for public use. In addition, one of the protective mechanisms there are on these areas that are not on state lands is that criminal penalties for violations of those special area permits. Violations are a Class A misdemeanor which is roughly \$5,000 and a year in jail for an individual, and for a company it is \$100,000 or three times the monetary gain expected from the action. These are in addition to getting restitution. There are no fees for special area permits or for public use in these areas. The two exceptions are the public access permits required for McNeil River Sanctuary and Walrus Island Sanctuary.

When a critical habitat area includes private lands, the state does not have eminent domain, but does have authority to acquire land from willing sellers. No special areas permit authority exists over private land within refuges or sanctuaries, but private land within critical habitat areas is subject to the permit requirements. Permit authority means that if someone wants to develop his private land, he needs a special areas permit similar to the Corps 404 Permit required to develop wetlands. The state does not encourage creation of a special area that has an irreconcilable conflict within it.

The boundaries can and often do go beyond mean high water. However, the ADFG still regulates the fisheries harvest. Designation of a special area can not change regulations such as hunting, but through the planning process, recommendations can be made.

There is a statutory requirement to propose additional areas every year. The process starts by checking around the department for ideas, and then going to the public. There has not been any attempt at selecting sites to represent biogeographic regions in the state. Some people have suggested looking at what it takes to maintain major species. An attempt is being made to focus on selecting special areas of at least statewide, or national if not international significance. Recently, there are more and more local proposals, but these are often referred to the municipal programs. The Anchorage Coastal Wildlife Refuge statute says that municipal lands which are within the boundary under a cooperative agreement can be managed as part of the refuge, so municipal agreements can be included.

When a bill is being introduced into the legislature to create these areas, usually the costs are presented to the sponsor of the area along with an indication that it would be appropriate to have a fiscal note accompany the bill. Usually, however, the bill continues on without the fiscal note and the area gets established without any additional funding. In addition, through the department process, funds are requested but the funds are in competition with a wide variety of other items. Management of the area is low profile. The real strength of the program is that all the statutory and regulatory authority needed to administer and enforce the area is in place. The thing the program is not able to do is to build facilities in some of the more popular areas.

If there is no money to accompany the designation, it would take at least five years to develop the management plan. The major cost of designating an area occurs when the management plan is being prepared, and depends, in part, on how much permitting is needed. The permit process starts immediately, after designation and is not dependant on the completing of the management plan.

Getting an area created requires not only getting local support, but also sponsoring local legislation. Good legislation is the basis for good management. The old legislation has all of the authority, but does not have the detail of the newly created areas.

Once in the system, it would take a legislative action to remove a site from designation. This has not been done to date, but trades have taken place. Arranging a trade also takes a legislative action. The special areas program would not be in favor of acquiring something that somebody thought might have a different use down the road. There have been suggestions to include a sunset clause on some of these areas, but it does not seem appropriate to just protect fish and wildlife for a short period of time. Once the time has been dedicated to developing a management plan, designation should provide long-term protection.

Although the statutes do not explicitly define the differences between refuges and sanctuaries, sanctuaries are generally smaller and more closely managed, including public access. The refuges tend to be larger and a permit is not required for public access; however, permits are required for off-road vehicles. Sanctuaries tend to be the most restrictive in the way they are managed. This is more a matter of practice than statutes. Critical habitats are typically aimed at a whole population or specific life phase.

The real significant difference between these special areas and other state lands is that on state land, the Commissioner of Natural Resources is responsible for balancing uses, and the ADFG has an advisory function. The ADFG recommends what is good for wildlife and fish, which enters into this balancing act. Whereas in special areas, the Fish and Game Commissioner has a direct role and statutory authority to only allow things that will be compatible with maintaining fish and wildlife. The reason the program is able to take on all of these new areas and really never see it reflected in its budget is that one of the primary functions of the Habitat Division is an advisory role to ADNR. The ADFG is reviewing all of those actions on regular state lands anyway, but when its role is advisory, comments are sent and the results are never really known; in contrast, when special area

permits are issued, the same comments would be implemented into a permit. That is what really allows the program to keep accepting these new areas and still operate under the same level of management.

The ADFG does not budget for managing these areas on an area by area basis. The ADFG fish and wildlife biologists manage their respective resources on all state lands, no matter if the area is established as a special area. The additional function the special areas program provides these areas is the development of a management plan. It costs about \$70,000 to develop a management plan. There is a public information program which includes a brochure for each area plus one statewide brochure, at a cost of about \$2,000 per year on each area. There is no budget for signs.

There are three or four special areas for which oil and gas permit applications are common. Other typical permit applications are requests for roads, cabins, duck lines, and camping for entire seasons. Many special areas are open for mineral entry, although, most do not have any mineral potential. Some areas are withdrawn from mineral entry. The Anchorage Coastal Wildlife Refuge is legislatively closed, but others have been closed administratively. Basically the area is as good as the legislation. Recent designations (since 1985) have more detail in the statutes that create them. So an area can be closed for, example, to oil and gas leases by the statutes. If the legislation is silent, then administrative authority can still be used. One advantage of the management plan process is that potential multiple uses are examined and certain activities can be regulated under the plan.

Timber harvest is allowed if it benefits the purposes for which the area was created. There are not any prohibitions against habitat manipulation or enhancement, but neither has there been funding to do so.

There is one full-time habitat biologist in the program to coordinate policy development, and develop management plans statewide for all these different areas. Each year, one management plan is completed, and sent through a public planning process. ADFG habitat biologists administer the necessary permits and conduct the field inspections. The reason legislators have established these areas is that it guarantees that the lands will remain in public ownership and that they are managed for fish and wildlife habitat and for public use.

These designations seem to really make a difference. These areas get a little more attention in terms of public use management. Trespass cabins have been a big problem on state lands. Those have really been cleaned up on our refuge system. An inventory has been completed and they have either been permitted or removed.

RESTORATION AND THE ENVIRONMENTAL/
POLITICAL/USER CONTEXT
Discussion

It is evident that there are many commercial interests to consider in restoration planning including the fishing, tourism, mining, and timber industries. There is a certain volatility because the economic interests rise and fall. There are also political boundaries of state, federal, and native lands and the sensitivities that go with those. There are native interests from the regional corporation level down to village corporations which have the option of being either profit or non-profit corporations.

It seems that all of the sanctuaries, parks, etcetera that have been discussed have had very strong support locally and politically. Smaller parks (around 600 acres) could be slipped through the designation process with just a few signatures, but larger parks typically take some type of legislative or congressional action. Also, the consequences of poor support must be considered. Some kind of support is required, whether it be the local "grass roots" supports that brings the legislators around or the politicians and the scientists that can sell it. There must be some compelling reason for creating the area. If someone asks the question, "what if we don't do it," and the answer is that there will not be much difference, then it is not likely to be successful. If the compelling reason is good science, but it is not necessarily a politically favorable action, it may also fail.

Another option is to expand an already existing refuge or sanctuary rather than creating a whole new area. In the case of the native lands in Kenai Fjords National Park, a purchase may be possible. Public participation is always included in the process of expanding boundaries of a protected area. A temporary emergency closure of an area for less than 30 days does not require a public process, but anything else does. A sanctuary in federal waters could theoretically be designated by the Secretary of Commerce in the face of public opposition, but is not likely to happen. Because there is so much public land in Alaska, it may be fairly easy to extend boundaries of jurisdiction, but it seems that the key is to include some of the water area when doing so.

DISCUSSION AND SYNTHESIS

The following are questions to consider in our discussion:

- Is protection of marine habitats necessary and desirable for restoration?
- Is the existing management capability sufficient?

- If additional protection is desirable, should we
 - expand existing management?
 - use current designations?
 - create new designations?
- What do existing designations have to contribute to the restoration of individual resources or an ecosystem?
- How do different designations interact with each other and with other management capabilities and needs?
- How should choices be analyzed and recommendations be made?

We need to consider the protection of habitats to maintain their present capacity to support life and to enable the recovery of an injured resource as part of the restoration process. In other words, restoration should not only include efforts that directly enhance populations, but also should function to maintain habitats so populations can recover on their own. The goal of the restoration efforts is to restore injured resources. The regulations state that a habitat can be restored to the baseline of where the ecosystem would have been had there not been an oil spill.

A firm rationale for protection of habitats as a means of restoration must be established if it is to be successful. It must be determined if protection of habitats is necessary, and also, if protection in itself is sufficient to attain restoration goals. The feasibility of other options must also be examined.

There is a need to evaluate how resources in designated areas are currently being managed. If the mandate of existing designated areas require the maintenance of existing resources, then, theoretically, restoration efforts would not be impacted by current management practices. It is essential to determine whether the restoration process can be accomplished under the existing management mandates of designated areas, or whether something more is needed. If current mandates are insufficient, we need to determine if restoration goals can be achieved through modifying existing mandates, or developing new protection designations. We also need to determine if the state or federal governments would support the implementation of new mandates or designations.

Once it is determined that protection is a necessary element of the restoration process, we need to identify the types of things which would be needed to provide further protection. Several determinations will need to be made:

- determine that the resource was injured as a result of the spill,
- determine that there is a continued threat to those resources, and

- determine that current management systems do not provide sufficient protection and that the resources are likely to degrade further or fail to recover from spill injuries.

Once these factors are established, we have to determine what will need to be done to implement an adequate protection program. We need to identify the political resources which will be needed to accomplish these tasks (e.g., public involvement, congressional assistance). Then, we will have to develop a strategy. If it is determined that the present designations are not sufficient to meet the goals of restoration, we must identify designation structures which would facilitate recovery of injured resources.

There would also be a political usefulness to the development of a designated status for habitats targeted for restoration. Agencies investing large sums of money in restoration may feel that some kind of direction in managing it is needed, such as that provided by official designation.

Implementation of a designation status would also put a clear emphasis and focus on habitat restoration in those areas. That provides a basis for getting a mixture of planning and research through various means. Very often, especially in the case of marine sanctuaries and estuarine reserves, the planning process provides a vehicle for multi-agency coordination and communication. It aids in understanding other agencies rules and regulations and how they apply.

In designing designations strategies, the ecosystem as a whole should be taken into consideration. The current designation mandates, in most cases, do not include the marine environment. There is no unification of regulations which adequately cover the entirety of the coastal ecosystem in areas we want to protect. We might want to think about the inclusion of the marine environment under designations programs we might propose. A few states have begun to do ocean management planning.

Within the state of Alaska, the Alaska Department of Environmental Conservation (ADEC) classifies waters by various uses. There are seven different use categories for freshwater criteria and an additional seven categories for marine criteria. For marine waters these categories include water used for: aquaculture; fish processing; industry; contact recreation; secondary recreation; growth and propagation of fish, shellfish, aquatic life and wildlife; and harvesting for consumption of raw mollusks or other aquatic life. Different levels of protection are applied depending on the classification of the water. Currently, most of the Alaskan state waters are classified under less stringent categories. However, waters can be reclassified through the public hearing process to provide more stringent protection. Enforcement of these criteria is by the ADEC; however, the state must provide sufficient evidence to prove that criteria would be violated to deny the proposed use.

In contrast, within a marine sanctuary, the burden of proof that an action is not going to harm the resource is on the user, not the sanctuary. This is statutory authority from the Title III. Similarly, under the Clean Water Act, if a user wants to exceed the standards for

a water body as it is classified, that user must prove that the desired action, such as a discharge, will not degrade the environment.

During the oil spill, the Environmental Sensitivities Index (ESI) was used extensively to identify ecologically sensitive coastal habitats in the path of the spill. Because many of these areas were already mapped, we were able to characterize them prior to the spill, or in some cases afterward. What we learned was that this technique provided the framework for identifying and categorizing sensitive habitats in Prince William Sound. It would be prudent to expand these surveys to other areas in the Sound to identify all of the sensitive areas and provide a basis for consideration of some areas for protective designation.

The surveys we conducted did not include political, public, or cultural attributes. There would have to be some matrixing of these issues along with ecological sensitivity to provide guidance on the use or level of protection of designation. At the very least, it would provide a vehicle for documenting the special attributes of areas within the Sound. This would not only serve to identify potential areas for protection now, but could also be used as a basis for restoration of habitats from future impacts.

There is a need to define just how the protective designation of an area acts as a restoration process. The protective designation would mandate that particular resources within the area are of high priority and can not be compromised by other uses. This establishes a precedence and eliminates potential conflicts to the health of that resource by other users. Once properly defined, the protection designation would allow environmental quality of that resource to be maintained, allow managers to take pressure off that resource so that it does not further degrade and perhaps allow enhancement of that resource without interference from competing users. The underlining premise is that it would allow a resource time to restore itself, without the possibility of further degradation to the population or its environment. Time is one of the main restorative tools.

Another important factor in the establishment of protected designation areas is the provision in the guidelines for long-term monitoring programs aimed at management oriented issues. One of the main objectives in the Estuarine Research Reserve Program and Padilla Bay is long-term monitoring to answer the questions related to damage assessment and the determination of potential impacts of proposed changes to land or water use within the area.

The attorneys on the Exxon case have made it clear that research and monitoring cannot be a primary use of the funds that are derived from the settlement. The money must be spent in a way directly affecting restoration, either through acquisition, management, or designation of these sanctuaries. However, in the memorandum of agreement which has never been signed, the definition of restoration explicitly includes long-term monitoring and research.

Given the low level of development and access pressure in the state, do areas have to be protected through designation to encourage restoration? Designation would provide the mechanism and authority to enforce regulations and maintain the integrity of the

ecosystem. It would also provide the impetus for authorities to work cooperatively to maintain the ecosystem. In some cases, those capabilities exist without the designation; however, designation would make cooperative efforts more likely.

Several years ago, NOAA proposed designation of a sanctuary in Alaska. Would it be possible for NOAA to resurrect that proposal now given the current need for protecting areas in Alaska? It is possible; however, the site would have to meet the basic test in Title III; that being: does the site possess natural resource or human use values of special national significance? If the answer is yes, the site could be put on the SEL and considered further.

Going back to the sufficiency question, one of the things that needs to be determined is whether the existing authority has the ability to implement restoration activities. Further, whether that existing management authority could provide future protection of the restoration activity from similar types of problems. If not, then it is probably not sufficient. An example would be the decline of the abalone in the Channel Islands. In this case, the managers have the authority to document the decline, but do not have the management authority to do anything about, and neither does the sanctuary. In these situations, each of the agencies involved must agree that restoration is necessary, and be willing to take whatever action is needed to protect the resource.

Perhaps an entirely new designation is in order, such as an ecosystem reserve, to take into account the ecological interactions. A joint designation of an estuarine reserve and a sanctuary could be designed to have an integration of the regulations and management programs. It might also be desirable to couple a federal designation with one of the state designations to provide some underlying management authority.

The public wants to see the area returned to the way it was. However, they do not want to feel that they suddenly find themselves shut out of a newly restricted area. One advantage of creating a new kind of designation is that it can be designed to deal with the issues of this specific incident, the Exxon Valdez oil spill, while not necessarily carrying nonapplicable restrictions which might come with an already existing program. A precedent may have been set in the case of the Yellowstone fire.

In creating a new designation, you could create a new authority or could borrow concepts from existing ones. In the case of the proposed Alaska Coastal Biological Reserve bill, the public perception was that it was something new, but in fact it was borrowing from existing authority. A sunset clause could also be included, for example in the year 2130, an area reverts back to the same status it was at the time of the spill. It is up to Alaska to decide if it wants sunset legislation.

We have to ask whether we should be taking areas which were damaged by the oil spill and protect them while they are recovering by setting up a reserve, or should we take an area that was not damaged and protect it while it is still in good condition? Both approaches are actually valid. Protecting an existing healthy habitat is the equivalent resource approach, whereas protecting the injured resource is a more direct restoration

approach. Almost any area we were to protect in Prince William Sound, unless it were a very small discrete unit, would most likely encompass both healthy and hard-hit areas.

FINAL INSIGHTS/COMMENTS FROM GUESTS

Miles Croom (NOAA): National Marine Sanctuaries are designed to coordinate existing authorities, identify gaps in regulatory management structures, and enhance ecosystem protection. I think they play a valuable role from that standpoint.

Jack Sinclair (ASP): I have two points to make, one dealing with state marine parks and the other with state lands which border critical federal lands or wilderness areas. The state marine parks were set up to maintain natural, cultural and scenic values; maintain fish and wildlife resources; and facilitate recreation and tourism. But, without some sort of scientific knowledge of our resources, we are just laymen overseeing a wonderful resource. Unless we somehow designate the water body that is within the marine park as having special qualities that would coincide with a state refuge, sanctuary, or critical habitat, we are just waiting for the next incident to find out what really happened. Right now, there is no incentive to study these areas, unless we can get some university to study them. I feel like the lack of research in the marine areas leaves a big hole in our management.

My other point is related to land designations for species protection, such as sea otters. I can think of one or two areas which might be suitable for that sort of program. One example is the northwestern lagoon of Kenai Fjords, which is prime habitat for otters. This site would fit the needs of a state sanctuary designation. I think there are options available which we could realistically consider right now.

I am not trying to go against the grain of the Prince William Sound Management Plan, but that document was completed before the spill, we look at things a little bit differently now.

Anne Castellina (NPS): As a Park Service Manager, I do not feel that I have enough management discretion to protect the park. What is needed is some sort of cooperative management agreement with the state, designating adjacent offshore areas, or joint management with USFWS. It does not really matter who actually owns or manages the area, as long as it is managed as an ecosystem. We, as managers, need to start working on restoration programs ourselves and not wait for the settlement. We have to get on with management now and hope that some money for it comes along at some point.

Ed Ueber (NOAA): The important thing to do is to communicate with other agencies, and gain social and political support for the types of designations we would like to establish. Efforts will likely fail without this support. Tailor regulations specifically for the specific needs of the designations proposed (e.g., protection, authorized activities). I think that any designation proposed can be made to fit into the act.

Debbie Clausen (ADFG): Whatever proposal is finally drafted needs to be compelling, or it will not sell. People need to see that without the proposed designations, the areas could not be restored to their previous conditions.

Terry Stevens (WDOE): Getting people to buy into this type of restoration program is really important. They need to feel a part of the process. We also need to look at the whole ecosystem and not just those portions that the tourists see. Things like cooperative management, including adjoining area, or joining designations may be helpful to our overall objective of complete restoration.

C. Mack Shaver (NPS): No single designation will do all of the things that are necessary to fully restore and protect ecosystems within Prince William Sound. No matter what set of designations are ultimately selected, it is imperative that the public and agencies involved are committed to the same goals which are the protection and restoration of the ecosystem.

John Martin (AMNWR): We need strong public involvement and support in these efforts. We can not leave the local people feeling like they have had no input into the process. Without their support, I think our efforts will fail.

Stan Senner (ADFG): To date, public participation in the restoration planning process has been lacking. The work group made substantial efforts to inform and involve the public through the restoration symposium and numerous public meetings in the smaller communities. However, the veil of litigation has essentially dampened public participation opportunities. Once the court cases are settled, public participation will be further encouraged. We really need public participation and support during the designation process. OSRWPG is looking forward to the time when the public can be brought back in to the restoration planning process. Unfortunately, because of the pending court cases, we have to be confidential in our preliminary restoration planning for now. Hopefully, once funds are released, there will be enough flexibility in the ways the funds can be spent, that we can enjoy the full participation of the public in designing the final restoration plans.

Ed Ueber (NOAA): Perhaps the confidentiality is hurting the case, because the public is uninformed of the magnitude and persistence of the impacts from the spill, and they could get the impression that restoration is not needed. Maybe there should be some sort of change in departmental policy to better inform the public and gain their support.

Stan Senner (ADFG): I do not think that is possible at this point.

Terry Stevens (WDOE): Has anyone taken the goals and objectives of the restoration effort and evaluated the salient points within any of the designation classifications to determine what realistic opportunities exist?

Stan Senner: We will be doing those types of analyses after this workshop. We wanted to get input from this group first.

Appendix A

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