



## **Accomplishments of the Alaska Region's Habitat Conservation Division in Fiscal Year 2004**

This report provides a summary of Habitat Conservation Division (HCD) activities in support of the sustainable management of living marine resources from October 1, 2003 through September 30, 2004.

HCD carries out NOAA Fisheries' statutory responsibilities for habitat conservation in Alaska under the Magnuson-Stevens Fishery Conservation and Management Act, Fish and Wildlife Coordination Act, National Environmental Policy Act, Federal Power Act, and other laws. HCD has two principal programs: identification and conservation of Essential Fish Habitat (EFH) through fishery management, and environmental review of non-fishing activities that may adversely affect EFH or other habitats for living marine resources. HCD also supports habitat restoration projects in conjunction with the NOAA Fisheries Restoration Center.

HCD has staff located in the Alaska Regional Office in Juneau and a field office in Anchorage. HCD coordinates extensively with other groups to facilitate habitat conservation. Within NOAA, such organizations include the Sustainable Fisheries Division and Protected Resources Division in the NOAA Fisheries Alaska Regional Office; the Alaska Fisheries Science Center; NOAA Fisheries Office of Habitat Conservation; NOAA General Counsel; and NOAA Ocean Service's Office of Response and Restoration. HCD also works in close partnership with other agencies and organizations, including the North Pacific Fishery Management Council, Army Corps of Engineers, Environmental Protection Agency, U.S. Fish and Wildlife Service, Minerals Management Service, U.S. Forest Service, Bureau of Land Management, Federal Energy Regulatory Commission, Alaska Department of Fish and Game, Alaska Department of Natural Resources, and a variety of industry and conservation groups.

### **Essential Fish Habitat and Fishery Management**

#### Habitat Areas of Particular Concern (HAPCs)

HCD formed an interdisciplinary team to develop proposals to identify and manage HAPCs in waters off Alaska. The team, comprised of staff from HCD, the Alaska Region Analytical Team, the Alaska Fisheries Science Center, and the North Pacific Fishery Management Council, assembled four proposals that NOAA Fisheries submitted to the Council for HAPCs to protect Gulf of Alaska corals, Aleutian Islands corals, a Gulf of Alaska pinnacle, and seamounts in the Exclusive Economic Zone. The proposals, submitted in response to the Council's public solicitation, represented the first time NOAA Fisheries has initiated specific management proposals expressly to encourage the Council to protect Alaskan habitat features to support commercial fisheries.

Following submission of the proposals, HCD assisted Council staff in conducting a technical review of all proposals submitted, and HCD provided guidance for organizing the diverse proposals into a range of alternatives for analysis in an Environmental Assessment. The proposals submitted by NOAA Fisheries proved to be very influential with the Council, the fishing industry, and other stakeholders, largely shaping the Council's selection of final alternatives to be analyzed. HCD subsequently assisted Council staff with the analysis, providing technical expertise and ensuring the draft Environmental Assessment was completed on schedule.

#### EFH Environmental Impact Statement

NOAA Fisheries and the Council continued work in FY04 to develop an Environmental Impact Statement (EIS) to reexamine the identification of EFH in Alaska and the measures needed to minimize the effects of fishing on EFH. The EIS is very controversial because substantial differences of opinion exist as to the extent and significance of habitat alteration caused by bottom trawling and other fishing activities, which has led to litigation. Moreover, available scientific information provides an incomplete understanding of the interactions between managed species and their habitats, as well as the threats to those habitats from fishing and non-fishing activities.

HCD coordinated the efforts of the EFH EIS team to incorporate Council comments into the draft EIS that was released for public review in January 2004. HCD oversaw the processing of over 33,000 written public comments – apparently a record for the most ever on a NOAA Fisheries EIS – and ensured that all comments were coded and categorized to facilitate responses. HCD led the effort to develop thorough written responses to the comments and highlighted major issues from the comments for consideration by the Council.

HCD also facilitated an independent peer review of a key portion of the draft EIS: the analysis of the effects of fishing on EFH. HCD formed a team including the Alaska Fisheries Science Center, Sustainable Fisheries Division, Regional NEPA Coordinator, and Council staff to develop the scope of work for the Center for Independent Experts review. HCD kept stakeholders informed about the review, made all review materials available via the internet, and organized and ran the meeting between the review panel and NOAA Fisheries scientists. The review concluded that the model developed by the Science Center was a reasonable approach to determine the effects of fishing on habitat features, and recommended a number of improvements to the way agency scientists assessed the influence of habitat disturbance on fish stocks. HCD worked with the Science Center to develop a written technical response to the review panel's recommendations and to devise a plan for incorporating responsive information into the final EIS. The independent peer review will yield a stronger analysis in the final EIS, ensuring that final decisions by the Council and NOAA Fisheries are based upon a rigorous examination of the best available scientific information.

#### Programmatic Groundfish EIS

HCD staff assisted the team preparing the final Programmatic Supplemental EIS for the Alaska groundfish fisheries. HCD staff reviewed sections of the habitat analysis, provided recommendations to improve the evaluation of effects to EFH, and contributed to the responses to public comments. HCD also coordinated with the Programmatic EIS

team to improve upon a common section in both the Programmatic EIS and the EFH EIS that explains the relationship between the habitat analyses in the two documents.

#### Other Fishery Management Actions

HCD staff advised and assisted staff from the Alaska Region's Sustainable Fisheries Division regarding a number of other fishery management actions during FY04. HCD staff contributed to the EIS for rationalization of the crab fisheries, reviewed the Environmental Assessments and draft decision memoranda for a variety of in-season management actions and for the annual harvest specifications for the groundfish fisheries, and completed an EFH consultation to evaluate potential effects on habitat from setting the annual specifications.

### **Environmental Review to Minimize Habitat Losses**

#### Overview

HCD personnel conducted a wide variety of environmental review activities during FY04. HCD provided consultative services and technical assistance to regulatory agencies, industries, land owners, and others. Staff reviewed approximately 600 actions proposed by federal or state agencies and evaluated potential adverse effects to living marine resources and their habitats, including EFH. For about 160 of those actions, HCD prepared written conservation recommendations that NOAA Fisheries submitted to the agencies responsible for authorizing, funding, or undertaking the proposed actions. The remainder of this section provides examples of successful environmental reviews conducted by HCD staff.

#### South Lena Subdivision

HCD and Alaska Fisheries Science Center personnel completed a dive survey of the location of a proposed sewage outfall pipe for a housing development in Juneau. The dive survey documented a significant colony of sea pens, a soft coral that provides refuge habitat for a variety of fish species. As a result of this new information, the municipality agreed to redesign the subdivision to include septic systems and drain fields for each house lot, eliminating the need for a sewage outfall in marine waters and avoiding potential damage to the sea pen colony.

#### Auke Nu Cove Seafood Processing Dock

A seafood processing company that proposed a new facility and dock in Juneau agreed to extend the dock to reduce potential impacts to productive eelgrass habitat. HCD and the Alaska Fisheries Science Center conducted dive surveys and compiled information about cumulative impacts to eelgrass beds in Auke Nu Cove as a result of piecemeal development for a ferry terminal, tour boat operations, and other facilities. HCD worked with the applicant and other agencies to investigate options for avoiding further loss of eelgrass habitat. Although complete avoidance was not practicable, HCD educated users of the area about fish habitat and convinced the applicant to extend the dock into deeper water to minimize disturbance to the eelgrass beds.

### Mendenhall Wetlands

Juneau International Airport has developed plans for a variety of safety and operational improvements that could require filling adjacent tidal wetlands. The Federal Aviation Administration is preparing an EIS for the project. In the interim, the airport sought local approval for a proposal to remove some of the affected wetlands from the Mendenhall Wetlands State Game Refuge, apparently in an effort to streamline federal permitting for wetland development. HCD developed an analysis that pointed out the ecological value of the wetlands as well as the legal restrictions on changing protective status for wetlands as a way to avoid regulatory scrutiny. HCD argued that the EIS process offered the appropriate forum for developing a preferred alternative that balances airport safety improvements with protection of EFH and other resources. Based on this input, the city assembly decided to defer action pending a more complete review of alternatives for minimizing wetland impacts.

### Coastal Fill in Sitka Sound

HCD staff reached consensus with a developer and the Corps of Engineers to modify a proposed commercial facility to reduce impacts to Pacific herring spawning habitat. The project included a proposal to place fill material below the high tide line for a two-story building with office space and gear storage. HCD raised concerns that the fill would affect an adjacent healthy eelgrass bed within the core spawning area of the Sitka Sound stock of Pacific herring, and could impact juvenile salmon from several nearby streams. HCD worked with the applicant and staff from other agencies to devise several modifications to the project design and the construction plans, reducing environmental impacts without compromising the purpose of the project.

### North Slope Oil and Gas Development

HCD's participation in the review of the proposed Alpine Satellite oil and gas development led to design modifications to ensure that all bridges span the full floodplain and all culverts provide fish passage.

The U.S. Department of the Interior approved a plan by Conoco-Phillips and Anadarko Petroleum Corp. to develop five tracts around the Alpine field on the North Slope of Alaska near the Beaufort Sea. Development of these fields, which hold more than 330 million barrels of oil, includes building new roads, bridges, pipelines, and drilling pads near major rivers and smaller streams that support anadromous fish harvested by residents of a native village. Production is slated to start by 2006, and will supplement production from the existing Alpine fields, which hold 429 million barrels and have a daily oil output of about 100,000 barrels. The permit conditions suggested by HCD will minimize the effects of the development of fishery resources.

### Major New Developments in Upper Cook Inlet

HCD helped to improve coordination for fisheries habitat studies for three large projects that are being considered in Knik Arm. The Port of Anchorage is planning a large expansion to include road and rail extension, a new terminal, and dock expansion. Development of Port MacKenzie would include a large tidelands fill to accommodate a new boat ramp and associated parking. The Knik Arm Bridge Authority proposes to

build a 7,000 foot, two-lane highway bridge and causeway from north of Port MacKenzie to Cairn Point, then south along a new road near the Port of Anchorage expansion.

HCD staff noted that these projects will have cumulative effects on fish, marine mammals, and their habitat in Knik Arm. HCD worked with other resource agencies to draft a conceptual fisheries study plan to address data needs and presented this plan to the three different project proponents. Due to HCD's efforts, the project proponents agreed to work collectively to fill the highest priority data gaps. These studies will help regulatory agencies make informed decisions about the impact of these projects on fishery resources.

#### Streamlining the Environmental Review of Transportation Projects

HCD staff worked with other resource agencies, the Federal Highway Administration, and the Alaska Department of Transportation and Public Facilities to finalize an agreement to ensure early and effective consultation and coordination for highway projects. The agreement is designed to expedite and improve the environmental decision making and permitting for federal-aid transportation projects. The intent is to allow signatory agencies to focus staff resources on major projects while ensuring the adverse effects of minor projects are identified and addressed.

#### Southeast Alaska Ferry Terminals

HCD persuaded the Alaska Department of Transportation and Public Facilities to adopt measures to minimize habitat impacts associated with three ferry terminal projects. For proposed improvements to existing ferry terminal sites at Pelican and Juneau, the modifications included timing restrictions to reduce effects on salmon and herring, sound attenuation to reduce effects on marine mammals, keeping oil spill response equipment on site, and monitoring to assess possible effects on nearby eelgrass beds. For a proposed new ferry terminal at Blind Slough near Petersburg, HCD's advice led to the adoption of similar measures plus a commitment to develop a compensatory mitigation plan to offset unavoidable impacts to undisturbed habitats.

#### Forest Service Fish Passage Working Group

HCD staff participated actively in a Tongass National Forest Fish Passage Working Group to develop a process to set priorities for replacing culverts that do not provide adequate fish passage. HCD provided input on a draft model to assess the biological significance of stream reaches for which access would be restored by providing effective fish passage. HCD also contributed to a draft matrix that would be used to inform decisions on which culverts to repair. The Forest Service anticipates that the working group's products will have regional and national relevance.

#### Kensington Mine Project Monitoring

HCD staff facilitated an agreement between state and federal agencies, a mining company, and The Nature Conservancy for monitoring in Berners Bay. The agreement will help to fund a pilot project initiated by the Alaska Fisheries Science Center to monitor Berners Bay water quality, aquatic vegetation, and fish assemblages to detect changes as development increases in the bay. HCD staff will participate in the monitoring as well.

## **Habitat Restoration**

### Community-Based Restoration Projects

HCD and NOAA Restoration Center staff coordinated with various local, regional, state, and federal agencies as well as non-governmental organizations to evaluate potential habitat restoration opportunities in the Matanuska-Susitna Borough, Anchorage, and Southeast Alaska. HCD staff also reviewed numerous proposals for funding from the NOAA Community-based Restoration Program and provided technical comments and funding recommendations.

### Identification of Habitat Restoration Priorities

HCD and NOAA Restoration Center staff worked together to develop a list of regional restoration research and project priorities for FY05 and beyond. This prioritized list is being used by the NOAA Restoration Center to guide regional restoration planning and funding efforts.

### Interagency Collaboration on Habitat Restoration

HCD and NOAA Restoration Center staff participated in an interagency team that is developing a bioengineering research project on the Kenai Peninsula.

HCD, NOAA Restoration Center staff, and the US Fish and Wildlife Service planned and co-hosted a statewide Interagency Stream Restoration and Bank Stabilization Workshop. More than 80 state and federal agency representatives participated in the two-day meeting. The purpose of the workshop was to convene Alaska's restoration professionals to strengthen interagency communication and promote collaboration on important aquatic habitat restoration issues.

HCD and NOAA Restoration Center staff participated in the Alaska Department of Transportation's Haines Highway Mitigation Interdisciplinary Team, participating in site visits, reviewing mitigation monitoring reports, and providing feedback on project successes, deficiencies, and supplementary mitigation actions.

## **Other Noteworthy Activities**

### Shotgun Cove Habitat Assessments

HCD staff organized and coordinated a cooperative study with the U.S. Fish and Wildlife Service to collect bimonthly baseline information for fish and habitat in Shotgun Cove, near Whittier in Prince William Sound. The cove is a likely site for substantial future harbor development. The team led by HCD is documenting the presence and relative abundance of juvenile and adult salmon, herring, forage fish, and other organisms as well as delineating eelgrass beds and shoreline habitats. The resulting site-specific information will assist local, state, and federal agencies in planning development activities to account for impacts to fishery resources.

HCD staff also invited Alaska Fisheries Science Center researchers to participate in the data collection using an established nearshore habitat assessment protocol, enabling a portion of the data to be used in ongoing syntheses including the stock assessment and fishery evaluation for Gulf of Alaska groundfish.

### Vessel Safety

HCD organized and sponsored small boat safety training for Regional Office and Science Center personnel. The training covered vessel operations, emergency procedures, and survival skills, improving safety for staff members who use small vessels.

### Diving Operations

HCD divers conducted a variety of dives to assess habitats at risk from proposed development activities in southeast and south central Alaska, and also conducted regular proficiency dives. Examples of HCD dive operations include the following:

- Assisting NOAA Fisheries Auke Bay Lab staff in mapping a large colony of sea pens (a soft coral) off Lena Point in Juneau, which led to withdrawal of a proposed sewage outfall for a 60 lot housing subdivision;
- Mapping the seaward extent of an eelgrass bed at Auke Nu Cove as part of an annual assessment of the cumulative effects of development in Auke Bay;
- Conducting an investigation of the proposed Cascade Point dock location for the Kensington gold mine in Berners Bay

In many cases, HCD divers used their required proficiency dives as an opportunity to support research and education, such as collecting specimens for local aquaria and conducting a demonstration dive for elementary school students in Juneau who were able to participate from shore via a diver-held camera and shoreside monitor.

### Research Assistance

HCD staff participated in a research cruise aboard the NOAA Ship John N. Cobb and provided dive assistance for instrument recovery as part of a study conducted by the Alaska Fisheries Science Center to determine early life history habits of juvenile sablefish using hydroacoustically tagged fish.

HCD staff participated in a research cruise aboard the R/V Pandalus with the Alaska Department of Fish & Game and the Kachemak Bay National Estuarine Research Reserve to complete a sea cucumber survey in Eldred Passage and Sadie Cove of Kachemak Bay.

HCD staff also participated in a study with the U.S. Fish & Wildlife Service and The Nature Conservancy to investigate the long-term, chronic effects of the 1989 Exxon Valdez oil spill. The study is documenting the bioavailability of hydrocarbons in Prince William Sound to understand how these contaminants move through the food chain to top level predators.

### Shore Zone Mapping

HCD funded a contractor to conduct mapping of coastal habitats in southeast Alaska using aerial photography and videography. The digital mapping system will be available on the internet for use in a variety of coastal resource management applications.

### United States - Chile Fisheries Cooperation Talks

An HCD staffer coordinated a U.S. - Chile bilateral fisheries meeting held in Juneau. NOAA Fisheries staff from around the country participated, as well as

representatives from the National Ocean Service, NOAA General Counsel, and Department of State. The agenda included a broad range of fisheries issues, leading to agreements on a variety of topics.

#### Training and Development

HCD staff participated in a wide variety of training and developmental opportunities during FY04. National workshops and conferences attended by HCD staff included a treated wood workshop (San Francisco), Alaska Forum on the Environment (Anchorage), American Fisheries Society meeting (Madison), West Coast Groundfish Conference (Victoria B.C.), and an oil dispersants workshop (Washington, D.C.). HCD staff also participated in many training opportunities, including National Environmental Policy Act training for analysts, NOAA diver training, small boat safety training, media training, GIS training, contract officer training, Endangered Species Act workshop, oil industry seminar, records management training, NOAA Library training, Myers Briggs Type Indicator training, management and leadership skills, Alaska water quality standards training, federal travel regulation training, first aid and CPR certification, conflict management training, and ethics training.