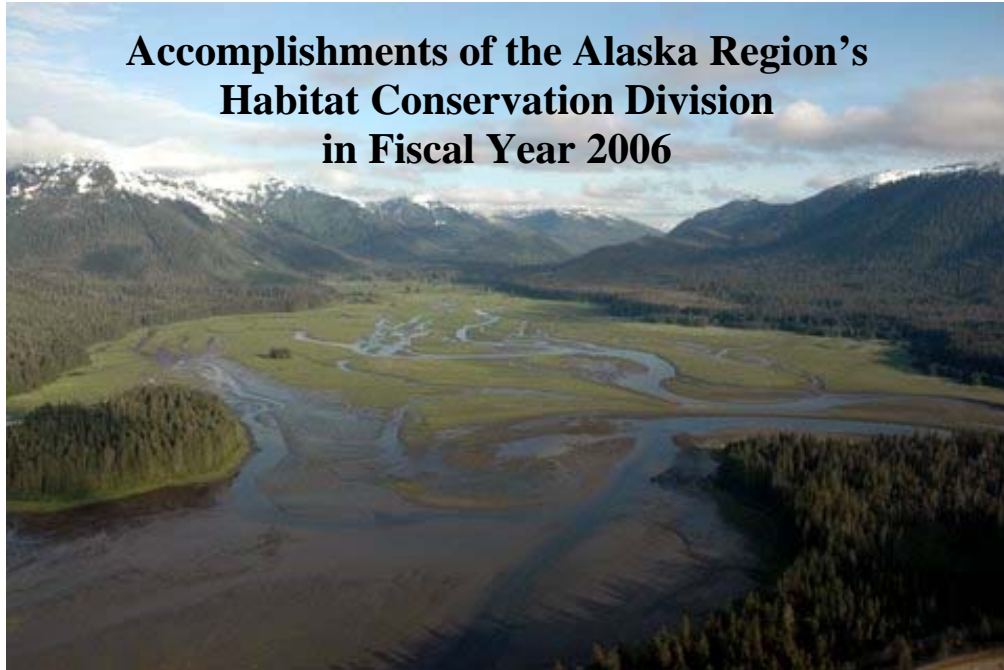


Accomplishments of the Alaska Region's Habitat Conservation Division in Fiscal Year 2006



This report provides highlights of Habitat Conservation Division (HCD) activities in support of the sustainable management of living marine resources from October 1, 2005 through September 30, 2006.

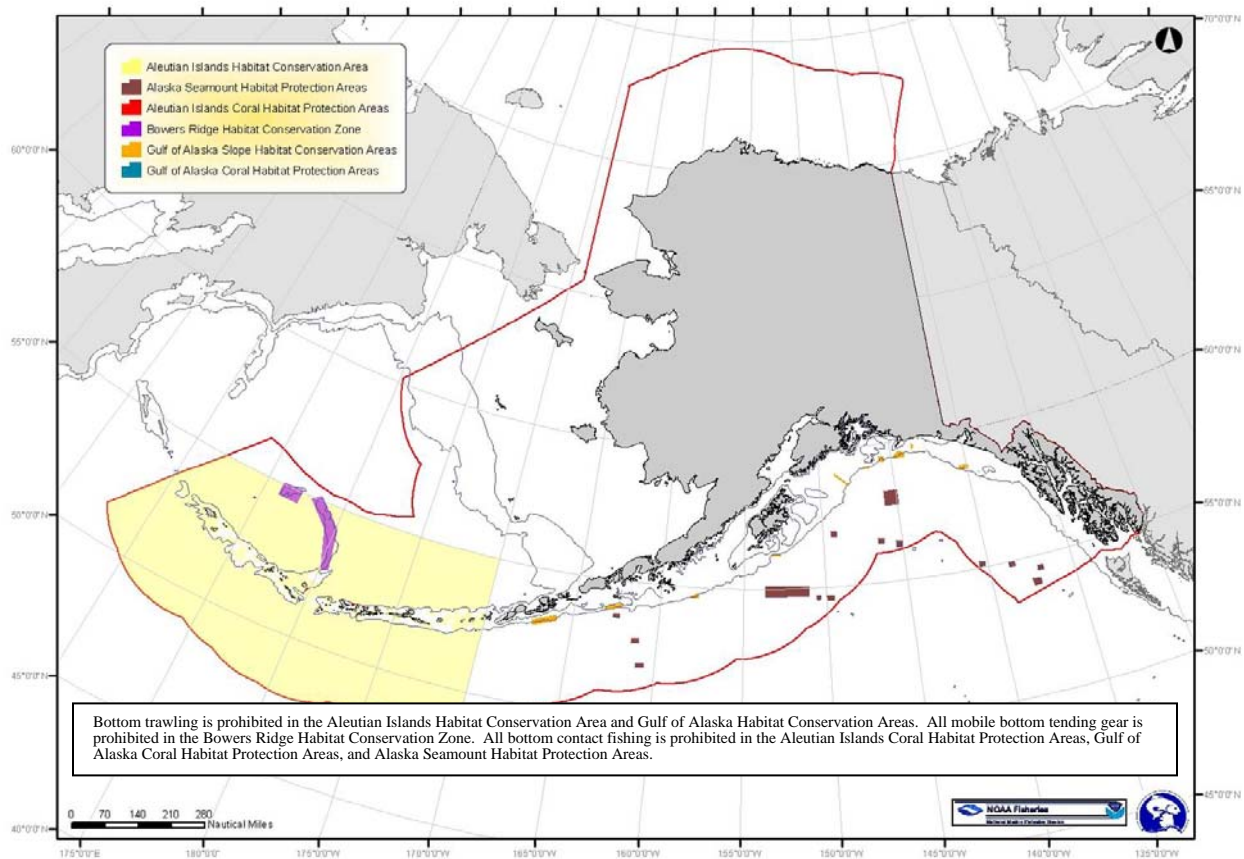
HCD carries out NOAA Fisheries' statutory responsibilities for habitat conservation in Alaska under the Magnuson-Stevens Fishery Conservation and Management Act, Fish and Wildlife Coordination Act, National Environmental Policy Act, Federal Power Act, and other laws. HCD has two principal programs: identification and conservation of Essential Fish Habitat (EFH) through fishery management, and environmental review of non-fishing activities to minimize impacts to EFH or other habitats for living marine resources. HCD also supports habitat restoration projects in conjunction with the NOAA 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; Alaska Department of Transportation and Public Facilities; and a variety of industry and conservation groups.

Essential Fish Habitat and Fishery Management

EFH Protection Measures for the Gulf of Alaska and Aleutian Islands

HCD worked in partnership with the Sustainable Fisheries Division to develop proposed and final regulations to implement extensive new fishery closures in the Aleutian Islands and Gulf of Alaska to minimize potential adverse effects of fishing on EFH. The closures stemmed from the 2005 *Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska* (EIS), and received a great deal of positive media attention. The EIS analysis found no indication that bottom trawling or other fishing in Alaska reduce the capacity of seafloor habitats to support healthy populations of managed species, yet precautionary measures may be warranted due to scientific uncertainty. The new closed areas to protect EFH were supported by the fishing industry, conservation groups, and other stakeholders. The final regulations took effect July 28, 2006. (See map below.)



EFH Protection Measures for the Bering Sea

HCD assisted the North Pacific Fishery Management Council with work related to a new analysis of habitat conservation measures for Bering Sea fisheries. HCD provided guidance to Council staff on the development of a range of alternatives for analysis, arranged for a contractor to undertake the socioeconomic analysis of proposed habitat conservation measures, and provided staff support for the Environmental Assessment that will be completed in 2007.

Ecosystem Approaches to Management

HCD provided support in several capacities for the North Pacific Fishery Management Council's initiatives to implement ecosystem approaches to management. HCD represented the Regional Administrator on the Council's Ecosystem Committee and served on a team that will help the Council develop a Fishery Ecosystem Plan for the Aleutian Islands. The Fishery Ecosystem Plan will inform future fishery management decisions by taking fuller account of habitat and ecosystem processes. HCD also represented the Regional Administrator on the Alaska Marine Ecosystem Forum, a newly formed group of 14 federal and state agencies that have jurisdiction over various activities that can affect the marine ecosystem. The purpose of the forum is to coordinate and share information to promote the sustainable management of Alaska's marine ecosystems.

Other Fishery Management Actions

HCD staff advised and assisted staff from the Sustainable Fisheries Division regarding a number of other fishery management actions during FY06. HCD contributed to the EIS for the annual harvest specifications for the groundfish fisheries to evaluate potential effects on habitat, and completed an EFH consultation. HCD staff also reviewed analyses and draft decision memoranda for a variety of regulatory amendments, and recommended modifications in some cases to ensure the analyses clearly reflected consideration of effects on EFH.

EFH Informational Workshops

HCD held EFH workshops in Anchorage and Juneau to inform partners and stakeholders about recent updates to the EFH descriptions, Habitat Areas of Particular Concern, and EFH conservation areas in Alaska. The workshops also included an overview of the interagency EFH consultation process as a refresher for federal and state action agencies to help improve compliance with statutory and regulatory requirements.

Environmental Review to Minimize Habitat Loss

Major New Developments in Upper Cook Inlet

HCD played a key role in the environmental review of three large projects in Upper Cook Inlet: the Port of Anchorage expansion, proposed Knik Arm bridge, and proposed Cook Inlet ferry. Studies requested by HCD have shown extensive use of the Knik Arm area by over 20 species of fish including all 5 species of salmon. NOAA Fisheries' comment letter on the Port of Anchorage expansion raised numerous issues that were then picked up by other agencies, mostly related to alleviating impacts on habitat for salmon and beluga whales. HCD continues to work with other federal and state agencies and project proponents to minimize the impacts of these large projects on living marine resources and identify suitable compensatory mitigation.

Auke Nu Cove Commercial Development

HCD persuaded the City and Borough of Juneau to redesign a proposed landing facility for commercial fishing vessels to minimize direct and indirect impacts to ecologically valuable habitat, and to protect the remaining intertidal habitat in the adjacent cove through a conservation easement. NOAA Fisheries was the only agency to object to a proposed Corps of Engineers permit for the facility located at Auke Nu Cove. The project as originally proposed would have

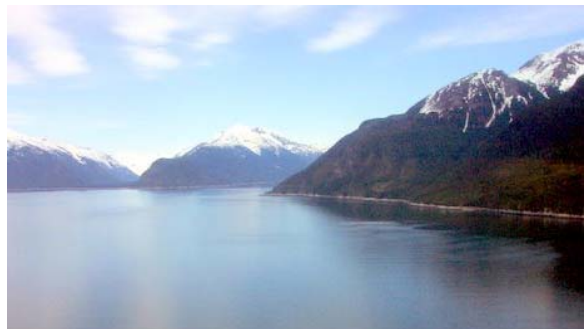
significantly degraded productive eelgrass and other intertidal and subtidal habitats. Through negotiations with the applicant, the project was redesigned to reduce environmental impacts while still achieving the basic project purpose. The applicant and HCD staff will also jointly complete experimental transplantation of eelgrass from the project site to a nearby site.

Haines Highway Project

HCD staff assisted the Alaska Department of Transportation with the monitoring of a major mitigation project associated with the Haines Highway. The mitigation includes six wetland creations, eighteen stream channel creations and/or stabilizations, two pond expansions, thirteen culvert replacements, and four areas of river mining reclamation. The flagship restoration project is the creation of a 7,000 foot long extension of 37-mile Creek and associated wetlands and feeder channels. The main channel extension includes a specified sequence of pools, runs, and riffles and the placement of woody debris and spawning and riffle gravels. Juvenile coho salmon and Dolly Varden char rear and overwinter in the main and feeder restoration channels, and coho salmon spawn in the 37-mile Creek extension. In addition, sockeye, Dolly Varden char, and Chinook salmon spawn in the main restoration channel.

Habitat Enhancement for the Juneau Access Project

HCD staff facilitated the development of an innovative mitigation project to offset impacts to coastal habitats from building a new highway 51 miles north from the Juneau road system along Lynn Canal. The mitigation plan includes constructing an artificial reef at a site that will benefit key forage fish species, especially Pacific herring. The University of Alaska will assist with site selection, materials and reef design, baseline studies, and post-construction monitoring. The Alaska Department of Transportation will pay for construction of the artificial reef, and installation is expected in May 2007. Other mitigation for the road includes substantial realignment to minimize wetland impacts, long bridge spans to minimize impacts to anadromous fish and key forage species for Steller sea lions, limiting human access to important estuarine habitats, and acquisition of key wetland parcels for preservation.



Natzuhinni Wetland Mitigation Bank

Alaska's first site-specific riparian mitigation bank is nearing the final public review stage. HCD staff served on the Mitigation Banking Review Team and assisted Sealaska (the regional native corporation sponsoring the bank) with establishing operational procedures to govern the sale of mitigation bank credits for wetland impacts authorized under Corps of Engineers permits. To establish the bank, Sealaska restored riparian habitat on a formerly unbuffered anadromous stream and enhanced and protected a productive estuary. Sealaska anticipates developing more site-specific mitigation banks in the near future.

Galore Creek Mine

HCD coordinated with British Columbia's Environmental Assessment Office to comment on a large new open pit mine for copper, gold, and silver in British Columbia with potential

downstream impacts to the Stikine River in Alaska. HCD worked in conjunction with other U.S. agencies to help influence the location of the preferred access route to decrease potential impacts to the Stikine River and to increase the amount of monitoring proposed.

Government Creek Realignment

HCD staff assisted the Alaska Department of Transportation with the development of a major mitigation project associated with the Ketchikan Airport runway safety area upgrade. The mitigation involves constructing a new channel to reroute an anadromous stream at the south end of the runway and constructing an estuary where the new channel meets Tongass Narrows. HCD was part of an interdisciplinary team of state and federal agencies that met over a 2 year period to design the habitat goals and features of the new stream bed and estuary. HCD was instrumental in assuring that a monitoring plan was developed prior to construction to establish performance measures for the new stream and estuary and to develop a method for addressing any deficiencies. The stream and estuary provide habitat for pink, chum, and coho salmon. The new stream channel will enhance coho rearing habitat over the existing channel and should result in a net benefit to salmon.

Habitat Restoration and Protection

Anchorage Salmon Restoration Task Force

HCD served on a Salmon Restoration Task Force to aid the Municipality of Anchorage with salmon restoration plans for three watersheds. The municipality received \$5 million from the Pacific Coastal Salmon Recovery Fund to restore salmon habitat. HCD helped prioritize projects to maximize improvements to salmon habitat in urban and industrial areas of the city. HCD also worked to make in-lieu fee mitigation monies from several large local projects available for use by this program. Combining several large sums of money will allow the task force to accomplish significant restoration projects.

Artificial Reef Demonstration Project

HCD staff constructed Alaska's first ever modular artificial reef. HCD staff conceived of the idea as a way to offset unavoidable losses of hard bottom habitats from coastal development.



Last year HCD personnel identified a suitable site and designed the reef in coordination with several partners. This year HCD acquired and deployed the reef units and began a monitoring program to assess how marine life uses the reef in comparison to a reference area. The project received nationwide media coverage and may lead to other artificial reef projects in Alaska for habitat restoration and mitigation. HCD is also working cooperatively with teachers on an education/outreach program on reef ecology for use in public schools.

Cooperative Habitat Protection Partnership

HCD staff were the catalyst for implementing a pilot grant for a Cooperative Habitat Protection Partnership (CHPP) in Anchorage. The idea behind CHPPs is to use non-regulatory approaches to protect fish habitat at the regional and community levels to supplement traditional

regulatory activities. HCD secured funding from NOAA Fisheries' Office of Habitat Conservation for a watershed planning effort for Little Campbell Creek. The funding for the Community Outreach Habitat Operation (a.k.a. Project COHO) allows us to partner with the municipal government to add fish habitat information to GIS products, and will yield an improved watershed plan that addresses habitat concerns in a broader context.

Shotgun Cove Habitat Assessments

HCD continued a cooperative study with the University of Alaska to collect baseline information on eelgrass in Shotgun Cove, near Whittier in Prince William Sound. The work examines the genetic structure of the eelgrass beds, assesses the health and stability of the beds by determining changes in carbon isotope ratios, and measures the rate at which plants are lengthening their rhizomes. Data on eelgrass genetics will complement previous studies by HCD 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 cove is a likely site for substantial future harbor development. The site-specific information gathered by HCD will assist local, state, and federal agencies in planning development activities to account for impacts to fishery resources.

Nancy Street Wetland Restoration

Through a multi-year, multi-agency effort a former nine-acre borrow pond along an anadromous creek in Juneau was restored to an emergent wetland and meandering stream with overwintering habitat for juvenile salmon and spawning riffles for cutthroat trout. As part of this project, HCD staff organized volunteers from a local community sustainable agriculture program to collect, store, and plant over 3,000 willow and alder cuttings to stabilize the shoreline. The project yielded private funding for boardwalks and viewing platforms, and over 350 volunteer hours.



Marine Debris Cleanup

Staff from HCD and the NOAA Restoration Center provided technical advice and support to the Ketchikan Borough to organize a cleanup of the Gravina Island coastline using a NOAA marine debris grant. To date 6,660 pounds of trash have been collected and two miles of shoreline have been cleaned.

Other Noteworthy Activities

Coastal America

NOAA Fisheries, represented by HCD, became co-chair of the Coastal America Alaska Regional Implementation Team. Coastal America is a national interagency partnership coordinated by the White House Council on Environmental Quality that promotes efforts to conserve and restore coastal habitats. The Alaska team endorsed seven projects that bring

together the resources and expertise of a variety of agencies. Some of the projects also involve contributions from the Alaska Corporate Wetlands Restoration Partnership.

Shorezone Mapping

HCD provided funding for a third field season for the Shorezone mapping project, which inventories coastal habitats using aerial surveys with video, still photos, and classification of habitat features. This year's field work covered major portions of southern southeast Alaska including the areas surrounding Ketchikan and Craig. These areas will be mapped and added to an interactive website (www.fakr.noaa.gov/maps/szintro.htm) that allows users to "fly" the coast and view video or still images. HCD established a flexible contracting mechanism to facilitate future Shorezone work, and worked with a Forest Service intern to evaluate potential benefits of the project for management of the Tongass National Forest. In addition, Coastal America formally endorsed the Shorezone project for multi-agency partnering.



Green Crab Habitat Suitability Model

HCD staff obtained headquarters funding to develop a habitat suitability model for invasive green crabs using the imagery and mapping of the Shorezone project. The Delphi approach will be used to compile green crab habitat characteristics and display them in GIS format. Results will show hotspots that may be correlated with potential resources at risk, such as shellfish concentrations. This effort is part of a larger west coast green crab effort directed at stopping the northward spread of the species.



Alaska Invasive Species Working Group

HCD staff participated in a state-wide multi-partner initiative to address invasive species issues in Alaska, and formed and led a marine species subgroup. The group is promoting invasive species awareness, coordination, and responsiveness in Alaska, and developed a Memorandum of Understanding to formalize the partnership. This effort has led to greater coordination of invasive species issues in the state and will continue to grow.

EFH Research Implementation Plan

HCD collaborated with the Alaska Fisheries Science Center to develop the *NOAA Essential Fish Habitat Research Implementation Plan for Alaska for FY 2007-2011*. The plan identifies research themes and priorities to guide scientific investigations related to describing EFH and evaluating effects on EFH from fishing and other human activities. It also clarifies the process to be used to allocate internal funding for EFH research. The plan will help to ensure that EFH research addresses resource managers' top information needs.

Habitat Recovery at Former Log Transfer Facilities

Biologists from HCD, the Auke Bay Lab, and the University of Alaska teamed up to study recovery of EFH at inactive log transfer facilities (LTFs) in southeastern Alaska. LTFs are used to transfer logs from land to the ocean for transport to mills and sort yards. Over time, bark accumulations on the ocean floor have resulted in lost fish habitat and degraded water quality. During a 10-day research cruise the team conducted dive surveys, bottom trawling, and water quality assessments at eight LTFs and adjacent reference sites. Preliminary results indicate that bark deposits near LTFs are relatively small and benthic habitats appear to be recovering biologically. The work will enable HCD to make more informed recommendations to the Forest Service regarding the siting and design of LTFs to minimize impacts to EFH.



National GIS Team

An HCD staffer participated as a member of the Educational & Technical Support Subcommittee and the GIS Education Committee for NOAA Fisheries GIS activities. HCD developed a Frequently Asked Questions list for both web pages, and provided experience related to fishery data sets.

NOAA Small Boat Management

HCD personnel coordinated and provided safety and operational support for small boat operations for Alaska Fisheries Science Center projects as well as HCD field work. The projects included a Pacific right whale investigation in the Bering Sea, nearshore fish habitat studies in Prince William Sound, monitoring for the Whittier artificial reef, and support for the Fish and Wildlife Service Bering Sea ice walrus tagging program.

Outreach and Education

Earth Day

HCD coordinated with NOAA Weather Service and NOAA Fisheries Law Enforcement to hold an Earth Day event for local students. Over 400 1st through 6th grade students and accompanying teachers and parents attended the event.

Alaska Oceans Festival

HCD assisted other Alaska Region staff with a booth at the Alaska Oceans Festival in Anchorage. The booth – one of the most successful at the event – emphasized children’s activities and provided materials on regional topics.

Alaska State Fair

HCD staff partnered with NOAA Weather Service in a joint NOAA booth at the 2006 Alaska State Fair. NOAA employees increased public awareness of a variety of topics including federally managed fisheries, habitat conservation, endangered species and marine mammals,

tsunami and earthquake hazards, lightning safety, NOAA weather radio, marine and aviation products and services, and flood preparedness.

Student Intern

HCD hosted an intern from the University of Washington DO-IT (Disabilities, Opportunities, Internetworking, and Technology) Program. Alisha Fahey, who is hearing impaired, worked in our Anchorage field office where she helped with field sampling, compiled marine mammal stranding reports into a computer spreadsheet, and inventoried dive video logs for fish presence, habitat type, and structure. This provided an opportunity for a bright young person to work alongside our staff, and opened her eyes to NOAA-related career paths.

Personnel News

HCD wished “fair winds” to our NOAA Corps officer, CDR Mark Boland, who is now Executive Officer aboard the NOAA Ship MILLER FREEMAN. We’ll miss his expertise and smile.

LT(jg) Jonathan Taylor joined our HCD staff in Anchorage. JT came to us from the NOAA Ship GORDON GUNTER and previously worked as an Alaska fisheries observer. JT’s three year assignment will allow him to get his land legs back and give him exposure to habitat and protected resources management issues.

Katharine Miller was accepted into NOAA’s Advanced Studies program, and enrolled in the University of Alaska where she is working toward a doctorate degree in fisheries oceanography. Her research will emphasize community ecology and the linkages between fish and their nearshore habitats.

Cindy Hartmann began a 4 month detail to NOAA’s Ecosystem Goal Team staff as part of the NOAA Rotational Assignment Program. She’ll be working on budget planning and programming.

Janet Herr left NOAA Fisheries for a new position with the NOAA Weather Service Tsunami Warning Center in Palmer. Janet was an administrative office assistant in Anchorage, and previously worked in the Regional Office in Juneau. We wish her well.

Larry Peltz relocated to Idaho where he accepted a new job with the U.S. Fish and Wildlife Service managing fish hatcheries. We’ll miss him too!