



**NOAA Fisheries**

National Marine Fisheries Service



## **Accomplishments of the Alaska Region's Habitat Conservation Division in Fiscal Year 2007**



Sitka Sound – photo courtesy of the ShoreZone project

This report provides highlights of Habitat Conservation Division (HCD) activities in support of the sustainable management of living marine resources from October 1, 2006 through September 30, 2007.

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 State-Managed Fisheries

HCD worked with staff from the Sustainable Fisheries Division, the North Pacific Fishery Management Council, and the Alaska Department of Fish & Game to persuade the Alaska Board of Fisheries to adopt regulations for state managed fisheries that mirror federal regulations to protect EFH in the Aleutian Islands and Gulf of Alaska. Federal regulations issued in 2006 closed substantial portions of the Aleutian Islands and Gulf of Alaska to bottom trawling and closed high-density coral areas and seamounts to all bottom-tending fishing gear. Those regulations applied to federally permitted fishing vessels, but not to state managed fisheries that are prosecuted in state or federal waters. Action by the Board of Fisheries extends the closures to all state managed fishing vessels, increasing the protection of sensitive seafloor habitats.

### Habitat Protection Measures for the Bering Sea

HCD helped the North Pacific Fishery Management Council finalize a suite of new measures to minimize the effects of bottom fishing on seafloor habitats in the Bering Sea. These new habitat conservation measures reflect an open-area approach that limits bottom trawling to areas where it has historically occurred, protecting undisturbed habitats from potential expansion of fishing into new areas. The measures include closing about 50,000 square nautical miles in the western portion of the Bering Sea management area and about 85,000 square nautical miles in the northern Bering Sea and nearshore areas around St. Matthew Island, St. Lawrence Island, Nunivak Island, Etolin Strait, and Kuskokwim Bay. The Northern Bering Sea Research Area would be closed pending the development of a research plan that would guide any future experimental or commercial fishing there.

### Ecosystem Based Approaches to Management

Over the past year HCD continued to support the North Pacific Fishery Management Council's initiatives to implement ecosystem based approaches to management. HCD served on a team that developed a Fishery Ecosystem Plan for the Aleutian Islands, which the Council approved in June 2007. 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 Council's Ecosystem Committee and on the Alaska Marine Ecosystem Forum. The Ecosystem Committee advises the Council on matters such as the development of the Fishery Ecosystem Plan and a new Fishery Management Plan for the Arctic. The Alaska Marine Ecosystem Forum is comprised 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 FY07. 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 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.

## **Environmental Review to Minimize Habitat Loss**

### Cooper Lake Hydropower Project

The Federal Energy Regulatory Commission (FERC) issued a new 50 year license for the Cooper Lake hydropower project in 2007, implementing the terms of a settlement agreement that HCD helped negotiate in 2005 with assistance from NOAA General Counsel. This was the first hydropower license based on a settlement agreement involving NOAA Fisheries Alaska Region since FERC began emphasizing alternative licensing procedures several years ago. The project was first licensed in 1957 and diverts all flow from Cooper Lake through a tunnel/penstock to the project powerhouse, where it is discharged into Kenai Lake (source of the Kenai River). This arrangement reduced stream flows and water temperatures in the 4.8-mile-long bypassed reach of Cooper Creek, greatly diminishing use of the stream by salmon. HCD initially assisted with study development and data analysis, and then participated in settlement negotiations between interested parties and Chugach Electric. The final agreement called for Chugach Electric to spend ~\$10 million on project modifications to improve year-round stream flows and increase water temperatures. These modifications should increase the use of Cooper Creek by salmon. The project modifications combined with the 50 year term of FERC's license help illustrate the long term benefits of NOAA Fisheries' role in hydropower licensing.

### Ketchikan Cruise Ship Berth IV Mitigation Project

HCD worked with the Corps of Engineers to develop an innovative mitigation project to compensate for habitat loss from the construction of a new cruise ship berth in Ketchikan. The



developer will provide \$10,000 to support a monitoring program for three species of invasive tunicates – small invertebrates that could spread to Alaska on the hulls or in the ballast water of cruise ships. Non-native tunicates are currently infesting Puget Sound, Washington, and have the potential to alter coastal habitats in Alaska. The monitoring program at the new cruise ship berth will be

undertaken by the Smithsonian and represents the first mitigation required by the Corps of Engineers to address the potential impact of aquatic invasive species in Alaska.

### Auke Nu Cove Conservation Agreement

The City and Borough of Juneau finalized a conservation easement recommended by HCD to protect 29 acres of intertidal habitat in Auke Nu Cove. The cove, located just north of Auke Bay, has been subjected to cumulative habitat loss and degradation over the years from construction of a ferry terminal, tour boat facilities, a barge wharf, a seafood processing business, and related infrastructure. Most recently, the City and Borough of Juneau applied for a Corps of Engineers permit to build a new dock and float for commercial fishing vessels. That project would have affected eight acres of sensitive habitat including mudflats and eelgrass beds. HCD worked with the applicant to minimize the footprint of fill and redesign the dock and ramp to

avoid most sensitive areas. HCD also recommended that the City and Borough of Juneau acquire all remaining tidelands in the cove and place a third-party conservation easement on this ecologically valuable habitat. The Southeast Alaska Lands Trust accepted the conservation easement and will provide stewardship for this habitat in perpetuity.

#### Residential Development in Petersburg

HCD's conservation recommendations led a private applicant to modify a proposal to fill intertidal wetlands for a single family residence in Petersburg, and locate the house above the high tide line instead. HCD's comments noted that the nearshore habitat in the project area is used by juvenile salmon, Pacific cod, walleye Pollock, arrowtooth flounder, rockfish, and other species, and less damaging alternatives were available for building a house at the site. The amount of habitat loss averted through our EFH consultation with the permitting agency was relatively small, but the result illustrates that such consultations often lead developers to find ways to build their projects while avoiding impacts to important fish habitats.

#### Port Heiden Drum Cleanup

HCD's review of an intertidal mining proposal near Port Heiden on Bristol Bay led to the cleanup of numerous deteriorating 55 gallon drums that were becoming visible along an eroding beach. A major anadromous fish stream, the Meshik River, and subsistence-use clam beds were at risk from any leaching contaminants. HCD staff notified the Corps of Engineers' Environmental Resources Division about the drums and requested their assistance, which led to a successful three week cleanup effort.

#### Forest Service Coordination

HCD worked with Forest Service personnel to update and revise procedures for integrating EFH consultations into Forest Service National Environmental Policy Act analyses. As a result, NOAA Fisheries and the Forest Service signed a new consultation agreement in June 2007. Additionally HCD staff reviewed major Forest Service actions such as proposed amendments to the Tongass National Forest Land and Resource Management Plan and offered recommendations to reduce adverse effects on EFH.

#### Mining

HCD staff continue to participate in pre-project planning for various mining projects in Alaska including Galore Creek, Tulsequah Chief, and Shaft Creek Mines in British Columbia; Bokan Mountain Mineral Exploration (Ross Adams Mine); the Kensington mine in Southeast Alaska; and the Chuitna coal mine and Pebble gold mine in southwestern Alaska. Our participation in most of these projects involves making sure that the environmental analyses include a thorough assessment of baseline fish habitat conditions and anticipated impacts so that appropriate steps can be taken to minimize adverse effects.

#### Tesoro Ballast Water Treatment and Monitoring

HCD's recommendations led Tesoro Alaska Petroleum Company to begin voluntary monitoring for aquatic invasive species from tanker ballast water discharges at a refinery in Nikiski, approximately 60 miles southwest of Anchorage. The refinery receives petroleum from Cook Inlet and North Slope oil fields via tanker shipments and pipeline, in addition to some tanker shipments of Indonesian crude oil. Tesoro's permit for ballast water treatment and discharge into Cook Inlet was up for reissuance in 2007. HCD staff recognized that ballast water

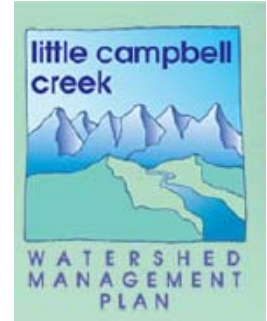


discharges are a leading vector for the spread of invasive species throughout the world, and recommended that the Environmental Protection Agency (EPA) address the potential for introducing invasive species. As a result EPA requested that Tesoro join the Alaska Invasive Species Workgroup, and Tesoro agreed to do so and began voluntary monitoring.

## **Habitat Restoration and Protection**

### Cooperative Habitat Protection Partnership

HCD has been working closely with the Municipality of Anchorage and a variety of partners to implement 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. HCD secured funding in 2006 from NOAA Fisheries' Office of Habitat Conservation for a watershed planning effort for Little Campbell Creek. The funding for Project COHO (Community Outreach Habitat Operation) allowed us to partner with the municipal government to add vital fish habitat information to a watershed management plan. A draft of the plan was released in October 2007 and it will be finalized in 2008.



### National Fish Habitat Action Plan

HCD worked with several other agencies and non-governmental groups to institute Fish Habitat Partnerships under the National Fish Habitat Action Plan. We helped develop a Strategic Action Plan for the Matanuska-Susitna Basin Salmon Conservation Partnership, one of five national pilot partnerships and one of four that was officially recognized by the National Fish Habitat Board in October 2007. The plan focuses on wild salmon and their freshwater habitats in the Mat-Su Basin and marine habitats in upper Cook Inlet.

### Marine Debris Cleanup

HCD staff organized a NOAA Fisheries team to participate in the International Coastal Cleanup. This annual event relies on volunteers and sponsoring organizations to collect and dispose of marine debris. The NOAA Fisheries volunteers from Juneau adopted a section of beach on Douglas Island and filled the bed of a pickup truck to overflowing with trash collected from the beach.



Jon Kurland, Phyllis Hunter, Cindy Hartmann, Stephanie Mooney, Dana Whiteley, Emily Ferry, Julie Scheurer, Demian Schane, Tim Wilkins, and Jimmie Wilkins



Emily Ferry, Cindy Hartmann, and Demian Schane

### Marine Debris Workshop

Regional Restoration Center staff applied for and received an internal NOAA grant to hold a workshop on marine debris in Alaska. The workshop, which is being organized jointly with the Protected Resources Division, will present information on funding and coordination opportunities from the NOAA Restoration Center and will formulate criteria for prioritizing cleanups in Alaska. It will be held in conjunction with the 2008 Alaska Forum on the Environment.

### Training for Invasive Green Crab Monitoring

HCD organized successful training sessions in southeast and southcentral Alaska to promote early detection of the spread of invasive green crabs. The training resulted from a partnership between NOAA Fisheries, the NOAA invasive species program, Prince William Sound Regional Citizen's Advisory Council, Alaska Invasive Species Working Group, and Alaska Department of Fish & Game. Invasive European green crabs are moving northward along the west coast of North America, most recently occurring in large numbers along the west coast of Vancouver Island, British Columbia. Although monitoring in southcentral Alaska has been ongoing for several years, none has been conducted in southeast Alaska. As a result of the training and coordination, monitoring for the 2008 season will be performed in Whittier, Juneau, Sitka, Gustavus, and Ketchikan by volunteers from a variety of local groups and government agencies.



**top row, left to right:** Tammy Davis ADF&G; Cindy Hartmann NMFS; Dan Gilson PWSRCAC; Gary Frietag, Ketchikan; Alan Unmack, Sitka Tribe; Heather Meuret-Woody, Sitka Tribe **bottom row, left to right:** Whitney Rapp Glacier Bay NPS Gustavus; Linda Shaw NMFS. Photo by Richard Enriquez, USFWS



Dan Gilson, PWSRCAC

### Lynn Canal Artificial Reefs

HCD initiated a project to develop two artificial reefs to enhance nearshore marine habitat in Lynn Canal north of Juneau in partnership with the Alaska Department of Transportation, the Federal Highway Administration, and the University of Alaska Fairbanks. The university designed the project and study plan and completed extensive surveys of the seafloor. NOAA Fisheries reviewed the research proposal and obtained all required state and federal permits. The Alaska Department of Transportation and the Federal Highway Administration provided engineering expertise, funding, and contracting services for the project as partial mitigation for

the planned Juneau Access Improvement Project. The depth and flat top of the reefs are designed to support the growth of kelp and other seaweeds that provide ideal spawning habitat for Pacific herring. Construction is scheduled for late 2007.

### Municipality of Anchorage Watershed Task Force

HCD continued serving on a Salmon Restoration Task Force to assist the Municipality of Anchorage with salmon restoration plans for three watersheds using a grant from the Pacific Coastal Salmon Recovery Fund. HCD helped prioritize projects to maximize improvements to salmon habitat in urban and industrial areas of the city. The Municipality of Anchorage has repeatedly thanked us for our staff's involvement and our contribution of technical expertise.

## **Outreach and Education**

### PBS Film Project

In the spirit of "One NOAA" HCD provided coordination and logistical support for Jean-Michel Cousteau's Ocean Futures Society in filming an upcoming PBS special. The film is



scheduled to feature Cook Inlet beluga whales, emphasizing important management and development issues. The field effort involved two days of filming and observations from a NOAA small boat piloted by an HCD staffer. This outreach project should lead to a positive showcase of NOAA Fisheries' commitment to investigating Cook Inlet beluga whales, identifying their behaviors and habitats, and professionally describing the threats these whales face near Alaska's largest urban area.

Matthew Eagleton, Celine Cousteau, and Jean-Michel Cousteau

### Alaska Oceans Festival

HCD and other Regional Office personnel staffed a booth at the Alaska Oceans Festival in Anchorage. The booth – one of the most successful at the festival – emphasized children's activities and provided material on Alaska habitats and related topics.

### Salmon in the City

HCD participated in the Salmon in the City Festival together with the Municipality of Anchorage, other federal and state agencies, and non-governmental organizations. The festival is a two week event centered around the theme of "Celebrating our Creeks, Community and Culture." HCD staff participated in the opening day events with activities and information on salmon habitat protection and restoration projects in the community.



## One NOAA

For the second year in a row NOAA Fisheries Anchorage field office staff coordinated with the National Weather Service Alaska Regional Office in putting on an Earth Day event and sharing a NOAA booth at the Alaska State Fair.

At both events NOAA employees ensured that the public was provided with a consistent message about NOAA products and services. NOAA staff increased public awareness in areas of involving fishery management, habitat conservation, endangered species, marine mammals, tsunami and earthquake hazards, lightning safety, NOAA weather radio, marine and aviation products and services, and flood preparedness.



## **Other Noteworthy Activities**

### ShoreZone Mapping

HCD provided funding and coordination for a fourth field season for the Shorezone mapping project, which inventories coastal habitats using aerial surveys with video, still photos, and classification of habitat features. The 2007 funding enabled mapping of 5,297 kilometers (km) of shoreline on Baranof and Prince of Wales Islands in southeast Alaska, imaging over



1500 km of shoreline from west Cleveland Peninsula to the Wrangell area in the summer of 2008, and conducting a ground verification study. The data will be added to an interactive website

([www.alaskafisheries.noaa.gov/maps/szintro.htm](http://www.alaskafisheries.noaa.gov/maps/szintro.htm))

that allows users to “fly” the coast and view video or still images. Organizations working in partnership on the Alaska ShoreZone project include NOAA Fisheries, Alaska Department of Natural Resources, Alaska Department of Fish & Game, Archipelago

Marine Research, Coastal and Ocean Resources Inc., Cook Inlet Regional Citizens Advisory Council, Exxon Valdez Oil Spill Trustee Council, National Park Service, Prince William Sound Regional Citizens Advisory Council, Royal Caribbean Cruises Ltd. (The Ocean Fund), The Nature Conservancy, and the U.S. Fish and Wildlife Service.

### Habitat Data Workshop

HCD and the Alaska Fisheries Science Center organized a workshop to inventory habitat-related data sets maintained by staff from the Alaska Fisheries Science Center, Alaska Regional Office, North Pacific Fishery Management Council, and the Alaska Department of Fish and Game. The workshop improved understanding of existing habitat data amongst key personnel and resulted in documentation of 22 available data sets using a standard format. The habitat data inventory will be published as an Alaska Fisheries Science Center Processed Report.



### Alaska Invasive Species Working Group

An HCD staffer continued to lead the Alaska Invasive Species Working Group's Marine Subcommittee. This group allows organizations that are interested in issues related to aquatic invasive species in Alaska the opportunity to share information and collaborate on projects of mutual concern. Participants have expressed that the subcommittee under HCD's leadership is highly effective at advancing these goals.

### Coastal America

HCD continued to represent NOAA Fisheries in Coastal America, a national interagency partnership coordinated by the White House Council on Environmental Quality that promotes efforts to conserve and restore coastal habitats. HCD co-chaired the Coastal America Alaska Regional Implementation Team and was recognized by the director of the national partnership with a Coastal America Regional Leadership Award. The Alaska team continued work to implement a variety of worthy projects, including some that have received funding from the NOAA Restoration Center.

### NOAA Administrator's Award

Several HCD staff were recognized for their groundbreaking efforts in the successful installation of Alaska's first modular artificial reef, demonstrating that this technique, previously used only in warmer climates, can effectively enhance marine habitats in sub-Arctic waters.

NOAA Fisheries Deputy Assistant Administrator John Oliver, LTJG Jonathan Taylor, John Olson, Erika Ammann, Brian Lance, and NOAA Administrator VADM Conrad C. Lautenbacher Jr., USN (Ret.) (not pictured, Matthew Eagleton)



### Student Intern

For the second year in a row HCD hosted an intern from the University of Washington DO-IT (Disabilities, Opportunities, Internetworking, and Technology) Program. The student, who is hearing impaired, organized and prepared field sampling kits and also partnered with the U.S. Fish and Wildlife Service Marine Necropsy Lab to dissect and inventory deceased marine mammals. The internship provided her an opportunity to gain additional work experience and learn more about NOAA-related career paths.

Please visit our website:  
[www.alaskafisheries.noaa.gov/habitat](http://www.alaskafisheries.noaa.gov/habitat)