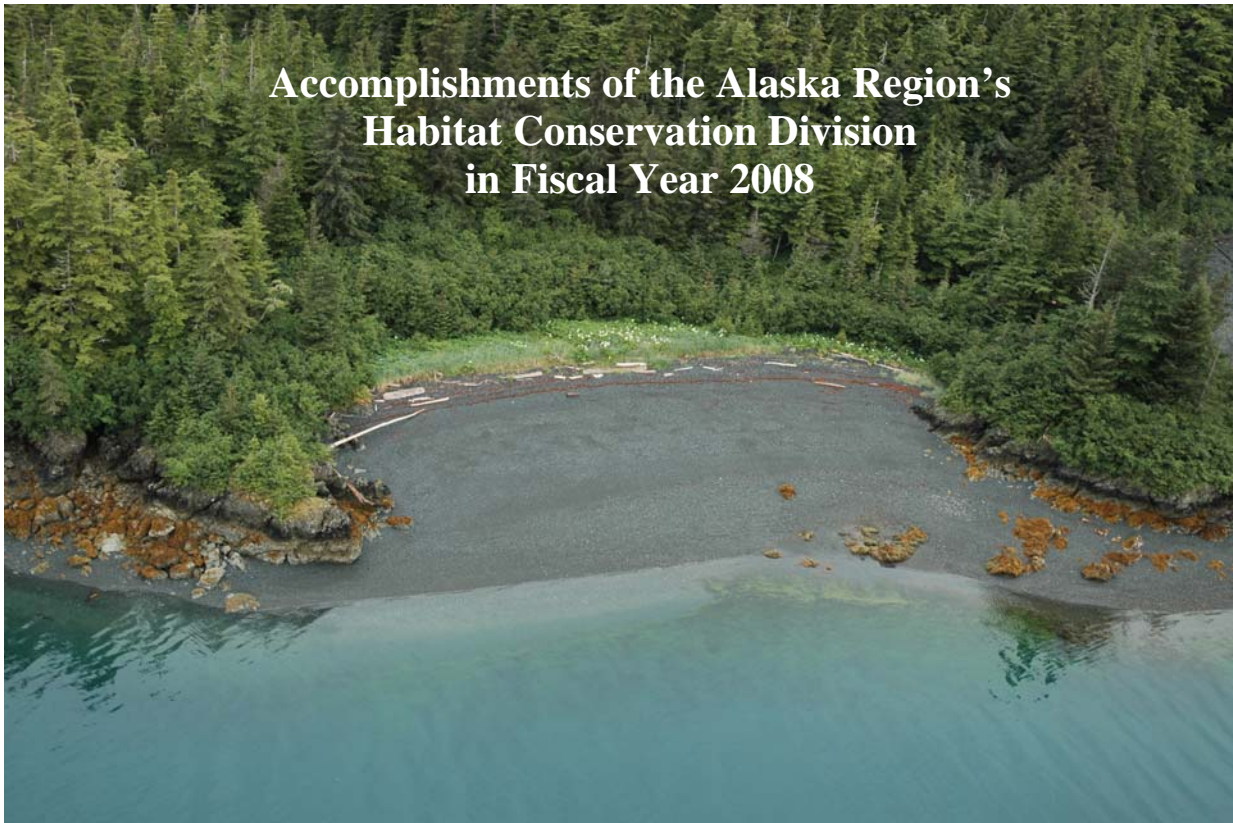


Accomplishments of the Alaska Region's Habitat Conservation Division in Fiscal Year 2008



Evans Island, Prince William Sound: photo courtesy of the Shorezone project

This report provides highlights of Habitat Conservation Division (HCD) activities from October 1, 2007 through September 30, 2008. 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, the NOAA Fisheries Office of Habitat Conservation, NOAA General Counsel, and the Invasive Species Program. 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, Alaska Invasive Species Working Group, and a variety of industry and conservation groups.

Essential Fish Habitat and Fishery Management

Arctic Fishery Management Plan

For the first time, a Fishery Management Plan (FMP) is being prepared for the Arctic. HCD staff played a key role by developing the description and identification of EFH based on available data regarding fish assemblages and habitat. The effort was challenging because the Arctic has not been well researched or sampled, and available information is dated or limited to small-scale investigations that do not reflect the entire range of target species. Further, the scale of the Arctic is enormous with no infrastructure to support marine fisheries or research. As a precautionary approach, the FMP will prohibit commercial fisheries in waters north of the Bering Strait until systematic sampling can establish stock densities and allow informed decisions about effects to habitat and other ecosystem components.

North Aleutian Basin Energy and Fisheries

HCD staff participated in a panel discussion on energy and fisheries issues in the North Aleutian Basin at a workshop hosted by Alaska Sea Grant. This effort was instrumental in preparing requests to the Minerals Management Service to study potential effects to fish and marine mammals from oil and gas developments. The Minerals Management Service has included the North Aleutian Basin in its five year plan for lease sales, generating concern about the potential effects to fisheries and marine mammals in the eastern Bering Sea and Bristol Bay.

Review and Revision of Essential Fish Habitat Components within Fishery Management Plans

HCD in cooperation with the Alaska Fisheries Science Center and North Pacific Fishery Management Council prepared a draft plan and schedule for the review and revision of the EFH components of the Council's FMPs. The plan includes a coordinated approach for updating EFH information within five years of the last revision, as called for in the national regulations implementing the EFH provisions of the Magnuson-Stevens Act. The Alaska Region was the first in the nation to initiate such an approach.

Cold Water Corals

HCD staff served as an integral part of the NMFS Coral Team, which has been drafting plans to further deep sea coral protection and identification. Habitat-forming biota such as deep sea corals and sponges are sensitive to human activity and may take many years to recover from disturbance. Some managed fish and shellfish species use this habitat for protection and camouflage. Deep sea coral management continues to evolve within the Alaska Region.

Essential Fish Habitat Contract Closed Out

HCD approved the final invoice for a large multi-year contract for services related to preparation of the Environmental Impact Statement for EFH Identification and Conservation in Alaska. The contract was initiated in 2001 and amended several times. Most of the work was completed prior to publication of the Final Environmental Impact Statement in 2005 but the contractors also provided assistance for the analysis of measures to protect Bering Sea habitats in 2006 and recently completed a final task related to the identification of EFH for the new Arctic FMP. HCD's careful oversight of the contract resulted in spending 99.78% of the obligated funds on analyses to support EFH management decisions.

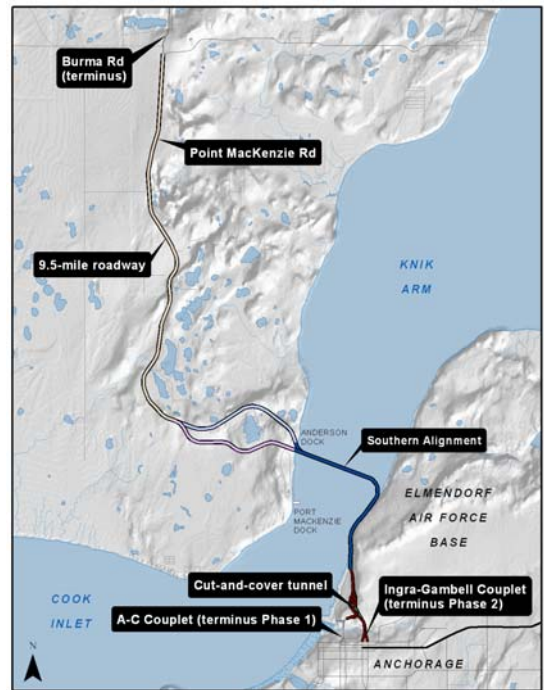
Other Fishery Management Actions

HCD staff advised and assisted staff from the Sustainable Fisheries Division regarding a number of other fishery management actions during FY08. HCD completed intra-agency EFH consultations on annual harvest specifications, fishery management plan amendments, and all other fishery management actions that would result in changes in fishing effort that may adversely affect EFH.

Environmental Review to Minimize Habitat Loss

Proposed Knik Arm Bridge

HCD worked with the Protected Resources Division to develop comments on the Final Environmental Impact Statement for the proposed Knik Arm bridge in upper Cook Inlet. Studies requested by HCD have shown extensive use of the Knik Arm area by over 20 species of fish, including all five species of Alaska salmon. In 2003, the Alaska legislature established the Knik Arm Bridge and Toll Authority (KABATA) to undertake the permitting, design, financing, and construction and then to own, operate, and maintain the proposed bridge as a toll road. Preliminary capital costs are estimated to range from \$400 million to \$600 million. KABATA's preferred alternative entails solid fill approaches extending a total of over 5,000 feet into Knik Arm and leading to a pile-supported bridge 8,200 feet in length. NMFS recommended not proceeding with the expansion as proposed because that is the best option for recovery of Cook Inlet beluga whales and for sustaining upper Cook Inlet salmon runs. Alternatively, we recommended that KABATA investigate crossing designs which may include seasonal construction, reducing fill amounts, and greater free span distance.



GCI/Spandex Marine Cable Project.

HCD staff coordinated with the project sponsors, the NOAA Fisheries Northwest Region, and the North Pacific Fishery Management Council to assess the installation of a new fiber-optic telecommunications cable from Oregon to several landfalls in Alaska. The cable route transects nearshore areas important to groundfish and salmon, as well as offshore commercial fishing areas. HCD helped to ensure that the Council was notified and Council meetings were used to provide an arena for commercial fishermen to learn of the project and voice any concerns. HCD's early coordination and assistance were key to a transparent consultative process, leading the project sponsors to route the cables within existing, dedicated cable corridors and avoid laying cable through Habitat Areas of Particular Concern (the Alaska Seamount Habitat Protection Areas).

Chuitna Coal Project

HCD staff participated in the pre-application and scoping process for the Chuitna Coal project, a proposed surface coal mining and export project located in the Beluga Coal Field, approximately 45 miles west of Anchorage. The proposed project includes a surface coal mine and support facilities, mine access road, coal transport conveyor, personnel housing, air strip, and a coal export terminal that would include a 10,000-foot trestle constructed into Cook Inlet for loading ocean-going coal transport ships. HCD raised concerns regarding the hydrologic studies for the project. As a result, consulting hydrologists under direction of the Environmental Protection Agency (EPA) further investigated the study design and hydrologic models, concluding that the models being used would not accurately support an assumption of "no effect." EPA and the project proponents are now preparing an environmental impact statement, and HCD will continue to be involved.

Port of Anchorage

Over the past six years, HCD raised numerous issues and offered recommendations to minimize impacts to salmon habitat and beluga whales from the Port of Anchorage expansion project. The Corps of Engineers ultimately issued a permit for the project, allowing approximately 135 acres of intertidal and subtidal fill and 235 acres of dredging. NOAA Fisheries subsequently received a Freedom of Information Act request from a local environmental advocacy group, which used our detailed administrative record to petition the Corps to rescind the permit under the auspices of the Data Quality Act. The Corps has not yet responded. HCD staff continue to work to minimize the impacts of the project through compensatory mitigation. In particular, our efforts have focused on purchasing 60 acres of high value estuarine habitat (wetlands and uplands) at the mouth of Campbell Creek.



Port of Anchorage Prior to Expansion



Future Port of Anchorage Expansion

Pebble Mine

HCD staff continue to participate in the Pebble Technical Working Groups and steering committee for a vast mine development proposed in the Bristol Bay watershed. In recent letters to the Pebble Limited Partnership and the EPA, HCD expressed concerns that ongoing or planned studies for the project will be inadequate for analyzing potential impacts to Bristol Bay resources. Dialog with staff from other federal and state resource agencies revealed similar concerns. As a result HCD is attempting to bring together leadership at the various agencies to discuss ways to improve the value of ongoing technical analyses.

Nanwalek / Port Graham Airport Project

HCD staff coordinated with ADOT&PF and residents of the villages of Nanwalek and Port Graham on the Kenai Peninsula to reduce effects to marine habitat from planned airport improvements. The two villages are accessible only by water or air and their airports do not meet current Federal Aviation Administration standards. A reconnaissance study by the Alaska Department of Transportation identified several options for building a new shared airstrip. HCD staff was concerned that an alternative initially favored by the communities would include building a runway that extends into English Bay with

substantial subtidal fill and loss of productive marine habitat. As a result of early input from HCD, the villages and the Department of Transportation agreed to examine other alternatives in more detail to avoid or reduce environmental concerns.

Hydropower and Assessing the Impacts of Climate Change on Watersheds

HCD, in cooperation with the University of Alaska Fairbanks, began assessing whether recent precipitation and hydropower reservoir inflow anomalies in Southeast Alaska are within the normal range of variability over the observational record or whether they are evidence of a potential regime shift associated with climate change. The analysis will focus on Sitka's Blue Lake and Green Lake projects as the Blue Lake reservoir undergoes a license amendment to increase dam height and generating capacity. The study will discuss how natural variability on seasonal-to-decadal scales and longer-term climate change affect water resource management. Data sources will include information from the utilities about inflow and outflow in the reservoir, power generation, and reservoir management. The results of this study could be applied to other hydropower utilities in Southeast Alaska or used to provide general guidance to NMFS and other agencies when assessing measures to provide adequate flows to protect fish habitat below hydropower projects.

Auke Nu Cove Eelgrass Transplantation

Over the past few years HCD staff worked closely with the City and Borough of Juneau (CBJ) to develop mitigation to offset the environmental impacts of a new dock and float for commercial vessels in Auke Nu Cove. The project involves filling about five acres of productive intertidal habitat including eelgrass beds. The project footprint was redesigned to minimize the impact to intertidal resources and to avoid almost all eelgrass habitat. Permit conditions recommended by HCD required CBJ to transplant the last remaining eelgrass that they could not avoid filling. HCD helped by mobilizing volunteers from NMFS, CBJ, the Corps of Engineers, and Alaska Glacier Seafood Company to transplant the eelgrass. With the help of these volunteers, the transplantation was a success and destruction of these eelgrass plants was averted.



Residential Development in Wrangell

HCD's conservation recommendations led the Corps of Engineers to deny a permit to construct a workshop and home on intertidal fill in Wrangell. 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 that less damaging alternatives were available. The result illustrates that such consultations can lead to protection of important fish habitats, especially when proposed development is not water dependent and alternatives are available.

Hyder Causeway Construction Project

HCD worked with the Alaska Department of Transportation and the Forest Service to provide guidance for the construction of a new access causeway in Hyder. The causeway replaced an existing trestle across a broad intertidal area to a boat and floatplane harbor. A major concern was the potential for blocking access to juvenile chum and coho salmon that rear in the tidal flats at the upper end of Portland Canal. With assistance from Alaska Fisheries Science Center staff, HCD persuaded the Department of Transportation to design suitable breaches in the causeway to facilitate salmon passage.

Sitka Airport Runway Safety Area Extensions

HCD staff worked with the Federal Aviation Administration on issues relating to a number of improvements to the Sitka Airport, including runway safety area extensions that would fill marine intertidal habitat. The preferred alternative was scaled back based on both economic constraints and environmental concerns promoted by HCD for herring spawning areas immediately adjacent to one end of the runway. HCD comments resulted in major changes to the Preliminary Draft Environmental Impact Statement, and HCD staff continue to address outstanding issues of water quality and mitigation.

Habitat Restoration and Protection

National Fish Habitat Action Plan

Alaska has two recognized Fish Habitat Partnerships (FHPs) under the National Fish Habitat Action Plan: the Matanuska-Susitna Basin Salmon Conservation Partnership (Mat-Su) and the Southwest Alaska Salmon Habitat Partnership. Alaska also has two candidate FHPs: Anchorage's Salmon in the City and the Kenai Peninsula Conservation Partnership. HCD and Restoration Center staff work closely with these partnerships. HCD staff helped the Mat-Su finalize a strategic plan and develop a process to receive project proposals. Staff also helped the Southwest partnership write a proposal for conservation of land in



the Bristol Bay region. HCD is also working with the Kenai and Salmon in the City partnerships to develop strategic plans to submit to the National Fish Habitat Board for recognition as a full partnership. Additionally, HCD staff, as a partner in the Mat-Su FHP, received the Department of the Interior's 2008 Cooperative Conservation Award for playing a key role in developing the partnership and its strategic plan.

Cooperative Habitat Protection Partnership

HCD was the recipient of one of the first pilot grants for a watershed planning effort for Little Campbell Creek in Anchorage in 2006. The funding for Project COHO (Community Outreach Habitat Operation) allowed HCD to partner with the municipal government to add fish habitat information to a new watershed plan that addresses habitat concerns in a broader context. HCD staff continued to see results this year when the Little Campbell Creek Watershed Plan was adopted by the Municipality of Anchorage's Planning and Zoning Commission and then approved by the full Municipal Assembly in June 2008. The Watershed Plan describes the area's resources, addresses social and environmental issues

that the watershed faces, and identifies implementation strategies that will assist and guide the Municipality in decision-making and permitting throughout the watershed.

Colter Creek Culvert Replacement Project

Four culverts occur on Colter Creek in Wasilla, severely constricting the creek and creating velocity barriers to juvenile salmon. Regional Restoration Center staff, in partnership with the Nature Conservancy, the Mat-Su Borough, US Fish & Wildlife Service, the Wasilla Soil and Water Conservation District, the Girl Scouts, and local landowners, are working to replace all four culverts with arched pipes. The restoration sites will be re-vegetated and monitored with the help of volunteers and incorporated into existing environmental education programs conducted by the Wasilla Soil and Water Conservation District for local school children. The project will also be used to educate the public about fish passage. The Colter Creek Fish Passage Restoration Project will restore juvenile fish passage, improve stream function, and enhance fish habitat on Colter Creek. By the end of this project, there will be adequate fish passage and stream flow.

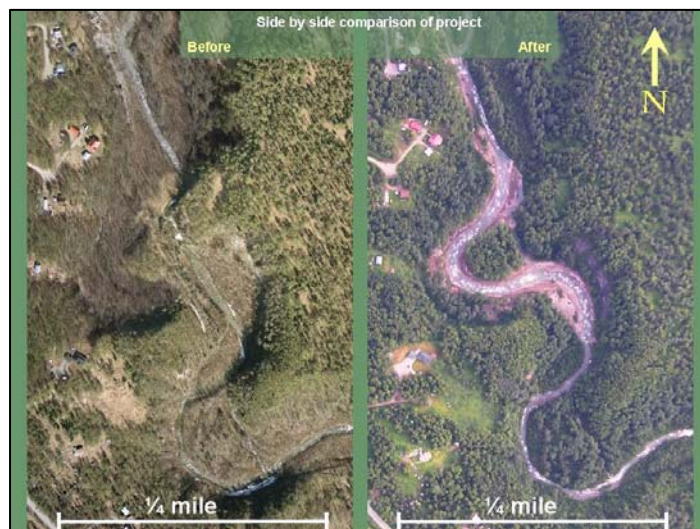


Montana Creek

Regional Restoration Center staff continued to work with a variety of partners to support the Juneau chapter of Trout Unlimited in completing a watershed planning document for Montana Creek. Partially funded by NOAA, the watershed planning document provides the City and Borough of Juneau with an overview of the value of the Montana Creek watershed to local residents and an outline of management recommendations to ensure the sustainability of fish habitat and recreational and educational opportunities. The document promotes comprehensive and durable land use designations within the watershed to maintain the fishery and recreational values of Montana Creek.

Moose Creek

Regional Restoration Center staff continued to work with the Chickaloon Village Tribal Council on a



restoration project to re-established fish passage and physical and biological function of the Moose Creek stream channel and adjacent floodplain, lost when the stream was re-routed at several locations in the early 1900s to facilitate construction of a railroad line for transporting coal. Channel alignment changes and related impacts resulted in formation of three distinct waterfalls and a significant loss of in-stream aquatic habitat. Once the restoration work is complete, access to over 10 miles of the upper watershed and access to a wetland complex north of Wishbone Hill will be re-established.

Little Campbell Creek Fish Alcove

In 2006, with a grant from the Great Land Trust, NOAA, and the National Fish and Wildlife Foundation, the Anchorage Waterways Council undertook a habitat restoration and enhancement project along Little Campbell Creek. In 2007, ground was broken for the Little Campbell Creek Fish Alcove project, native vegetation was planted, and the alcove was constructed. On July 24, 2008, the alcove was connected to Little Campbell Creek. Regional Restoration Center staff follow-up in the summer and fall indicated that the project is functioning as a fish refuge, as well as providing habitat for several other wildlife species. See the following link for media coverage of the project.

www.youtube.com/watch?v=lil6quGVfbQ&url=http://anchoragecreeks.org/pages/littlecampbellcreek_projects.php



June 2007



July 2008

Chester Creek

HCD staff worked with a large number of partners on a restoration project to improve a stream channel to the Chester Creek estuary in Anchorage and design a new culvert with natural substrate that will be placed under the railroad. The new culvert will replace a long culvert with no stream channel and a steep outfall to the lagoon, and will increase opportunities for fish to reside in the mixing zone between fresh and saline waters during upstream and downstream migrations. To give project managers a before and after restoration comparison, NOAA Fisheries and the At-Sea Processors Association are funding a video monitoring project to compare conditions before and after the project.

Outreach and Education

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 on 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

HCD staff took the lead in NOAA Fisheries partnering with NOAA's National Weather Service at the 2008 Alaska State Fair to share a booth and reach out to the public. Together, NOAA employees provided a consistent message about NOAA products and services. NOAA staff increased public awareness in areas 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

Exemplary Ecosystems Award

In July, 2008, the Lynn Canal Artificial Reef Project received an Exemplary Ecosystems Award from the Federal Highway Administration. HCD staff were instrumental in implementing this project, which constructed two artificial reefs composed of granite boulders at Yankee Cove in Lynn Canal near Juneau. The award, presented to the Alaska Department of Transportation, identifies exemplary ecosystem and habitat projects that are unique or highly unusual in their (a) geographic scope; (b) use of cutting edge science or technology; (c) high level of environmental standards; (d) high quality of results achieved; and/or (e) recognition by environmental interests as being particularly valuable or noteworthy.

Shorezone Mapping

HCD staff continued to work in partnership with other agencies and organizations to image and map habitat features along sections of the Alaska coastline. Work completed this year includes 4,905 km of physical mapping data; 5,472 km of biological mapping data; and 3,118 km of new shoreline imagery in southeast Alaska (70 km in the Icy Cape Area, 2,085 km in the Wrangell area, and 963 km in the northern Admiralty Island area). Partners imaged an additional 1,144 km in the Petersburg area and 565 km in the northern Admiralty Island area. The imaging was collected by a contractor with funds from NOAA Fisheries and other partners. The imagery and mapping data are accessible via an interactive website (www.alaskafisheries.noaa.gov/maps/szintro.htm) to provide coastal habitat information to decision makers and the public.

Invasive Species Coordination

HCD staff continued to lead the Marine Subcommittee of the Alaska Invasive Species Working Group to great success. As a follow up to training HCD facilitated in 2007, green crab and tunicate monitoring were established in Gustavus, Ketchikan and Sitka, and tunicate monitoring was initiated by the Alaska ferry system and expanded to Sitka. HCD staff used NOAA invasive species program funding to produce a green crab awareness poster, support monitoring in the field with equipment and mounted green crab specimens, and contract for the preparation of a *Spartina* response plan. HCD staff also worked with a contractor to test a green crab habitat suitability model using actual green crab occurrences in Vancouver, Canada. HCD was also instrumental in working with partners to develop an Alaska green

crab response plan. HCD staff presented on green crab and tunicate monitoring at a National Invasive Species Council meeting in Anchorage. HCD staff also provided extensive information and recommendations that were included in the Alaska Governor's Report on Climate Change and contributed to draft legislation for a bill to be introduced to the Alaska legislature to form a state Invasive Species Council. Through these and many other efforts of coordination and cooperation this past year, NOAA Fisheries is regarded as a leader in marine invasive species efforts in Alaska.



Green crab sampling from a float plane in Security Cove photo by Gary Freitag.



Green crab sampling in Glacier Bay photo by Whitney Rapp

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 collaborated with a variety of partners to implement a variety of worthy projects, including those that receive funding from the NOAA Restoration Center and the Pacific Coastal Salmon Recovery Fund (which is overseen by NOAA Fisheries).

Marine Debris Workshop

Regional Restoration Center staff received an internal NOAA grant to hold a workshop on marine debris in Alaska. The workshop held in conjunction with the 2008 Alaska Forum on the Environment, was organized jointly with staff from the Protected Resources Division and presented information on funding and coordination opportunities from the NOAA Restoration Center. Regional criteria for prioritizing cleanups in Alaska were also developed.

Please visit our website:
www.alaskafisheries.noaa.gov/habitat