

MEMORANDUM

TO: Council, SSC and AP Members
FROM: Chris Oliver *DD for*
Executive Director
DATE: March 24, 2012
SUBJECT: Habitat Issues

ESTIMATED TIME 10 HOURS (all C-3 items)

ACTION REQUIRED

- (c) Review Nunivak Island-Etolin Straits-Kuskokwim Bay Habitat Conservation Area Boundary
- (d) EFH consultation criteria: Ecosystem Committee Report.

BACKGROUND

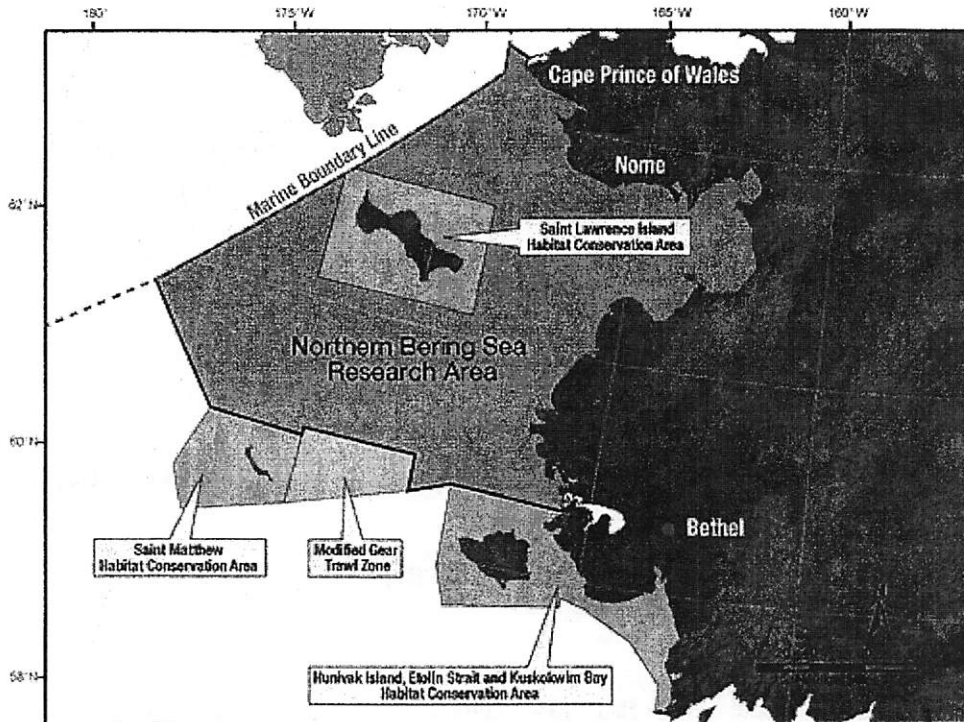
(c) Review Nunivak Island-Etolin Straits-Kuskokwim Bay Habitat Conservation Area Boundary

In July 2007, the Council adopted Amendment 89 to the BSAI Groundfish FMP, which created a number of habitat conservation areas (HCAs) in which bottom trawling is prohibited. One of these areas is the Nunivak Island-Etolin Strait-Kuskokwim Bay Habitat Conservation Area (Nunivak HCA, see map).

During the Council's consideration of Amendment 89, the boundaries for the Nunivak HCA were developed in close consultation with an industry and Association of Village Council Presidents (AVCP) working group. Communities and industry agreed on a southern boundary line for the habitat conservation area, which was subsequently established in regulation. The flatfish industry members committed to continued work with the AVCP communities in an ongoing process to communicate and share information on fishing activities and scientific information about the area, and if appropriate, to consider modifying the boundary line.

As part of the Council's final motion adopting the closure, the Council agreed to review the boundary line developed for the Nunivak HCA in four years, and to consider whether further action is appropriate. The review of that boundary is the subject of this agenda item. At the June, 2011 Council meeting in Nome, AK, the Council heard testimony from industry and communities asking the Council to reschedule this topic to allow interested parties more time for discussion. At the December, 2011 meeting, the Council was again asked to reschedule this topic to allow more time for discussion between the interested parties. The Council passed a motion to reschedule the matter to this meeting. Representatives of industry and tribal and community organizations have met several times since the Council was last updated, and may have a proposed resolution to bring to the Council for review at this meeting.

At this meeting the Council will hear from representatives of industry and community organizations and could initiate analysis of a new boundary or other protection measure, take no action, or again reschedule the issue.



(d) EFH consultation criteria: Ecosystem Committee Report.

In February, the Council received further information on the NMFS Essential Fish Habitat (EFH) consultation process (**Item C-3(d)(1)**), following up on a comprehensive report to the Council in December (**Item C-4(d)(2)**). Under current practice, NMFS notifies the Council, or Council staff, of a pending action that may affect habitats of direct concern to the Council. Nationally, no Councils have developed explicit criteria for when NMFS should inform a Council about EFH consultation issues and seek Council involvement, however, the agency recommended that any criteria that be developed be flexible and fairly broad. The Council asked both the Ecosystem Committee and the State of Alaska to provide input and recommendations on suggested criteria that might apply to consultations resulting in recommendations for mitigation.

The Ecosystem Committee is meeting on March 27, and will provide recommendations to the Council on this issue during this agenda item.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

November 28, 2011

Eric Olson, Chair
North Pacific Fishery Management Council
605 W. 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

Dear Mr. Olson:

At its last meeting the North Pacific Fishery Management Council asked the National Marine Fisheries Service (NMFS) to provide a report on the Essential Fish Habitat consultation process. The Council asked for a summary of the range and scope of reviews NMFS undertakes for federal actions proposed by various agencies, and a reminder of the process for bringing any such issues to the Council's attention for possible Council action. The enclosed report responds to the Council's request. We look forward to discussing this with the Council during the NMFS Management Report (agenda item B-2) at the December meeting.

Sincerely,

A handwritten signature in black ink, appearing to read "James W. Balsiger".

James W. Balsiger, Ph.D.
Administrator, Alaska Region

Enclosure



Overview of the Interagency Consultation Process for Actions that May Adversely Affect Essential Fish Habitat in Alaska

Prepared for the North Pacific Fishery Management Council
by the National Marine Fisheries Service, Alaska Region
November 2011

At its October 2011 meeting the North Pacific Fishery Management Council asked the National Marine Fisheries Service (NMFS) to provide a report on the Essential Fish Habitat (EFH) consultation process. The Council asked for a summary of the range and scope of reviews NMFS undertakes for federal actions proposed by various agencies, and a reminder of the process for bringing any such issues to the Council's attention for possible Council action. This report responds to the Council's request.

Legislative and Regulatory Background

In 1996 Congress added new habitat provisions to the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Section 303(a)(7) of the amended MSA required that every fishery management plan (FMP) describe and identify EFH¹ for federally managed species, minimize to the extent practicable the adverse effects of fishing on EFH, and identify other actions to encourage the conservation and enhancement of EFH. The 1996 amendments to the MSA also directed the Secretary to develop by regulation guidelines to assist the Fishery Management Councils in developing the EFH components of FMPs. NMFS issued an interim final rule with such guidelines in 1997 and a final rule in 2002. The EFH provisions of the MSA were not changed by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006.

Section 305(b) of the MSA requires federal agencies to consult with the Secretary regarding all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH. NMFS is required to provide conservation recommendations regarding any federal or state agency action that would adversely affect EFH. Action agencies do not have to follow NMFS's recommendations. As specified by Section 305(b)(4) of the MSA, federal agencies must respond in writing to any NMFS EFH conservation recommendations, and in the case of a decision that is inconsistent with NMFS's advice, the action agency must explain its reasons for not following the recommendations. The EFH regulations establish the procedures for coordination, consultations, and recommendations regarding proposed actions that may adversely affect EFH (50 CFR Part 600, Subpart K).

When it added the EFH provisions to the MSA, Congress found that "One of the greatest long-term threats to the viability of commercial and recreational fisheries is the continuing loss

¹ EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." "Waters" include aquatic areas and their associated physical, chemical, and biological properties. "Substrate" includes sediment underlying the waters. "Necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem. "Spawning, breeding, feeding, or growth to maturity" covers all habitat types utilized by a species throughout its life cycle. (50 CFR 600.10)

of marine, estuarine, and other aquatic habitats. Habitat considerations should receive increased attention for the conservation and management of fishery resources of the United States” (16 U.S.C. 1801(a)(9)). Congress also stated that a purpose of the amended MSA is “to promote the protection of essential fish habitat in the review of projects conducted under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat” (16 U.S.C. 1801(b)(7)).

Experience Implementing EFH Consultations

NMFS began conducting EFH consultations in 1999 when the first EFH designations took effect. Prior to EFH, NMFS reviewed federal agencies’ actions under the Fish and Wildlife Coordination Act and other authorities and offered recommendations on many actions. The EFH provisions of the MSA provided more structure for this process and focused the consultations on the habitats that sustain MSA-managed species.

Every year the NMFS Alaska Region reviews in the range of 100 to 200 actions proposed by federal and state agencies that have the potential to affect living marine resources. Staff evaluate each action to determine whether it would affect EFH or other resources for which NMFS has statutory responsibility. In a typical year the actions include a wide range of activities such as harbor redevelopment, navigation dredging, offshore disposal of materials, pollutant discharges, coastal construction, mining, forestry, oil and gas exploration, Naval training exercises, hydropower development, and transportation infrastructure projects (highways, bridges, airport expansions, etc.). Action agencies include the Army Corps of Engineers, Environmental Protection Agency, Bureau of Ocean Energy, Bureau of Land Management, Federal Energy Regulatory Commission, Federal Highway Administration, Federal Aviation Administration, and others.

Over the years NMFS has found that our habitat biologists are most effective at avoiding or minimizing impacts to EFH during pre-consultation coordination with project proponents and action agencies. NMFS staff work to incorporate measures that avoid and minimize impacts to EFH to the greatest extent practicable during early scoping and design of projects, prior to the activity reaching the stage where the consultation process would be initiated. In many cases this early work obviates the need for EFH consultation, or at least narrows the issues to be resolved. As a result the Alaska Region provides EFH conservation recommendations on fewer than 50 proposed actions annually. In 2011 the Alaska Region provided such recommendations on about 20 proposed actions.

NMFS also completes EFH consultations regarding its own actions, including fishery management actions. In Alaska we generally only complete a full EFH consultation on the annual harvest specifications, but every rulemaking includes an evaluation of potential adverse effects to EFH to verify whether the effects are within the scope of the annual consultation.

Related Information in Council Fishery Management Plans

As required by the MSA and the EFH regulations (50 CFR 600.815(a)(4)), the Council’s FMPs include information about activities other than fishing that may adversely affect EFH, as

well as recommendations to avoid or minimize adverse effects. NMFS updated this information most recently in conjunction with the 5-year review of EFH sections of Council FMPs that was completed in 2010, and a summary will be included in the omnibus EFH FMP amendment that the Council will soon submit to NMFS for Secretarial review.

NMFS habitat biologists use the non-fishing effects synthesis as a reference when reviewing proposed actions for potential impacts to EFH, and when considering possible ways to avoid or minimize adverse effects. The synthesis includes summaries of the effects of various activities on fish habitat, as well as numerous literature citations. NMFS may consider this information, along with information from many other sources, when developing comments and recommendations on proposed actions. Federal action agencies also may use the synthesis as a reference when preparing the EFH Assessments they provide to NMFS as a part of EFH consultations.

Council Role in Commenting on Actions that May Affect EFH

The MSA provides a role for Fishery Management Councils in commenting on federal or state agency actions that would affect fish habitat. Under Section 305(b)(3) of the MSA, Councils may comment on any action that may affect the habitat, including EFH, of a fishery resource under Council authority, and must comment if in the view of the Council the action is likely to substantially affect the habitat, including EFH, of an anadromous fishery resource under Council authority.

The EFH regulations at 50 CFR 600.930(a) state that each Council should establish procedures for reviewing federal or state agency actions that may adversely affect the habitat, including EFH, of a species under its authority. The regulations note that a Council could direct Council staff to track proposed actions, recommend that a Council committee identify actions of concern, or enter into an agreement with NMFS to have NMFS notify the Council of actions of concern. In Alaska we have followed the latter approach, with NMFS Habitat Conservation Division staff informing Council staff about pending actions that may be of particular interest to the fishing industry and/or that may affect habitats of direct concern to the Council. The following examples illustrate how this has worked in recent years:

1. In 2005, NMFS informed Council staff that the National Science Foundation (NSF) was proposing a federally funded geological research project that involved using a rock dredge in the vicinity of a coral garden site near Semisopchnoi Island. NMFS provided EFH conservation recommendations to NSF and gave a copy to the Council. The Council subsequently sent its own letter to NSF expressing concern about the action in light of Council efforts to protect vulnerable bottom habitats in the Aleutian Islands. NSF responded by detailing measures it would take to minimize adverse effects, such as restricting the amount of time the sampling gear would contact the bottom and avoiding the summits of volcanic cones as much as possible to stay away from high densities of coral.
2. In 2006, NMFS worked with the Minerals Management Service (MMS) to have Council staff included in a "North Aleutian Basin Information Status and Research Planning Meeting" to provide an overview of commercial fisheries in Bristol Bay and the eastern Bering Sea.

MMS had included the North Aleutian Basin in its draft *Outer Continental Shelf Oil and Gas Leasing Program, 2007-2012* and was beginning to evaluate environmental constraints and potential user conflicts for future oil and gas leasing and development. Council staff provided crucial information on the significance of commercial fisheries in the area: historic catch levels, landings value, and related figures. In 2008, Council staff and the Alaska Department of Fish & Game (ADF&G) provided additional information related to this issue at a Sea Grant sponsored North Aleutian Basin Energy-Fisheries Workshop, at which NMFS staff also presented. Having NMFS, the Council, and ADF&G involved in this issue helped to ensure fisheries concerns were included in MMS's decision-making process. MMS subsequently dropped the North Aleutian Basin from its plans for the leasing program.

3. In 2008, NMFS staff informed Council staff that the GCI/Spandex marine cable project included plans to run a new fiber-optic telecommunications cable from Oregon to several landfalls in Alaska. The projected cable route transected nearshore areas important to groundfish and salmon as well as offshore commercial fishing areas. NMFS facilitated using Council meetings as a venue for the proponents to inform commercial fishermen about the project and for the fishing industry to voice any concerns. The 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).
4. In 2009, NMFS staff briefed Council staff on information related to the proposed Pebble Mine and its potential effects to fishery resources in Bristol Bay. Staff jointly determined that the proposal had not yet advanced to the point that it should be brought to the Council, and agreed to keep in communication about this issue in the future. NMFS is still tracking this issue and most recently has been assisting the Environmental Protection Agency (EPA) with EPA's assessment of the effects of large scale mining in the Bristol Bay watershed. NMFS will keep Council staff informed as appropriate.

Conclusion

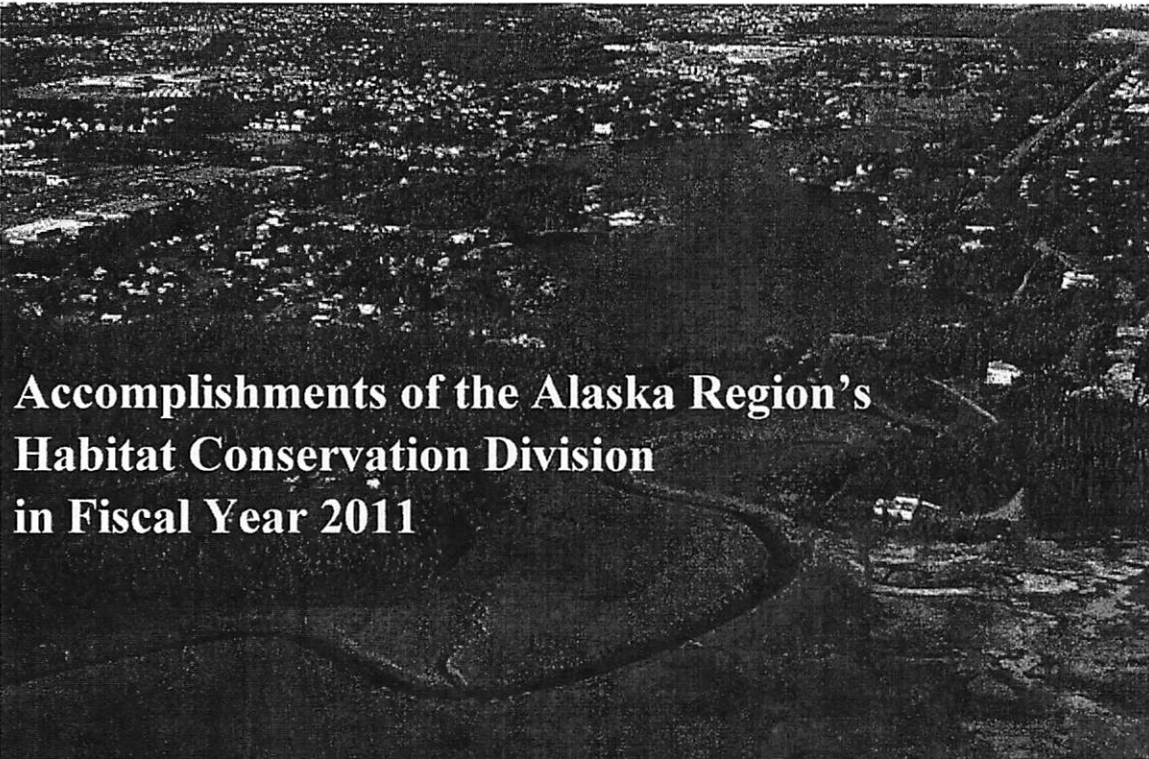
During EFH consultations between NMFS and other agencies, NMFS strives to provide reasonable and scientifically based recommendations for reducing the loss and degradation of habitats that sustain Council-managed species. These recommendations are non-binding, as specified by the MSA. The consultations serve to inform agencies with relevant jurisdiction about potential consequences of their actions for EFH and ways to minimize adverse effects to Alaska's valuable fishery resources.

The attached report, "Accomplishments of the Alaska Region's Habitat Conservation Division in Fiscal Year 2011," provides highlights of a number of EFH consultations completed during the past year as well as other NMFS Habitat Conservation Division activities. NMFS provides copies of this report to the Council office annually. The annual reports are also available on the internet at www.alaskafisheries.noaa.gov/habitat.



NOAA Fisheries

National Marine Fisheries Service



Accomplishments of the Alaska Region's Habitat Conservation Division in Fiscal Year 2011

Campbell Creek Estuary; Photo by Mark Lester

This report provides highlights of Habitat Conservation Division (HCD) activities from October 1, 2010 through September 30, 2011. HCD works with industries, stakeholder groups, government agencies, and private citizens to avoid, minimize, or offset the adverse effects of human activities on Essential Fish Habitat (EFH) and living marine resources in Alaska. 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 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 coordinates extensively with other groups to facilitate habitat conservation. HCD works in close partnerships with numerous NOAA offices as well as other agencies and organizations such as the North Pacific Fishery Management Council, Army Corps of Engineers, Environmental Protection Agency, U.S. Fish and Wildlife Service, Bureau of Ocean Energy Management, U.S. Forest Service, Bureau of Land Management, Federal Energy Regulatory Commission, Federal Aviation Administration, Alaska Department of Fish and Game, Alaska Department of Natural Resources, Alaska Department of Transportation and Public Facilities, local governments, and a variety of industry and conservation groups.

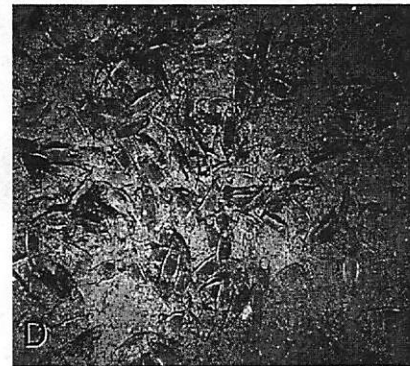
Essential Fish Habitat and Fishery Management

Omnibus EFH Amendment to Fishery Management Plans

HCD staff worked closely with the North Pacific Fishery Management Council to revise the EFH components of fishery management plans for Gulf of Alaska and Bering Sea / Aleutian Islands groundfish, weathervane scallops, and Bering Sea / Aleutian Islands crab. The Council adopted the omnibus amendment in April 2011. With these changes the fishery management plans will incorporate the most recent scientific information including revised descriptions of EFH for several species, thereby reflecting more accurately the habitats that are necessary to support managed species. The amendment also updated the information regarding the effects of non-fishing activities on EFH, revised the process for identifying Habitat Areas of Particular Concern, and highlighted the need for a more specific analysis of the potential effects of fishing on EFH for Bristol Bay red king crab, which is now underway. The omnibus amendment stemmed from a once-every-five-years review of the EFH components of fishery management plans, which HCD and the Alaska Fisheries Science Center completed in 2010.

Habitat Areas of Particular Concern for Skates

In 2010 HCD staff worked with Alaska Fisheries Science Center experts to develop a proposal to identify six skate nurseries (egg case concentration sites) in the Bering Sea as Habitat Areas of Particular Concern. Skates lay their eggs in cases they deposit on the sea floor, and development of embryos within the cases can span over three years, making the nursery areas vulnerable to disturbance by bottom-tending fishing gear. In February 2011 the North Pacific Fishery Management Council voted to proceed with an analysis of the proposal and associated management measures to protect these sites, which are used by several species of skates. HCD worked with Science Center experts and Council staff to develop the concept further and begin the analysis, which will be presented to the Council for action in 2012.



A skate nursery area in the Bering Sea

Environmental Review to Minimize Habitat Loss

Bristol Bay Watershed Assessment

HCD provided major support to help the Environmental Protection Agency conduct a comprehensive assessment of how future large-scale mining development may affect the Bristol Bay watershed, including water quality, salmon fisheries, and indigenous peoples. HCD contributed a synthesis of relevant literature regarding the ecological processes that support spawning and rearing habitat for salmon in these watersheds, and drafted a section discussing the contributions of salmon from the watershed to fish and marine mammal populations in Bristol Bay. HCD also supported EPA's development of a predictive risk assessment. EPA expects to release its watershed assessment in 2012 and to use the information in its regulatory decisions regarding the proposed Pebble Mine.

Knik Arm Bridge

HCD completed an EFH consultation for the proposed bridge over Knik Arm near Anchorage. The proposed crossing would include almost a mile of solid fill causeways from the eastern and western shores leading to an 8,200 foot long pile supported bridge spanning over the deepest part of Knik Arm and would result in the loss of 90 acres of intertidal and subtidal habitat. Concerns include likely adverse effects to migrating salmon, which will lose their shallow water migratory corridor and may experience increased mortality in deeper, faster moving water under the narrower opening that remains once the project is built. HCD coordinated its review with the Protected Resources Division, which completed consultation under the Endangered Species Act for impacts to beluga whales. The Army Corps of Engineers is proceeding with its evaluation of the project and will likely issue a permit in the near future.

Nome Airport Runway Extension

HCD staff recommended improving habitat in the Snake River in Nome, which the Alaska Department of Transportation and Public Facilities and the Federal Aviation Administration are proposing to realign as part of the Nome Airport Runway Safety Area Expansion Project. This reach of the Snake River was heavily impacted by historic mining. The morphology of this reach will require decades to develop and to re-establish complexity, which will primarily be accomplished from slump blocks sliding into the channel. Realignment of the river has the



Snake River near Nome Airport

potential to increase the habitat value for this reach. HCD suggested including features in the design of the Snake River realignment that would increase holding and rearing areas in a reach that currently provides very little habitat diversity, and converting the current channel to an engineered slough to provide refuge for juvenile salmon.

Siting Log Storage Areas to Minimize Impacts

As a result of HCD's concerns and recommendations, a proposed log storage facility that would have been built in intertidal habitat in Klawock Inlet was instead located in a nearby upland site. The original proposal involved filling 4.5 acres of intertidal area with wood waste from a lumber mill. Filling the area would have eliminated the habitat and caused water quality problems in the vicinity due to leachate from the wood waste. A considerable body of research has shown that leachate from decomposing wood fiber can contain high concentrations of contaminants that can be acutely toxic to marine life. HCD's review led the applicant to reexamine an upland location for the log storage yard, allowing the project to proceed with no impacts to marine habitat.

In a second project involving log storage, HCD reviewed a proposal to operate log storage areas in productive shallow water habitat in Nutkwa Inlet at Prince of Wales Island. The proposal involved storing 20 million board feet of timber annually in an uncommon shallow salt-chuck lagoon that provides rearing habitat for salmon and forage species. The applicant has two log transfer facilities in Nutkwa Inlet that include upland log storage yards as well as log rafting and storage areas in deep waters, so HCD recommended that the applicant pursue log storage

either in the existing upland sites or in deeper portions of the inlet where effects to fish habitat are less of a concern. The Corps of Engineers agreed to pursue these less damaging alternatives with the applicant.

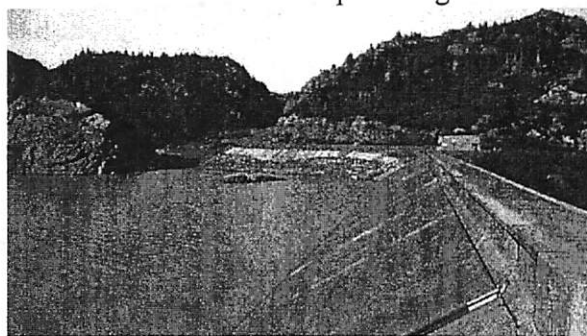
Mitigation Banks and In-Lieu Fee Arrangements

HCD staff assisted private sector partners with the development of four new agreements for mitigation banks or in-lieu fee arrangements to compensate for unavoidable impacts to fish habitat. Mitigation banks provide a mechanism for habitats to be restored or protected and then set aside in perpetuity, with the credits to be used in the future to offset losses of similar habitat from development activities. Similarly, in-lieu fee arrangements allow a sponsor to pool fees from Clean Water Act permit applicants to purchase valuable habitats that are then preserved in perpetuity. The arrangements are called “in-lieu fee” because the applicants pay fees in lieu of providing compensatory mitigation (like restoring wetlands) to offset impacts caused by a development project. HCD staff worked with the sponsors as well as the Corps of Engineers, Environmental Protection Agency, and U.S. Fish & Wildlife Service to develop the operating procedures for these new mitigation banks and in-lieu fee arrangements. NOAA Fisheries signed the four agreements as a member of the interagency review team: the Pioneer Reserve Umbrella Mitigation Bank Instrument, the Su-Knik Umbrella Mitigation Bank Instrument, the In-Lieu Fee Instrument for the Great Land Trust, and the In-Lieu Fee Instrument for the Southeast Alaska Land Trust. As an example of the benefits, the Pioneer Reserve includes 135 acres of wetlands, streams, and ponds with abundant salmon use throughout the system, and its preservation will provide direct compensation for fish habitat function lost due to development in the same area.

Haines Boat Harbor Expansion

As part of the planning process for proposed expansion of a federal navigation project in Haines, HCD staff participated in field surveys to assess baseline environmental conditions at the project site and potential mitigation sites. Mitigation options include remediating a former log transfer facility and using dredged material from the harbor expansion to create new kelp bed habitat. HCD assisted with determining the extent of degradation at the closed log transfer facility and evaluating the feasibility of the mitigation concepts. HCD also helped to define objectives for the field work, assist divers, and develop preliminary recommendations that will provide a foundation for identifying environmentally preferred alternatives. HCD will continue to assist the Corps of Engineers as this civil works project progresses.

Hydropower Development



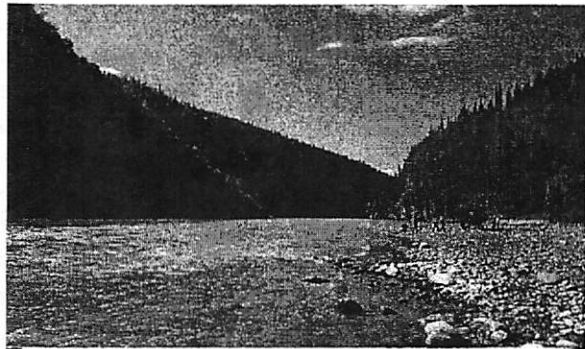
Crest of Bradley Lake Dam

HCD staff continued to provide guidance to hydropower developers to minimize adverse impacts to salmon and their habitats. Several proposed projects entered the study plan phase in 2011, and HCD advised the applicants on methods to assess impacts on hydrology and stream and estuarine habitats. HCD staff also participated in the Federal Energy Regulatory Commission’s licensing process for proposed traditional dam projects and hydrokinetic energy projects. Licensees for several existing projects submitted or are

developing amendment applications. HCD recommended ways to reduce the effects these hydroelectric projects would have on anadromous and marine habitats, including instream environmental flow requirements, passage requirements, and alteration of project structure and operation to limit effects on anadromous fish.

Susitna-Watana Hydroelectric Project

HCD participated in a variety of pre-license application meetings and events with the Alaska Energy Authority on the proposed Susitna-Watana hydroelectric project, which would involve constructing a new 700 foot high two mile long dam on the Susitna River. The early coordination allowed HCD to promote concerns and build collegial relationships. Staff attended a site visit with the Alaska Energy Authority and other agencies, including a project overview and discussion of the licensing process. Staff also participated in meetings regarding a gap analysis to identify data needs, and expect to see a Preliminary Application Document submitted to the Federal Energy Regulatory Commission before the end of 2011.



Susitna River at the proposed Watana Dam site

HCD Hydropower Website

In 2011 HCD launched a new webpage to provide valuable resource information to the

Home
Fisheries
(EAM) Permits and Reports
Online Services
Protected Species
Habitat Conservation
Regulations
RMP
Grants
Administration and Tools

Alaska Regional Office
Alaskafisheries.noaa.gov
PO Box 21668
Juneau, Alaska 99902-1668
Contact Information

Habitat Conservation Division - Hydropower Program

HYDROPOWER AND HYDROKINETIC PROJECT REVIEW

Alaska is in a unique position relative to most other regions in having robust and viable fish stocks and diverse populations of marine mammals, combined with the aggressive pursuit of new hydropower development throughout the state. NMFS reviews proposed and existing hydropower and hydrokinetic projects in cooperation with applicants and operators, the Federal Energy Regulatory Commission (FERC), other federal agencies, the State of Alaska, tribes, and communities. NMFS reviews proposed projects throughout the licensing phase and develops recommended license terms and conditions necessary to protect, mitigate damage to, and enhance fish and wildlife habitat affected by hydropower project construction and operation. NMFS also reviews existing hydropower projects, usually on an annual basis, to determine if project operations are meeting goals for protection of NMFS trust species or if adaptive management is necessary.

Click here for a larger version of the map of proposed and existing hydropower and hydrokinetic projects in Alaska.

general public, developers, and regulatory agencies on hydropower development in Alaska and NOAA Fisheries' role in hydropower project review. The webpage provides examples, references, and maps to describe NOAA Fisheries' role in reviewing projects throughout the Federal Energy Regulatory Commission's licensing phases and how HCD develops recommended license terms and conditions necessary to protect, mitigate damage to, and enhance fish and wildlife habitat affected by hydropower project

construction and operation. Please visit the site at www.alaskafisheries.noaa.gov/habitat/hydro/.

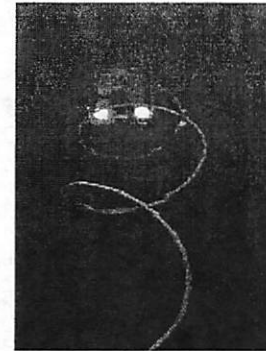
Habitat Protection and Restoration

National Fish Habitat Action Plan

HCD continued to support the National Fish Habitat Plan in Alaska. Staff participated in planning for a new Pacific Marine and Estuarine Fish Habitat Partnership which initially was described to include the Pacific coast from Baja through Southeast Alaska. The proposal eventually was scaled back to focus on California, Oregon, and Washington, so HCD worked with partners in Southeast Alaska to pursue regionally relevant strategies for habitat conservation, leading to a proposal for a Southeast Alaska Fish Habitat Partnership. That proposal was recognized by the National Fish Habitat Board as a Candidate Partnership in August 2011. One of the key goals is to develop a strategic plan that identifies conservation and restoration priorities. In addition, HCD continued to support other fish habitat partnerships in Alaska: the Matanuska-Susitna Basin Salmon Habitat Partnership, Kenai Peninsula Fish Habitat Partnership, and Southwest Alaska Salmon Habitat Partnership. HCD assists the partnerships in many ways, such as helping to write portions of strategic plans, looking for funding opportunities to promote habitat protection and restoration, and recognizing noteworthy outcomes by nominating partners for national awards. HCD is also working with the U.S. Fish & Wildlife Service to create a statewide umbrella group to assist in coordinating the administrative and data needs of all the Alaska fish habitat partnerships.

Invasive Species

HCD staff continued to work with the Alaska Department of Fish and Game, U.S. Fish and Wildlife Service, Smithsonian Environmental Research Center, University of Alaska, and other partners to address the infestation of an invasive colonial tunicate, *Didemnum vexillum*, discovered in Whiting Harbor near the Sitka airport in 2010. As part of the combined effort, HCD teamed up with the Alaska Fisheries Science Center to conduct a remotely operated vehicle survey to determine if the infestation had spread. Fortunately the infestation remains fairly localized. HCD also provided recommendations and guidance for additional *D. vexillum* surveys in Sitka's other harbors (none has been found), and helped to evaluate potential treatment methods and management actions to contain or eradicate the infestation. This work is integrated with continuing HCD staff coordination of the Alaska Invasive Species Working Group's marine subcommittee, which addressed other invasive species issues this year such as green crab monitoring. Finally, HCD staff now represent NOAA Fisheries on the Western Regional Panel of the Aquatic Nuisance Species Task Force and joined its coastal and marine subcommittee to seek ways to coordinate and promote Alaska invasive species issues.

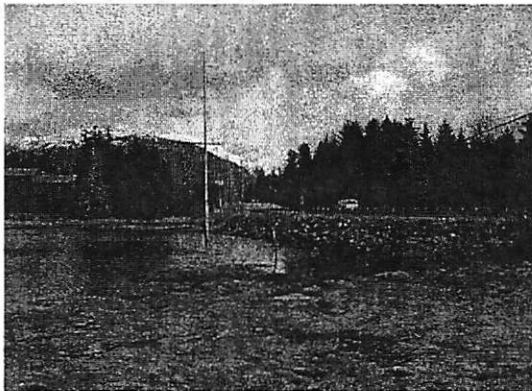


Remotely Operated Vehicle surveying for invasive tunicates in Sitka

Klawock Causeway Bypass

HCD assisted the NOAA Restoration Center, The Nature Conservancy, and the Alaska Department of Transportation and Public Facilities in implementing a major restoration project on the Klawock River in southeast Alaska using funds from the American Recovery and Reinvestment Act. The project involved breaching a large causeway on an outlet of Klawock Lagoon to provide fish passage, improve tidal flushing, and enhance eelgrass beds. At high tide,

water and fish are now crossing the causeway for the first time in 50 years via a new three-sided cast concrete culvert. A remote motion-sensing camera operated by the Forest Service is being used to monitor salmon passage through the culvert. Members of the Klawock Tribe will continue the monitoring program developed by NOAA and The Nature Conservancy, and the NOAA Coastal Services Center is helping to produce baseline maps from aerial photography. The completion of this part of the project concludes an 11 year commitment by about 14 different organizations. Monitoring will continue for several years.



Klawock lagoon causeway before and after the breach restored tidal flushing and fish access; Photos by TNC

Other Noteworthy Activities

ShoreZone Mapping

ShoreZone is a coastal habitat mapping and classification system in which spatially referenced aerial imagery is combined with geological and biological interpretation to

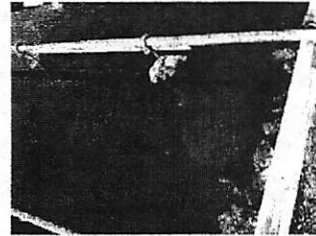


characterize coastal features and allow users to virtually “fly” the coast from any computer with internet access. To date 51,745 km or approximately 69% of Alaska’s shoreline has been imaged, which is an increase of 6% from last fiscal year. Fifty-five percent of the coastline is mapped with geomorphic and biologic features identified and entered into the ShoreZone database. Mapping is in progress for an additional 4,840 km. Imagery and mapping data are accessible via an interactive website to provide coastal habitat

information to decision makers and the public (www.alaskafisheries.noaa.gov/shorezone). HCD continues to work with other agencies and organizations to promote use of ShoreZone data and fund additional data collection. During FY11 HCD staff coordinated ShoreZone briefings for several agencies; gave presentations at statewide and national conferences to attract additional partners and users; secured \$85,000 from the U.S. Fish and Wildlife Service’s National Wildlife Refuge System for ShoreZone work; assisted the Forest Service and Bureau of Ocean Energy Management with their contracting for ShoreZone work; and contracted for mapping a section of the Bristol Bay coastline in 2012.

HCD Diving and Small Boat Operations

HCD's divers and small boat operators performed several successful operations during FY2011. HCD assisted the Kachemak Bay National Estuarine Research Reserve with an assessment of invasive species near Homer. Divers investigated a 20+ year old oyster farm structure (pictured at right) and the surrounding embayment for non-indigenous species, and fortunately found none. HCD divers also assessed several sites in southeastern Prince William Sound for marine debris. The sites were selected due to their proximity to known shoreline marine debris accumulation areas. The team catalogued marine debris by



location, type, and estimated weight. HCD also participated in an agency-wide small boat managers meeting to share lessons learned and focus on ways to maintain and improve safe small boat operations in diverse operational areas from the Arctic to the Florida Keys.

Grant Creek Habitat Study

HCD participated in a 2-dimensional hydraulic study with the US Geological Survey, Fish and Wildlife Service, and Alaska Department of Fish and Game. The study collected stream topographic, hydraulic, and geomorphic information in a heavily utilized reach of Grant Creek. The results will help to develop measures to protect flows and habitat in the steep stream, which could be affected by hydropower development in nearby Grant Lake.



Topographic survey of Grant Creek for 2-D habitat model; Sockeye salmon in Grant Creek

Outreach and Education

HCD staff participated as judges in several school science fairs and made presentations in classrooms on fish habitat issues, helping to teach the next generation of stewards for healthy aquatic habitats.



Scenic Park Elementary School outreach event with first graders to talk about hydrology and fish habitat after judging a school-wide science fair

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



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

January 19, 2012

Eric Olson, Chair
North Pacific Fishery Management Council
605 W. 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

Dear Mr. Olson:

At its December 2011 meeting the North Pacific Fishery Management Council asked the National Marine Fisheries Service (NMFS) to provide some additional information regarding Council involvement in the consultation process between NMFS and other agencies regarding actions that may adversely affect Essential Fish Habitat (EFH). Specifically, the Council asked us to investigate whether specific criteria have been developed to guide coordination between NMFS and other Fishery Management Councils on EFH consultation issues. The Council also asked NMFS to suggest criteria that the Council may want to adopt to clarify when the Council would like NMFS to bring particular EFH consultation issues to the Council's attention for possible Council action. These requests stemmed from Council discussion regarding a November 28, 2011, report we provided on the EFH consultation process.

We polled each of the other NMFS Regional Offices and learned that none of the Councils has developed explicit criteria for when NMFS should inform a Council about EFH consultation issues and seek Council involvement. Several of the Councils periodically engage in issues related to threats to EFH from non-fishing activities, including the New England, Mid-Atlantic, South Atlantic, Gulf of Mexico, and Pacific Councils. In almost all cases the Councils rely on NMFS Habitat Conservation Division staff or Council staff to flag issues for Council consideration. In some cases Councils have shown previous interest in certain types of activities (e.g., offshore energy development) and NMFS makes sure to brief the Council on such actions as they arise. In other cases Councils have developed policy statements on various non-fishing activities that may conflict with EFH and/or fisheries. Council involvement in specific projects generally depends upon whether staff or a concerned party brings an issue to the Council's attention and whether the Council decides that its involvement is warranted. When Councils do comment on particular actions, their comments on potential use conflicts and socioeconomic consequences can prove just as important to the process as their comments on effects to EFH.

As noted in the November 28, 2011, report we provided to the Council, in Alaska we have used the approach of having NMFS inform Council staff about pending actions that may be of interest to the fishing industry and/or that may affect habitats of direct concern to the Council. This process has worked well and has led the Council to engage in EFH consultation issues periodically. While we would welcome any additional direction from the Council on the types of projects that may be of interest, at this point NMFS is comfortable continuing to rely on the professional judgment of agency and Council staff to highlight issues for Council consideration, rather than having the Council establish explicit criteria.



If the Council chooses to proceed with developing criteria, we suggest keeping such criteria flexible and fairly broad. For example, the Council could adopt criteria such as the following:

- The extent to which the activity would adversely affect EFH;
- The extent to which the activity would adversely affect Habitat Areas of Particular Concern or other areas established by the Council to protect sensitive habitat features;
- The extent to which the activity would be inconsistent with measures taken by the Council to minimize the potential adverse effects of fishing on EFH; and
- The extent to which the activity would conflict with Council-managed fishing operations.

Regardless of whether the Council develops explicit criteria, NMFS recommends that the Council and NMFS continue to coordinate regarding non-fishing activities that may adversely affect EFH. Should the Council become aware of an activity that may impact EFH and merit Council involvement, we suggest that Council staff contact our Habitat Conservation Division to coordinate any concerns and potential comments to the applicable action agency. Likewise, NMFS will continue to keep the Council and its staff informed regarding potential threats to EFH and opportunities for the Council to comment as appropriate.

We look forward to discussing this with the Council during the NMFS Management Report (agenda item B-2) at the February meeting.

Sincerely,


for James W. Balsiger, Ph.D.
Administrator, Alaska Region