Alaska Marine Ecosystem Forum

MEETING SUMMARY

September 18, 2006, 10-4 pm Department of Environmental Conservation Conference Room, Anchorage, AK

The following member agencies attended the meeting. Underlined participants represented their agency.

North Pacific Fishery Management Council (NPFMC)

<u>Stephanie Madsen</u>, Chair Chris Oliver, Executive Director David Witherell, Deputy Director Diana Evans, NEPA Specialist

National Marine Fisheries Service (NOAA Fisheries)

Jon Kurland, Assistant Regional Administrator for Habitat Conservation Lisa Lindeman, Regional Counsel, NOAA General Counsel Joe McCabe, Paralegal, NOAA General Counsel

Fish and Wildlife Service (FWS)

Leonard Corin, Fisheries and Ecological Services Supervisor Greg Siekaniec, Refuge Manager, Alaska Maritime National Wildlife Refuge

Minerals Management Service (MMS)

<u>Kate Wedemeyer</u>, Fisheries Oceanographer, Environmental Studies Section Paul Stang, Alaska Regional Supervisor for Leasing and Environment

National Park Service (NPS)

<u>Judy Gottlieb</u>, Associate Regional Director for Subsistence and Partnerships

Bureau of Land Management (BLM)

Gary Reimer, Field Manager, Anchorage Field Office

Environmental Protection Agency (EPA)

Ron Kreizenbeck, Acting Regional Administrator Marcia Combes, Director, Alaska Operations Office

17th Coast Guard District (CG)

<u>Captain Mark DeVries</u>, Sector Commander Commander Robert Forgit, Commander

Alaskan Command (ALCOM)

<u>Colonel Mark Lowe</u>, Chief of Staff Jerome Montague, Tribal Affairs / Natural Resources Advisor

U.S. Army Corps of Engineers (COE)

<u>Patricia Opheen</u>, Chief, Engineering Division Kevin Morgan, Deputy Chief, Regulatory Branch

Department of Environmental Conservation (DEC)

Kurt Fredriksson, Commissioner

Department of Natural Resources (DNR)

Ed Fogels, Deputy Commissioner

Department of Fish and Game (DFG)

Heather Brandon, Ocean Policy Coordinator

Also present at the meeting:

Clarence Pautzke, Executive Director, North Pacific Research Board Joy Geiselman, Deputy Chief, Biology/ Geography Office, Alaska Science Center, US Geological Survey Brian Allee, Executive Director, Alaska Sea Grant

Signing of the Memorandum of Understanding

Stephanie Madsen (NPFMC), Jon Kurland (NOAA Fisheries), Judy Gottlieb (NPS), Ron Kreizenbeck (EPA), and Kurt Fredriksson (DEC) all signed the Memorandum of Understanding (MOU) creating the Alaska Marine Ecosystem Forum (AMEF) at the meeting. Other agencies sent their MOU signature pages in advance, and the Coast Guard and the Minerals Management Service will sign the document during the week following the meeting.

Election of Officers

The AMEF elected Ms Madsen (NPFMC) as chair, and Mr Fredriksson (DEC) as Vice-Chair. Ms Madsen explained that her position as Chair of the NPFMC, and consequently representative to the AMEF, would continue at least until August 10, 2007, so she would be able to serve as AMEF Chair during that time. Mr Fredriksson cautioned that with the upcoming change in Alaska governor, his position as DEC Commissioner was uncertain, and the Forum members acknowledged they might have to re-fill the office of Vice-Chair at a future meeting.

Agency Briefings

Each agency present at the meeting gave a brief report on their objectives, activities, or interests in the Aleutian Islands. Some agencies provided handouts, which are attached to this summary.

<u>Marcia Combes and Ron Kreizenbeck – Environmental Protection Agency</u> (handout attached) EPA is working with climatologists to develop a strategy for how EPA will be involved in climate change. One role might be communication: working with all agencies to get the most current information out; and another focus is on adaptation, how to mitigate the effects of changes. A post-doctoral student, Jackie Poston, is working full-time on this issue in the EPA office, and is the point of contact. There is also a climate team in Region 10.

Regarding hazardous material spills, EPA is working closely with the Aleutian/Pribilof Islands Association concerning cleanup of abandoned Department of Defense facilities, especially formerly used defense sites (FUDS). EPA also processes discharge permits (non-pollutant discharge elimination system), and has been involved in a user conflict in Unalaska between seafood processors and the local municipality. EPA is a co-lead with the Coast Guard on the Alaska Regional Response Team. They work closely together for oil spill response, especially whether to use dispersants given the harsh conditions. As far as marine mammal issues go, the agency's involvement is mainly through its role as a NEPA reviewer of environmental impact statements. EPA is not involved in Amchitka, but on Adak, is working closely with the Navy to remove polychlorinated biphenals (PCBs) in harbors, and ammunition and unexploded ordinance on the land. EPA funds DEC to take the lead on its Environmental Monitoring and Assessment Program work, for which the Aleutian Islands was sampled this summer, and baseline conditions established. EPA also issues air permits, and has had a referral from DEC on a processor in the Aleutians in violation of air quality.

During the agency briefings it was also discussed that some of the EPA laboratories may be closed down in the future, and their functions combined into fewer facilities. Mr Kreizenbeck noted that most of Alaska's oceanographic work is done on the East Coast. He encouraged any agency with an interest in the work done by the laboratories to comment to the agency while they are considering how to restructure.

Patricia Opheen - US Army Corp of Engineers (handout attached)

Research efforts in the Aleutians are through the Tribal Partnership Program (TPP) and Individual Harbor Projects, providing data collection for harbor and erosion control design and construction. The efforts for

the TPP will be primarily in placing wave buoys in the Bering Sea to collect wave height and frequency data. Several civil works programs are underway in the state in the harbors of Port Lions, False Pass, Sand Point, Saint Paul, Chignik and Unalaska. The FUDS program is being coordinated with other agencies, and its purpose is to cleanup former defense sites, of which there are a number in the Aleutian Islands.

Lenny Corin - US Fish and Wildlife Service (handout attached)

Most of the land in the Aleutian Islands is within the Aleutian Islands unit of the Alaska Marine National Wildlife Reserve. The objective of the Aleutian Islands unit is to restore and conserve the natural resources of the area, and the unit has a robust research and monitoring program. Fox eradication has been successful, and foxes have been removed from over 40 islands. The eradication of foxes on Sanak Island was closely coordinated with tribal leaders. 2500 acres have been culled of rats introduced by shipping, which helps to restore the bird populations. FWS works closely with the Coast Guard to ensure rats are not re-introduced to Alaska ecosystems.

FWS uses a 120 foot research vessel to do marine monitoring of seabirds. Fisheries management continues in some inland lakes in Unalaska. The marine mammal decline of northern sea otters has been significant from Cook Inlet westward. The sea otter is listed under the Endangered Species Act, and is found throughout the Aleutian Islands; a marking and tagging program exists. FWS uses the Sea Life Center in Seward for the study of sea otters. Kudos were given to the Coast Guard for their logistics support in the walrus survey. FWS is back to tracking seabirds, after a lull in the 1980s, and has a pelagic seabird database. 52 satellite tags have been placed on all species of albatross and they are being monitored; the progress can be followed on the web (google 'albatross project'). FWS is also looking to list Kittlitz' murrelet in the Aleutian Islands.

The Selendang Ayu response involved over 60 people onsite for spill response, and 100 FWS personnel total, and the Tekla research vessel was used as a platform in addition to aerial surveys. Currently, the agency is requesting proposals for restoration and mitigation in that area (to be funded by a settlement with the owner of the Selendang Ayu). FWS continues to study of low level contaminants in eiders out in Dutch Harbor, from the oil spill. The recent die-off of shearwaters in Dutch Harbor, recently reported in the news, has preliminarily been attributed to natural starvation and ship collision.

Jon Kurland – National Marine Fisheries Service (handout attached)

NOAA Fisheries has three major programs: Sustainable Fisheries (groundfish, crab, scallops, halibut), Protected Resources (marine mammals and endangered species), and Habitat Conservation (protection and restoration of habitat). NOAA Fisheries just implemented habitat conservation measures, including the Aleutian Islands Habitat Conservation Area. It is one of the largest such areas in the world. Also implemented were Coral Habitat Protection areas, which include about 6 areas of special coral, and protection areas on Bowers Ridge and the Gulf of Alaska Slope.

NOAA is considering adjustments to open and closed fishing areas within the Aleutian Islands Habitat Conservation Area, and revisions to the Steller sea lion protection measures to allow affected fisheries more flexibility without increasing interactions. They are assisting the NPFMC with the development of a Fishery Ecosystem Plan for the Aleutian Islands.

Captain Mark Devries - US Coast Guard

The Coast Guard has been involved recently in three programs with Russia: fisheries conservation (under Capt Cerne); law enforcement – (under RADM Brooks); and environmental response (under Capt Devries). These bi-lateral opportunities with the Russians provide joint partnerships and better cooperation for fisheries and law enforcement.

The Coast Guard is looking at the Aleutians, Cook Inlet and Prince William Sound, for risk assessments. Another project, partnering with DEC, is geographic response strategies, and the Aleutians are a current focus. Places of Refuge have also been a discussion item. The Coast Guard continues to work under the Oil Pollution Act, with the Regional Citizens Advisory Councils of Cook Inlet and Prince William Sound, as well on being able to provide primary mission requirements.

CDR Forgit gave a Pandemic Influenza Update and pointed out that the primary focus has been on influenza transmission through the medium of air transport, rather than maritime transport, as journey times are so much shorter. It has been concluded that the biggest threat will be by air rather than sea. Infected crewmembers will probably show symptoms due to the transit time versus an airline passenger that can be caring the virus and be in the public prior to symptoms.

Diana Evans - North Pacific Fishery Management Council (handout attached)

The NPFMC completed a comprehensive programmatic review of its groundfish fisheries in 2004, which resulted in the following management objectives: protection of habitat, reduction of fishery bycatch, Stellar sea lion protection, overfishing protection, ecosystem management, and improving data quality and management.

The NPFMC is currently developing a Fishery Ecosystem Plan for the western Aleutian Islands ecosystem. This is to be able to identify informative ecological indicators for the Aleutians, and to develop tools such as ecosystem models to evaluate the indicators and identify sources of uncertainty.

The NPFMC is also currently re-evaluating the mitigation measures in place in the pollock, Pacific cod and Atka mackerel fisheries, which protect Steller sea lions' critical habitat and limit fishery interactions with Steller sea lions. The NPFMC is establishing cooperatives for the multi-species trawl flatfish fisheries in the Bering Sea and Aleutians. This action will reduce discards in those fisheries by providing additional opportunities for vessels to meet a minimum retention standard for groundfish.

Colonel Mark Lowe - Alaskan Command

Col. Lowe gave a quick update of the number of personnel and the locations of bases in Alaska: 26,500 personnel and 24,000 dependents are under the ALCOM. One in 12 Alaskans are directly related to the military. There are currently 18 early warning sites. The Sea-based X-band Radar (SBX) early warning system will be located on a barge in the Aleutians. The system costs 750 million dollars. ALCOM is primarily focused on the global war on terror. They also work closely with State agencies. Alaskan military personnel are divided between two Combatant Commanders – PACOM and NORTHCOM. The Department of Defense owns 1.8 million acres of Alaska land. FUDS are of concern to ALCOM and Col Lowe ensured the AMEF that any future disestablishment of bases would be left in better condition that the FUDS.

Commissioner Kurt Fredriksson - Department of Environmental Conservation

The Commissioner first addressed inter-agency coordination, and how to make progress. DEC is working very closely with the Coast Guard on the Great Circle Route Risk Assessment, looking at spill response, air pollution, and rat populations. He is concerned that no real studies have been conducted on the net environmental impact of different clean up mechanisms, for example allowing it to be soaked on the beaches versus leaving it in the water column or burning it, since the Exxon Valdez oil spill. DEC is working with other agencies on the implications of the long range transport of pollutants. DEC sponsors a fish monitoring and tissue testing program to sample pollutant content in a number of species for consumer information. The agency is also working on data to support pollution control strategies. The agency is also working with EPA on a coastal conditions report for the Aleutian Islands. Anchorage now has an environmental test lab, and it was recently certified to test for Avian Influenza.

The Commissioner also believes that coordinating government presence in communities is important – the AMEF might be a way to achieve that. The group discussed the role of the Alaska Ocean Observing System in sharing information, and agreed to receive a presentation from Molly McCammon at a future meeting.

Ed Fogel - Department of Natural Resources (handout attached)

Mr Fogel described the DNR structure and mission, to manage the land and waters owned by Alaska. DNR owns some of the Aleutian Islands, and there are detailed land status maps available from the State. Chirakof Island has 800 cows that the administration wants to save. DNR, the Department of Military and Veterans Affairs, and the University of Alaska, Anchorage (UAA), have signed an initiative to create a high resolution digital map of Alaska. They have acquired a two million dollars, but the estimated cost of the project is \$30 million.

There is also a State initiative to consolidate all the State research priorities together, to be more cost effective.

Heather Brandon – Department of Fish and Game

DFG and the Department of Commerce, Communities, and Economic Development both support the priority issues identified in the MOU Addendum for the Aleutian Islands. Ms Brandon also reported that there are 35 State research priorities that are shared with UAA. The priorities are still in draft, and are available on the DNR website. The document lists State and university contacts for each priority. This is the first attempt to combine resources and management priorities across State agencies.

Ms Madsen also noted that the State has recently initiated a State waters Pacific cod fishery in the Aleutian Islands, and there is also one for rockfish. NPFMC and DFG are working on allowing fishery opportunities in near-shore waters, within the limits set by the Steller sea lion protection regulations.

Judy Gottlieb – National Park Service

NPS have an air quality monitoring program through all their parks. On an international level, NPS is very active in the Arctic Council.

Gary Reimer - Bureau of Land Management

BLM has completed the first land use plan in the Aleutians, but they are a minority land use owner. BLM aims to work in partnership with other agencies. The first land use plan is the Ring of Fire environmental impact statement.

Kate Wedemeyer - Minerals Management Service

MMS' mission is offshore energy, mainly on the continental shelf in less than 50 meters of water. Despite 20 years of leasing, there is only one marine oil/gas development project in Alaska, the North Star project (which is actually drilled from an island in state waters). There is also a development in Cook Inlet. Offshore oil and gas has become of more interest recently as prices increase; also mineral and wind energy development. The 2007-2012 oil/gas leasing program is under review and includes leasing sites in the North Aleutian Basin (Bering Sea). The agency includes specialists in all components of the ecosystem. Ms Wedemeyer also commented it would be helpful if all agencies would use the same indicators when examining ecosystem effects.

MMS also does biological research with FWS, including studies of marine mammal decline and increase. They are studying sea otters and polar bear ecosystems, migratory bird research, Aleutian and Pribilof Islands studies. They also monitor the Aleutians for seismic activity and volcanic monitoring.

Joy Geiselman – US Geological Survey

USGS does much geological work in the Aleutian Islands, especially volcanology. The agency also conducts walrus, sea ice, and climate change research, and water resource studies. USGS partners with the USFWS for bird research, and has also been involved in avian flu implications, particularly studying bird migration patterns.

State of Alaska / Sea Grant grant money

The State of Alaska and Sea Grant, in partnership, have recently received a grant for an Alaska marine research plan. Brian Allee (Sea Grant) briefed the AMEF on the grant proposal. The grant totals \$400,000, over 5 years. The proposal is to inventory research objectives and plans for each agency conducting research in Alaska, and in addition, specifically in the Aleutians, to inventory all ongoing research projects and identify research and data gaps. The draft research plan for the Aleutian Islands should be ready within two years. The proposers intend to conduct stakeholder workshops and interface with the AMEF for input on the plan, and a steering committee for the project includes the AMEF's Chair and Vice-Chair. Mr Allee's powerpoint presentation is attached.

The AMEF discussed the proposal, the schedule, and the role of the AMEF in the project. Mr Allee intends to contact each agency individually to request information on existing research plans, and needs statements. The steering committee will hold its first meeting as soon as possible, with a view to initiating the stakeholder workshops to develop the research plan. Mr Allee hopes to report progress on the project at the next AMEF meeting.

Aleutian Islands Risk Assessment

Mr Fredriksson provided a brief overview of the proposal to conduct a risk assessment of transportation through the Aleutian Islands. The DEC expert on this issue was not able to attend the meeting. The assessment is intended to quantify the risk of shipping accidents or groundings to the point that reasonable mitigation measures would be identified. A similar study was conducted in Prince William Sound in 1995, which led to tug escorts in the Sound. Commander Robert Forgit (CG) clarified that the purpose of the risk assessment is not response planning, but that risk information will be used to revisit response plans.

DEC and the Coast Guard are both involved in planning the risk assessment, and DEC has received \$250,000 for implementation, but the Coast Guard is still waiting funding to be allocated at the Federal level. The risks of transportation through the Aleutian Islands affect many agencies' responsibilities, and the AMEF members agreed to revisit this issue at their next meeting.

Potential oil and gas lease in the North Aleutian Basin

Paul Stang (MMS) presented an update on the agency's plans to include leasing sites in the North Aleutian Basin in their oil and gas program for 2007-2012. Although the program will not be finalized until summer of 2007, the agency hopes to get a head start on deciding what research would be required to understand the impacts of oil and gas development, should the North Aleutian Basin lease sites remain in the program. The MMS has not conducted research in the area for 20 years, and so is considering three questions: 1) what existing data (from other agencies) should be processed; 2) what research should be done; and 3) what should be monitored. MMS would like to be able to take advantage of the 2007 fieldwork season immediately, if the program goes ahead next summer. The amount of funding available for North Aleutian Basin research is unclear, but the agency has about \$5 million for its studies throughout Alaska. Mr Stang's powerpoint is attached.

The AMEF members discussed the presentation. Ms Madsen noted that Shell had made a presentation on this issue at an evening session of a Council meeting earlier in the year, and Mr Stang agreed that Shell has been very interested in the program. Mr Fredriksson suggested that MMS revisit the State's comments opposing leasing in the area 20 years ago, identifying data gaps (which may since have been addressed).

National Ocean Research Priorities document

Heather Brandon (DFG) summarized the recently issued Joint Subcommittee on Ocean Science and Technology report, *Charting the Course for Ocean Science in the United States: Research Priorities for the Next Decade.* Federal agencies are represented on the Joint Subcommittee, but Mr Fredriksson indicated that the State of Alaska would provide comments on the report. He also highlighted the last page of the report, which talks about the implementation strategy for the report (which has not yet been developed). The strategy will describe roles for each agency and sector (Federal, State, private) in planning, programming, budgeting, and executing these priorities, and will allocate research funding annually in accordance with the national strategy. Ms Madsen suggested that the AMEF continue to track this process.

Discussion of AMEF future direction, next meeting

The AMEF members decided to target their next meeting for March, 2007. The Chair and Vice-Chair will be responsible for drafting and circulating an initial agenda. Items will include updates on the issues discussed at this meeting, as well as a possible presentation from Molly McCammon on the Alaska Ocean Observing System. The group may wish to consider structuring the agenda with worksessions to allow the agencies' technical leads to participate on specific issues. Members also discussed the possibility of scheduling the meeting adjacent in time to a stakeholder workshop hosted by Sea Grant on the Alaska Marine Research Plan.

Now that the AMEF is in existence, the group discussed what the AMEF's public presence should be. The MOU describes the AMEF, and its purpose; it also clarifies what not to expect from the AMEF (i.e., the AMEF has no jurisdiction of its own). The members agreed that at least initially, each agency should communicate to its own stakeholders about the creation of the AMEF and its activities, and discuss any feedback at the next meeting.

To facilitate this communication, the group also discussed using a website. Although language about creating an AMEF website was removed from the MOU due to legal restrictions on interagency funding, Joe McCabe (NOAA General Counsel) clarified that there was no difficulty about each individual agency hosting or linking to a website describing its own participation in the AMEF. The NPFMC volunteered to post the MOU and the first meeting summary on the NPFMC website, and provide the link to the other member agencies.

Alaska Marine Ecosystem Forum Aleutian Islands Marine Ecosystem Area EPA Related Highlight Topics September 18, 2006

Engage in Studies and/or Research Concerning Areas of Common Concern

• Climate Change—EPA R10 is working with HQ to develop a strategy for how we intend to focus on the issue. For Alaska, adaptation and communication are likely to be areas where EPA will have a role.

Hazardous Materials Spills

• EPA has been working with APIA and DoD to facilitate cleanups on Unalaska Island and in other remote areas in the Aleutians where hazardous and other contamination threatening human health and the ecosystem present risks. i.e., drum cleanups. Other Federal facilities have also been sources of contamination and are often addressed under the FUDS (Formerly Used Defense Sites) program.

User Conflicts

• NPDES—EPA currently actively working with ADEC on delegation of primacy for this function, including permitting and compliance for discharges to surface water. Current example: regulation of discharges for wastewater in Unalaska versus seafood processing discharges.

International Resource Management

• Climate change issues apply here, especially contaminant transport via air and water from other continents.

Great Circle Shipping Route

• EPA is co-lead with USCG for ARRT for preparedness and response to oil spills; EPA is lead for coordinating and preparing joint gov't contingency plans for spill response. EPA also provides technical expertise in support of USCG and ADEC during responses, ex. Selendang Ayu and Cougar Ace approving conditional use of dispersants as potential response method.

Marine Mammals

• NEPA review and compliance; i.e. EIS review for proposed port sites or other major Federal actions such as permitting for lease sales, oil and gas exploration activities.

Human and Fishery Health Risk around Amchitka

• EPA would add ADAK, former naval air station to this topic. Current Status: Ongoing removal actions for ammunitions and other contaminants. Institutional Controls restricting land use are in place for many areas on the island.

Living and Non-Living Resource Mapping, Information Collection, Environmental Quality Monitoring, and Research

• EMAP—EPA funded environmental monitoring and assessment work through ADEC, this summer the Aleutian Islands coastal region was sampled to establish baseline conditions. 3rd of 5 regions in Alaska to be funded and sampled.

Regional Haze Plan

• Under air permits, EPA has a role in ensuring compliance if ADEC refers a case.



ALASKA MARINE ECOSYSTEM FORUM MEETING

18 Sep 2006

U.S. Army Corps of Engineers, Alaska District Activities and Efforts

Research:

Tribal Partnership Program and Individual Harbor Projects – We are conducting data collection for harbor and erosion control design and construction. The efforts for the Tribal Partnership Program will be primarily placing wave buoys in Bering Sea to collect wave heights and frequencies. This data will be used to forecast wave heights and wave periods for various coastal sites suffering erosion. This effort is presently UNFUNDED.

Civil Works Projects:

Akutan Harbor – In design and plans and specifications. Construction Award – Nov 2007

Alaska Regional Ports – Planning effort looking at potential harbor development throughout Alaska but primarily in SW and Western Alaska.

Port Lions Harbor Modification – Additional harbor protection so that design fleet can use the harbor safely. Technically not Aleutian Islands; however, fleet may fish Aleutian waters.

Chignik Harbor – Under construction. Next phase is to dredge inner harbor. Technically not Aleutian Islands; however, fleet may fish Aleutian waters.

False Pass Harbor – Under construction. Scheduled completion in Jan 2008.

Sand Point Harbor – Under construction. Scheduled completion in Sep 2007.

Saint Paul Harbor - Received approval to construct Small Boat Harbor.

Construction contract solicitation in Feb 2007. Technically not Aleutian Islands; however, fleet may fish Aleutian waters.

Unalaska Harbor – In design preparing plans and specifications. New harbor to be constructed beginning Summer 2007.

All Civil Works projects must undergo a rigorous public review process and evaluation of the environmental effects on the surrounding ecosystems. Any adverse impacts must be mitigated or adequately addressed to minimize the impact.

Regulatory:

The Corps of Engineers regulates development and the placement of fill in Navigable Waters and Waters of the United States under the auspices of Section 10 of the River and Harbor Act of 1899 and Section 404 of the Clean Water Act, as amended. Prior to the issuance of any permit, an evaluation of the effects of the project on the environment and surrounding ecosystems must be conducted. Any proposal must undergo a rigorous public review process. Any adverse impacts must be mitigated or adequately addressed to minimize the impact.

Purpose of the FUDS Program

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The Formerly Used Defense Sites (FUDS) program was established to reduce risk to human health and the environment through implementation of effective, legally compliant, and cost-effective response actions. FUDS are defined as real property that was under the jurisdiction of the Secretary of Defense and owned by, leased by, or otherwise possessed by the United States but were transferred from Department of Defense control prior to 17 October 1986.

FUDS in the Aleutian Islands

The FUDS Geographic Information System (GIS) provides access to the data included in the Defense Environmental Restoration Program Annual Report to Congress. The data in the report are updated annually to reflect current property activity. To access the FUDS GIS information, go to

https://rsgis.crrel.usace.army.mil/htmldb/f?p=124:1:743737408003642

This site provides data for all FUDS nationwide, but you can focus on the state of Alaska, the Aleutian Islands, or a specific FUDS property.

Determination of need for cleanup

The risks posed by contaminants at a site are evaluated quantitatively. Site risk is calculated including evaluation of pathways and human or ecological receptors in six media most likely to result in significant exposure: groundwater, soil, surface water (human endpoint), surface water (ecological endpoint), sediment (human endpoint), and sediment (ecological endpoint). The ecological risk evaluation includes potential risks from animals eating contaminated soil or water; plant uptake of contamination; and migration of contamination to the marine environment.

Involvement in the remediation process

FUDS execution provides the Alaska District with a rich opportunity for public involvement. We foster open, two-way communication during the environmental restoration process and ensure coordination with local elected officials, property owners, state and federal agencies and the public to establish and maintain an open dialogue among all interested parties so that concerns are heard and considered before making decisions regarding response actions.

In addition, the Alaska District's compliance with the National Environmental Policy Act (NEPA provides an opportunity for involvement in decision-making. NEPA requires federal agencies to consider environmental effects that include, among others, impacts on social, cultural and economic resources as well as natural resources. Citizens often have important information about places and resources that they value and the potential environmental, social and economic effects that proposed federal actions can have on those places and resources. NEPA's requirements provide the means to work with the Alaska District so we can take your information into account. Finally, no final decision about a site will be made without getting input from affected agencies, landowners, and the public. The proposed plan for remediation of each site will be sent to all interested stakeholders for review and comment. All comments will be fully evaluated and considered before a site remediation strategy is selected.

How to learn more

Contact for this information is the Alaska District Corps of Engineers: Patricia Opheen, Chief of Engineering, at (907) 753-2662 or Tom Findtner, Public Affairs at (907) 753-2522 or sending an email to Public.Affairs@poa02.usace.army.mil.

U.S. Fish and Wildlife Service Activities in the Aleutian Islands Ecosystem

Land Management Responsibilities:

Aleutian Islands Unit of Alaska Maritime NWR includes land on most of the islands

Objectives of the Aleutian Islands Unit are to restore and conserve native ecosystems, including marine birds and marine mammals and the resources upon which they rely.

The only way to accomplish this is through network of partners: other federal and state government agencies (e.g., NOAA, ADF&G, DEC, EPA, USCG, DOD), tribes, NGOs, and universities.

Resource Issues and Priorities:

<u>Introduced foxes</u>: Since 1960, removed from 40 islands, more than 1 million acres to restore native birds.

<u>Introduced rats</u>: Rats introduced by shipwreck or cargo transfer, particularly during WWII, to at least 12 islands larger than 2,500 acres and they now occupy dozens of smaller islands near the larger ones.

<u>Monitoring Trends:</u> Crews are deployed to selected locations each summer and sometimes in winter to monitor the status of marine birds and marine mammals. The program includes partnerships with the Univ of Alaska and BRD and the Refuge vessel, Tiglax is used for deploying crews and as a platform for monitoring.

<u>Formerly Used Defense Sites</u>: Alaska Maritime Refuge is home to more than 30 formerly used defense sites, the largest US underground nuclear test site, an active Coast Guard Installation (Attu Island), and two active Air Force Stations (Earikson Air Station, Shemya Island; Cape Lisburne Radar Site).

Other Trust Responsibilities:

<u>Fishery Resources</u>: The Service has operated the McLees Lake weir on Unalaska Island to count sockeye salmon since 2001.

<u>Marine Mammals</u>: Due to severe declines in population abundance for northern sea otters, the Service listed the sea otter population in the Aleutian archipelago as part of the distinct population segment as threatened under the Endangered Species Act.

The Service's Marine Mammals Management <u>Marking Tagging and Reporting Program</u> maintains taggers who record subsistence sea otter harvest and tag beach-found walrus

ivory in 6 Aleutian Island communities: False Pass, Akutan, Unalaska/Dutch Harbor, Nikolski, Atka and Adak.

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<u>Migratory Birds - North Pacific Pelagic Seabird Observer Program</u>: In 2006 the Migratory Bird Management Div. of the ServiceUSFWS began a collaborative project with NOAA-Fisheries and other projects to place seabird observers on research vessels in Alaska waters. The primary goal is to update and add to the North Pacific Pelagic Seabird Database. In addition, the seabird data will be analyzed in conjunction with the associated oceanographic and fisheries data to examine changes in distribution and abundance of seabirds relative to environmental changes.

<u>Oil Spill Response and Natural Resource Damage Assessment</u>: Following the *Selendang Ayu* oil spill, federal and state natural resource agencies began actively investigating potential natural resource injuries caused by the spill. With some cooperation from the responsible parties, the trustees have surveyed resources and services impacted by the *Selendang Ayu* spill to make a preliminary determination of injury. Later this year, the trustees will begin assessing the injuries and planning potential restoration actions to address those injuries.

<u>Habitat Restoration</u>: AFWFO Partners for Fish and Wildlife and Coastal Programs are partnering with Sanak Native Corporation of Sand Point and the Alaska Maritime NWR to eradicate non-native foxed from Sanak Island and adjacent islands in order to reduce impacts on the island's populations of ground-nesting seabirds.

<u>Endangered Species</u>: The Service, in cooperation with Oregon State University, has placed 52 satellite tags on all three species of <u>North Pacific Albatross</u> over the past 4 years (3 charter trips to Seguam Pass and surrounding waters in Central Aleutians; 20 Laysan Albatross, 20 Black-footed albatross and 12 short-tailed albatross captured at sea and tagged).

Due to the recent listing of the <u>Kittlitz's murrelet</u> as a Candidate species, surveys through the Aleutians have been conducted. Nearshore surveys of Adak, Attu, Atka, and Unalaska have located over 3,000 birds and intensive surveys in the mountains of Aguttu Island lead to the discovery of 10 nests. Previously, only 22 nests were know for this species.

<u>Contaminants - Threatened Eiders</u>: Although the effects of large oil spills on sea ducks are well understood, the risk from low level chronic oiling has received less attention. Staff in the Anchorage Field Office served as co-investigators with USGS-BRD on the effects of chronic oiling on Steller's eiders at Sand Point and Dutch Harbor, AK.

<u>Project Planning</u>: Under the Fish and Wildlife Coordination the Service has provided technical expertise and mitigation recommendations for several U.S. Army Corps of Engineers projects in the Aleutian Islands, including boat harbors in Unalaska, Akutan, and False Pass.

Our Part in the Bigger Picture

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The data we are gathering on marine birds, marine mammals, fish, and other natural resources when combined with information on climate, and other environmental factors through integrated studies will be our best hope of understanding ecosystem processes, critical for effective management.



NOAA / National Marine Fisheries Service Overview of Current Issues in the Vicinity of the Aleutian Islands September 18, 2006

Background

NOAA Fisheries' mission is stewardship of living marine resources through science-based conservation and management and the promotion of healthy ecosystems.

NOAA Fisheries has three major programs:

- Sustainable Fisheries (groundfish, crabs, scallops, halibut)
- Protected Resources (marine mammals and endangered species)
- Habitat Conservation (protection and restoration)

<u>Issues</u>

- Implementing recent habitat conservation measures: Aleutian Islands Habitat Conservation Area, Aleutian Islands Coral Habitat Protection Areas, Bowers Ridge Habitat Conservation Zone, and Gulf of Alaska Slope Habitat Conservation Areas (two of which are near Unalaska and Unimak) in coordination with the state Board of Fisheries
- Considering adjustments to open and closed fishing areas within the Aleutian Islands Habitat Conservation Area
- Considering revisions to the Steller sea lion protection measures to provide more flexibility for affected fisheries without increasing interactions
- Implementing a new co-management agreement with the Aleut Marine Mammal Commission for a sentinel program to monitor for marine mammal occurrence and unusual events
- Assisting the North Pacific Fishery Management Council with development of a Fishery Ecosystem Plan for the Aleutian Islands
- Implementing a variety of measures related to fishery development and allocation (Pacific cod allocations, Adak pollock experimental fishery, etc.)
- Assisting with habitat restoration planning related to the Selendang Ayu spill
- Conducting routine scientific surveys to assess stocks of fish and marine mammals

Briefing for the Alaska Marine Ecosystem Forum

September 18, 2006

Aleutian Islands Marine Ecosystem Area

Management Objectives

The Council completed a comprehensive programmatic review of its groundfish fisheries in 2004. This review resulted in the following management objectives:

Protection of habitat

- closures to protect essential fish habitat and habitat areas of particular concern such as seamounts and deep sea corals (recent Council/NMFS action closed much of the western Aleutian Islands to all fishing, and additional areas were closed to bottom trawling)
- encourage increased mapping of benthic environment

Reduction of fishery bycatch

- developing fishery rationalization programs and incentive-based bycatch reduction programs
- explore new management strategies that distinguish incidental catch and discards of species of concern

Protection of Steller sea lions

• participate in reconsideration of critical habitat and mitigation measures

Prevent overfishing

- consider new harvest strategies for rockfish
- continue to explore improvements to management strategies to sustainably manage target species and adequately protect incidental catch species

Ecosystem management

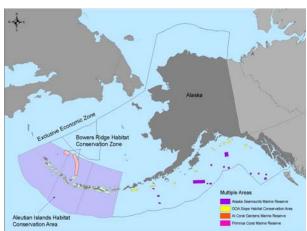
• continue to improve accounting for ecosystem indicators in single species assessments and setting harvest limits

Improve data quality and management

- expand or modify observer coverage based on data and compliance needs
- develop programs for economic data collection

Research Objectives

The Council has a comprehensive research priorities list that is updated annually by the Council's Scientific and Statistical Committee. Below is a brief selection of the ecosystem study priorities.



NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

- habitat mapping
- understanding the dynamics of important forage fish
- ecological effects of bycatch and discards
- climate change and fish communities (especially changes in ice cover and temperatures)
- environmental effects on recruitment and growth (e.g., information that covers a wider range of seasons)
- nutrients and lower trophic levels
- advancing ecosystem approach to fisheries management (e.g., indicators and indicator species, ecosystem reference points, improving current ecosystem models)

Ongoing and Upcoming Actions

Aleutian Islands Fishery Ecosystem Plan

The Council is developing a Fishery Ecosystem Plan (FEP) for the western Aleutian Islands ecosystem area (west of 170° W. longitude). A strategic policy and planning document, the FEP will help the Council better integrate ecosystem science into management decisions.

- a) AI FEP synthesis document that integrates information across fisheries
- b) identification of informative ecological indicators for the AI, to alert the Council to changes in the AI ecosystem requiring management consideration
- c) development of tools such as ecosystem models to evaluate the indicators and identify sources of uncertainty
- d) to assist the Council in understanding the cumulative effects of management actions

Steller sea lion protection measures

The Council is currently re-evaluating the mitigation measures in place in the pollock, Pacific cod, and Atka mackerel fisheries, which protect Steller sea lion critical habitat and limit fishery interactions with Steller sea lions. A Biological Opinion is evaluating all Federal and State fishery interactions with Steller sea lions.

Changes to fishery patterns in the Aleutian Islands

The Council recently took action to establish cooperatives for the multi-species trawl flatfish fisheries in the Bering Sea and Aleutian Islands. This action will reduce discards in those fisheries by providing additional opportunities for vessels to meet minimum retention standards for groundfish.

The Council is also expecting a report from the Aleut Corporation regarding the use of its AI pollock fishery allocation. The report will include an account of Adak's progress in developing a small vessel fleet and processing capacity.

Subject: Aleutians Land Status

Date: Mon, 18 Sep 2006 17:08:15 -0800 From: Ed Fogels <ed_fogels@dnr.state.ak.us> To: Diana Evans <diana.evans@noaa.gov>

Hi Diana,

At the AMEF meeting today I promised I would send folks a land status map of the Aleutians. I just realized that we have a great map library on the DNR website, and good maps are posted on it in .PDF format. Just go to the following link,

http://www.dnr.state.ak.us/lris/gis_maplib/maplib_start.cfm

and click the Search Option for "Region" and then either select Aleutian Chain or Alaska Peninsula, and you will be able to download a nice land status map of each region.

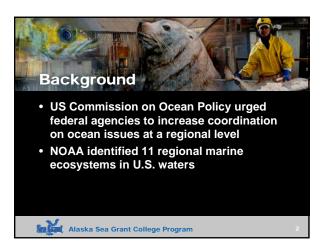
Could you please forward these instructions to the AMEF distribution list?

Thanks,

Ed

Ed Fogels Acting Deputy Commissioner Alaska Department of Natural Resources 550 W. 7th Avenue, Suite 1400 Anchorage, AK 99501-3561 (907) 269-8431 fax: (907) 269-8918



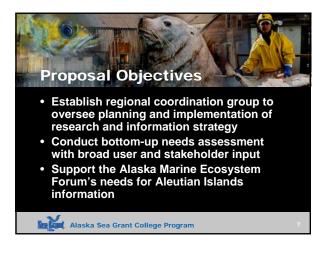












Identify research and information gaps around issues in a regional or ecosystem
Develop research and information plan for region that prioritizes actions according to management-critical needs
Facilitate coordination mechanisms to ensure transfer of technology and information to appropriate end users

Alaska Sea Grant College Program

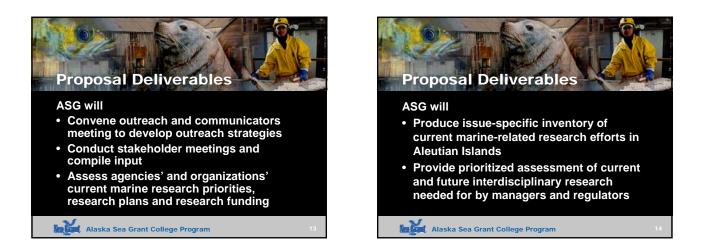


Alaska Sea Grant College Program

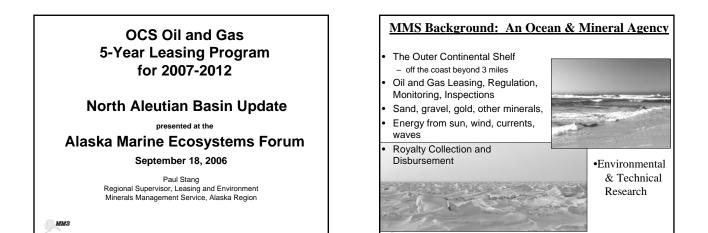


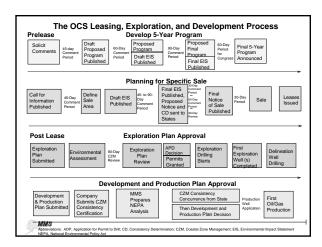


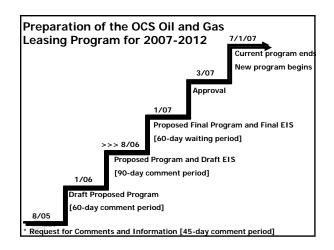


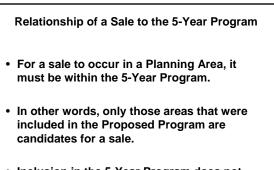






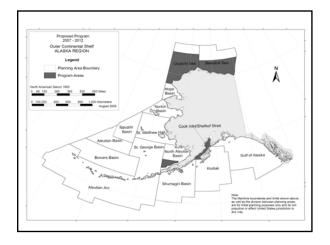


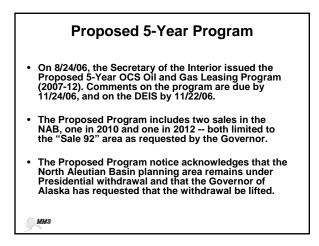


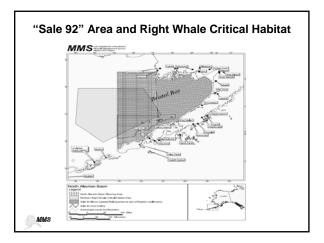


• Inclusion in the 5-Year Program does not guarantee a sale.









Schedule of Public Hearing/Meeting for NAB and Anchorage				
 Unalaska 	9/25	6:30 – 9 PM		
 Cold Bay 	9/26	7 – 10 PM		
 Nelson Lagoon 	9/27	4:30 – 7 PM		
 Anchorage 	9/28	5 – 7 PM		
 Sand Point 	9/28	7 – 10 PM		
 Goodnews Bay 	10/9	5 – 7:30 PM		
 Naknek 	10/10	6:30 – 9 PM		
 Dillingham 	10/11	6:30 – 9 PM		
MMS				

NAB Oil and Gas Estimates Risked Technically Recoverable				
Commodity	<u>>95 % chance</u>	<u>Mean</u>	<u>> 5 % chance</u>	
Gas (Trillion Cubic Feet)	0.4	8.6	22.3	
MBOE*	73	1,567	4064	
Oil (million barrels)	19	751	2,712	
We see the basin as more Natural Gas Prone. *MBOE = Million Barrel of Oil Equivalent				

MMS ENVIRONMENTAL STUDIES NORTH ALEUTIAN BASIN

- MMS plans to hold a 4-day research planning meeting with local, Tribal, State, and Federal scientific experts and other interested stakeholders (about 100 participants)
 - Review status of available information
 - -Advise MMS of study needs

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MMS
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NAB ENVIRONMENTAL STUDIES

- Contracted with Argonne National Laboratory (ANL) from the Department of Energy to facilitate the meeting and process.
 - Dr. Kirk Lagory (ANL) Principle Investigator (Lagory@anl.gov)
 - -Mtg. is 11/28-12/1/06 in Anchorage

MMS

NAB ENVIRONMENTAL STUDIES

- · Argonne will collect environmental reports and information from 1995 to present
- Meeting will use of Subject Matter experts from key topical areas:
- Physical Oceanography / Biology Fate of Effects of Oil Spills
 - Fisheries - Water Fowl
 - Socioeconomics
- Marine Mammals
- Commercial Fishing - Subsistence

MMS

