

## **UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration**

National Marine Fisheries Service P.O. Box 21668 Juneau, Alaska 99802-1668

December 20, 2004

Colonel Timothy J. Gallagher District Engineer U. S. Army Corps of Engineers P.O. Box 898 Anchorage, AK 99506-0898

RE: POA –1975-180-T Wrangell Narrows 2

Attn: Dr. Jan Stuart

Dear Colonel Gallagher:

The National Marine Fisheries Service (NMFS) reviewed the November 2, 2004, public notice of application for permit for the above referenced proposal by the City of Petersburg for work within the Petersburg Middle Harbor. The City proposes to remove 16,000 square feet of existing floats and 50 creosote treated piling; install 41 galvanized steel piles using vibratory and impact pile driving equipment; install 20,000 square feet of new floats constructed using creosote treated glulam beams and ACZA treated timber decking and stringers; dredge approximately 4,500 cubic yards of material from 1.7 acres; and fill approximately 0.4 acres below the high tide line with 8,000 cubic yards of material.

We offer the following comments specific to the EFH provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA).

## Essential Fish Habitat

Section 305(b) of the MSFCMA (16 USC 1855 (b)) requires federal agencies to consult with NMFS when any activity proposed to be permitted, funded, or undertaken by a federal agency may have an adverse effect on designated EFH.

The Alaska Department of Fish and Game (ADF&G) anadromous waters catalogue lists two catalogued anadromous fish streams in the Petersburg harbor area. These streams are: 106-44-10010 (pink and coho salmon and Dolly Varden char) and 114-31-10012 (coho salmon). Nearshore habitats are particularly important to juvenile salmon migrating as fry or smolts from fresh water to salt water in the spring and summer. Juvenile salmon use nearshore marine habitats in spring and early summer for feeding and predator avoidance prior to migration out to sea.

The inshore area of the project location also provides important habitat for several marine species. Additional MSFCMA species in the area may include the following groundfish species: Pacific cod, Pacific ocean perch, walleye pollock, dusky rockfish, shortraker rockfish, yelloweye

rockfish, rougheye rockfish, sablefish, arrowtooth flounder, rex sole, skates, sculpins, and various forage fish.

Marine species within the project area may be adversely affected by increased sedimentation and turbidity created during construction; underwater sound pressure waves generated by pile driving; exposure to toxic materials; and loss of habitat.

The MSFCMA requires NMFS to make conservation recommendations regarding any federal or state agency action that would adversely affect EFH. Accordingly, we offer the following EFH Conservation Recommendations:

- 1. We recommend that construction activities not be conducted during periods of peak use by juvenile salmonids and herring. No in-water work should be permitted from March 15 through June 15 to protect out migrating salmon and rearing salmonid smolts and to reduce the potential impact to schooling and spawning herring.
- 2. Pile-driving can disrupt migration and cause physical damage to fish. To the extent possible, drive piles during low tide periods in intertidal and shallow subtidal areas to prevent injuries to fish. We support the planned use of a vibratory hammer to drive the steel piles and only using an impact hammer to proof each piling at bearing depth. Under those conditions where impact hammers are required for reasons of seismic stability or substrate type, we recommend that the piles be driven as deep as possible with a vibratory hammer prior to the use of the impact hammer. A block of wood placed between the impact hammer and the piling is recommended to attenuate the sound. If peak sound pressure levels from deepwater pile driving exceed the 180 dB re uPa threshold for injury to fish (which is unlikely if small diameter piles are used) implement measures to reduce sound pressure such as: surrounding the pile with an air bubble curtain, using a smaller hammer to reduce the sound pressure, or using a hydraulic hammer if impact driving cannot be avoided.
- 3. Use an alternate material in lieu of creosote treated glulam beams for the floats. Creosote contains numerous constituents that are toxic to aquatic organisms including polycyclic aromatic hydrocarbons (PAHs), phenolic compounds, and nitrogen- sulfer- or oxygenated heterocyclics (Poston, 2001). Leaching of these constituents continues throughout the life of the wood and has been associated with the development of tumors, immune system suppression, decreased fecundity and abnormal embryonic development.

If viable alternatives exist, the float should not be constructed with wood that has been surface or pressure-treated with creosote or treated with pentachlorophenol. Alternatives to treated wood that have no or reduced toxicity should be used wherever practicable. Alternatives may include using a metal or concrete float, or if this is cost prohibitive, using an alternative preservative treatment in lieu of the proposed creosote treated beams. If treated wood must be used, any wood that comes in contact with marine or aquatic environments should be treated with waterborne preservatives approved for use in aquatic and/or marine environments. These include, but are not limited to: Chromated Copper

Arsenic (CCA) Type C, Ammoniacal Copper Zinc Arsenate (ACZA), Alkaline Copper Quat (ACQ), Copper Boron Azole (CBA) or Copper Azole (CA). Only use wood that has been treated in accordance with best management practices developed by the Western Wood Preservers Institute. Treated wood should be inspected before installation to ensure that no superficial deposits of preservative material occur on the wood.

- 4. All cutting and boring of treated wood should take place in upland areas; all waste materials should be kept out of the aquatic environment. Any cut wood, chips or sawdust from treated wood materials should be collected and disposed of at an acceptable upland site. The removed creosote pilings should be disposed of at an acceptable upland site.
- 5. No portion of the float should ground at any tidal stage
- 6. Reasonable precautions should be taken to prevent incidental and accidental discharge of petroleum products and other contaminants. A dock-side emergency oil spill response kit or other appropriate equipment should be made available to allow fast response to any accidental discharge of petroleum hydrocarbons and other contaminants.
- 7. The Corps should require the applicant to demonstrate that they have evaluated and fully considered options to avoid and minimize the use of fill for vehicle parking. These options could include building on pile-supported structures, or providing parking accommodations in adjacent uplands. The 404 (b)(1) guidelines prohibit discharges into waters of the U.S. where "there is a practicable alternative to the proposed discharge that would have less adverse effect on the aquatic ecosystem" [40 CFR 230.10(a)]. The Corps can only permit the least environmentally damaging practicable alternative for a proposed discharge of fill into jurisdictional wetlands or waterways.
- 8. Compensatory mitigation for any unavoidable impacts to waters of the U.S. is appropriate for this action. The Clean Water Act 404 (b)(1) guidelines direct agencies first to avoid impacting waters, second to minimize any impacts and last to compensate for unavoidable adverse impacts. We recommend that mitigation plans be coordinated with NMFS and other resource agencies. NMFS does not have specific recommendations for compensatory mitigation at this time, but we are willing to work with the Corps and the City of Petersburg to identify potential projects in Petersburg if impacts cannot be avoided.
- 9. When dredging, incorporate adequate control measures to minimize turbidity.

Upon receipt of these EFH Conservation Recommendations, the MSFCMA requires the Corps to respond to NMFS within 30 days informing us of the agency's decision regarding these recommendations.

## Threatened and Endangered Species/Marine Mammals

The project is within the range of endangered humpback whales and threatened Steller sea lions, as well as harbor porpoises, harbor seals and killer whales, which are protected under the Marine Mammal Protection Act (MMPA). The MMPA and the Endangered Species Act prohibit the injury, harm or harassment of marine mammals.

Pile driving introduces high levels of noise into the water column, with the potential to harass or injure marine mammals. Received sound levels in the range of 130-135 decibels have been measured up to one kilometer from a pile driver (Johnson et. al., 1986). Humpback whales, killer whales, Steller sea lions, harbor seals, and harbor porpoises may occur in the project area and could be affected by this work. To reduce the possibility for harassment or injury to marine mammals, NMFS recommends that pile driving not occur if any marine mammals are observed within 200 meters of the platform. The operator must scan the area for the presence of marine mammals. If marine mammals are sighted within 200 meters of the sound source pile driving must cease until the animals leave the immediate area.

If you have any questions regarding our comments and conservation recommendations for this project, please contact Cindy Hartmann (907-586-7585, cindy.hartmann@noaa.gov).

Sincerely,

James W. Balsiger
Administrator, Alaska Region

cc: USFWS, Juneau EPA, Juneau ADNR-OHMP, Petersburg ADNR, Juneau ADF&G, Tom Schumacher, Juneau NMFS, Protected Resources, Kaja Brix

## References:

Johnson, S.R., C.R. Greene, R.A. Davis, and W.J. Richardson. 1986. Bowhead whales and underwater noise near the Sandpiper Island drillsite, Alaskan Beaufort Sea, autumn 1985, Reprinted by LGL Limited Environmental Research Associates, King City, Ontario, and Greeneridge Sciences, Inc., Santa Barbara, CA, for Shell Western Exploration & Production Inc., Anchorage, AK. 130p.

Poston, Ted. 2001. Treated Wood Issues Associated with Overwater Structures in Marine and Freshwater Environments. White Paper, Washington Department of Fish and Wildlife. http://wdfw.wa.gov/hab/ahg/overwatr.htm