



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

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

January 12, 2007

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

Re: POA-2006-1879-2
Wrangell Inner Harbor

Attn: Ms. Mary F. Leykom

Dear Colonel Wilson:

The National Marine Fisheries Service (NMFS) reviewed the December 14, 2006, public notice of application for permit for the above referenced proposal by Mr. Frank Warfel. The proposed work includes the following: placing 2,400 cubic yards of fill and 175 cubic yards of armor rock to create a 0.29 acre work area along Inner Harbor. The shot rock would cover 12,000 square feet and the rock riprap would cover 910 square feet. Approximately 0.07 acre of tideland below Mean High Water would be filled. In addition, a new 20-foot by 30-foot wire-wrapped log float with treated decking would be connected to an existing 10-foot by 58-foot log float to provide access to deeper water. Three 12-inch diameter steel pilings would secure the floats. The floats would be connected to the fill by an aluminum ramp. The stated purpose of the project is to create a staging and storage area, including warehouse for two families' commercial fishing operations providing access to both the road system and harbor.

We offer the following comments specific to 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 Magnuson-Stevens Fishery Conservation and Management Act requires Federal agencies to consult with NMFS on all actions that may adversely affect Essential Fish Habitat (EFH). NMFS is required to make conservation recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects.

Significant anadromous fish streams occur in the Wrangell area, including the Stikine River, Crittenden Creek and Mill Creek/Virginia Lake. Salmon fry and herring use nearshore areas, near the City of Wrangell, in the spring and summer. Nearshore habitats are particularly important to juvenile salmon migrating as fry or smolts from fresh water to salt water. Juvenile salmon use near shore habitats for feeding and predator avoidance prior to migration out to sea. Additionally, the inshore area of the project location provides habitat for several marine species including Pacific cod, arrowtooth flounder, walleye pollock, dusky rockfish, shortraker/



rougheye rockfish, yelloweye rockfish, Pacific Ocean Perch, skates, and sculpins. Wrangell Harbor provides habitat for transient populations of Pacific herring, smelt, and juvenile salmon.

The Corps has concluded that the proposed project will not adversely affect EFH. NMFS disagrees with this conclusion. The proposed project would permanently remove intertidal habitat. Intertidal habitats are important to the marine ecosystem because they provide primary productivity, nutrient recycling functions, migration and rearing habitat for a variety of commercially and ecologically important species.

The proposed fill would be used for storage of commercial fishing gear and for a building pad for a larger warehouse to replace an existing warehouse. Fishing is a water dependent activity however; fishing gear does not have to be stored near the water. The Clean Water Act Section 404(b)(1) guidelines at 40 CFR 230.10(a) prohibit the discharge of fill material into waters of the U.S. if a practicable alternative exists that would have less impact on the aquatic environment. An alternative is considered practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. Additionally, the guidelines direct the Corps to consider the need and water dependency of a proposed action, establishing a rebuttable presumption that upland alternatives are available unless clearly demonstrated otherwise. Section 404(A)(23.1)(c) states: "Fundamental to these Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probably impacts of other activities affecting the ecosystems of concern."

Mr. Warfel must: demonstrate that he has evaluated practical alternatives to the proposed tideland fill, minimized the amount of fill, and mitigated adverse impacts. The public notice states that the applicant reduced the square footage of fill by 540 square feet, however no mitigation was identified. The application does not reference an analysis that describes an investigation of alternate gear storage sites including pile supported storage or the necessity for 12,000 square feet of storage. The applicant proposes a large gear storage area for a family commercial fishing venture. Is there sufficient justification for this large a fill area?

NMFS offers the following EFH Conservation Recommendations pursuant to Section 305(b)(4)(A) of the Magnuson-Stevens Act:

1. NMFS recommends that the Corps deny the portion of this permit that would authorize intertidal fill for storage of fishing gear based on: the availability of less damaging alternatives to the proposed fill; the lack of water dependency; and failure to demonstrate proper sequencing (avoidance, minimization, mitigation) in developing project alternatives.
2. Three steel piles are planned to support the float. 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 recommend 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. If peak sound pressure levels from deepwater pile driving exceed the 180 dB re μ Pa threshold for injury to fish or are anticipated to exceed acceptable limits implement appropriate mitigation measures when practicable (Appendix G, NMFS 2005; http://www.fakr.noaa.gov/habitat/seis/final/Volume_II/Appendix_G.pdf). Measures to reduce sound pressure include: surrounding the pile with an air bubble curtain system or air-filled coffer dam; using a smaller hammer to reduce the sound pressure (because the sound produced has a direct relationship to the force used to drive the pile); or using a hydraulic hammer if impact driving cannot be avoided. The force of the hammer blow can be controlled with hydraulic hammers; reducing the impact force will reduce the intensity of the resulting sound.

3. The use of any wood that has been surface or pressure-treated with creosote or treated with pentachlorophenol should be prohibited. Creosote contains numerous constituents that are toxic to aquatic organisms including polycyclic aromatic hydrocarbons (PAHs), phenolic compounds, and nitrogen, sulfur, 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 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). The applicant should 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. The float should not ground at any tidal stage.
5. No in-water work should be permitted from March 15 through June 15 of any year to protect salmon smolts and herring.
6. Reasonable precautions should be taken to prevent incidental and accidental discharge of petroleum products and other contaminants. An emergency oil spill response kit or other appropriate equipment such as absorbent pads should be available on site to allow fast response to small oil spills and accidental discharge of hydrocarbon contaminated bilge waters.

Under section 305(b)(4) of the Magnuson-Stevens Act, the Corps is required to respond to NMFS EFH recommendations in writing within 30 days. If the Corps will not make a decision within 30 days of receiving NMFS EFH Conservation Recommendations, the Corps should provide NMFS with a letter within 30 days to that effect, and indicate when a full response will be provided.

Threatened and Endangered Species/Marine Mammals

The project is within the range of the endangered humpback whale and the threatened Steller sea lion, as well as harbor and Dall's porpoises, harbor seals, and minke and killer whales, which are protected under the MMPA. All of these species may occur in the marine waters near Wrangell at any time of year on an opportunistic basis.

The MMPA and the ESA prohibit the injury, harm or harassment of marine mammals. Pile driving introduces high levels of impulsive noise into the water column, with the potential to harass or injure marine mammals. Sound pressure levels (SPLs) in the range of 130-135 dB re: 1 μ Pa have been measured up to one kilometer from an active pile driver (Johnson et. al., 1986). Humpback whales have been observed to react to SPLs greater than 115-129 dB re: 1 μ Pa within 200 meters of a sound source. Reyff (2003) measured SPLs of 159 dB re: 1 μ Pa about 200 meters from a pile driver driving 14-inch diameter hollow steel piles. NMFS normally considers harassment takes to begin at received levels of 160 dB.

The likelihood that marine mammals frequent waters within Wrangell Harbor is low, however, 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 or are observed to be disturbed by the activity at any distance, 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,



Robert D. Mecum
Acting Administrator, Alaska Region

cc: Mr. Frank Warfel, P.O. Box 517, Wrangell, AK 99929
Greg Scheff & Associates, P.O. Box 1331, Wrangell, AK 99929
Richard Enrquez and Bill Hanson, USFWS, Juneau
Chris Meade, EPA, Juneau
Jim Cariello, ADNR-OHMP, Petersburg
Tom Schumacher, ADF&G, Juneau
Kaja Brix, NMFS, Protected Resources Division, Juneau
Mary Leykom, ACOE, Anchorage
Brenda Krausee, DEC, Juneau
Jim Anderson, DNR, Juneau

References:

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