



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

April 14, 2008

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

Re: POA-1992-630-M
Wrangell Narrows

Attn: Ms. Tiffany A. Smodey

Dear Colonel Wilson;

The National Marine Fisheries Service (NMFS) reviewed the March 27, 2008, agency coordination letter for the permit modification proposal by Mr. Frank Stelmach. Mr. Stelmach proposes to install three 10 x 20 dock sections and three pilings. The project site is Lot 5 of the Green Rocks Subdivision near Petersburg, Alaska.

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

Essential Fish Habitat

Section 305(b) of the MSFCMA 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.

The Alaska Department of Fish and Game (ADF&G) anadromous waters catalogue lists numerous anadromous fish streams in Wrangell Narrows relatively near the proposed dock. Falls Creek, number 106-44-10060, is a large stream north of the proposed site with coho, sockeye, pink and chum salmon; steelhead and cutthroat trout; and Dolly Varden char. Colorado Creek, number 106-44-10460, is a relatively large stream south of the proposed dock with coho and pink salmon and Dolly Varden char. In addition to natural production of salmon entering Wrangell Narrows, Crystal Lake hatchery king salmon are released at Blind Slough which is located directly across the narrows from the proposed project. Juvenile salmon use nearshore habitat during spring and early summer for feeding and predator avoidance prior to migration out to sea. The inshore area of the project location may provide important habitat for other marine fish species including dusky, shortraker, yelloweye, and rougheye rockfish; arrowtooth flounder;



Pacific cod; sablefish; walleye Pollock; rex sole; Pacific ocean perch; skates; sculpins; and various forage fish.

Marine species within the project area may be adversely affected by increased sedimentation and turbidity caused by potential grounding of the float structures, underwater sound pressure waves generated by pile driving, exposure to toxic materials, and loss of habitat.

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

1. The proposed floating dock extensions should not ground at any tidal stage and should not be placed in or over eelgrass beds.
2. The use of any wood that has been surface or pressure-treated with creosote or treated with pentachlorophenol should be prohibited. If treated wood must be used, any wood that comes in contact with water 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). Use wood treated with waterborne preservatives 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 remain on the wood.
3. Piles should be driven with a vibratory hammer to the extent practicable. Pile driving can generate intense underwater sound pressure waves that can disrupt migration and injure or kill fish. Vibratory hammers produce less intense sounds than impact hammers (NMFS 2005). Fish have been observed to avoid sounds similar to those produced by vibratory hammers and to remain within the field of harmful sound associated with an impact hammer (Dolat 1997). If an impact hammer is required because of substrate type or the need for seismic stability, piles should be driven as deep as possible with a vibratory hammer before the impact hammer is used.
4. In-water blasting should be avoided unless it is the only practicable method for setting piles in bedrock. In-water blasting produces intense underwater sound pressure waves that can kill or injure fish. NMFS strongly encourages the use of drilling techniques or other mechanical means for setting piles in bedrock. If underwater blasting must be used, mitigative measures (e.g. stemming) should be employed to contain the explosive energy within the bedrock to the greatest extent possible. Because potentially harmful sound pressure waves are attenuated more rapidly in shallow water than in deep water (Rogers and Cox 1988), blasts should be conducted during the lowest tide level practical.

5. No in-water work should be permitted from April 1 through June 15 of any year to protect out migrating salmon and spawning herring.
6. NMFS recommends that reasonable precautions 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

Section 7(a)(2) of the ESA directs federal interagency cooperation “to insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species” or result in the destruction or adverse modification of critical habitat. NMFS is responsible for the administration of the ESA as it applies to listed cetaceans, pinnipeds, fish, and reptiles (sea turtles) In southeast Alaska, endangered marine mammal species include the Steller sea lion (western stock, west of 144 degrees West longitude), fin whales and humpback whales. The endangered leatherback turtle has also been documented in southeast Alaska. The threatened eastern population of Steller sea lion (eastern stock, east of 144 degrees West longitude) is also present in southeast Alaska. Salmon from several ESA-listed Evolutionarily Significant Units along the west coast may occur in Alaska waters.

Marine mammal species that are not listed under the ESA are afforded protection by the MMPA. In southeast Alaska, these species include harbor seals, harbor porpoise, Dall’s porpoise, minke and killer whales. All of the aforementioned species may swim and forage in marine waters near the proposed project at any time of year on an opportunistic basis. We do not have detailed information on the frequency or magnitude of occurrence of ESA or MMPA-protected species in Wrangell Narrows near the proposed project area. General information on ESA species and MMPA species under NMFS jurisdiction can be found at:
<http://www.fakr.noaa.gov/protectedresources>.

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.

NMFS recommends that pile driving not occur if any marine mammals are observed within 200 meters of the platform to reduce the possibility for harassment or injury to marine mammals. The operator should 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 should cease until the animals leave the immediate area.

If you have any questions regarding our habitat recommendations for this project, please contact Cindy Hartmann at 907-586-7585. Please direct any questions regarding marine mammals and endangered species to Aleria Jensen at (907) 586-7248 or Erika Phillips at (907) 586-7312.

Sincerely,



Robert D. Mecum
Acting Administrator, Alaska Region

cc: COE, Anchorage, Tiffany A. Smodey*
ADNR, Petersburg, Jim Cariello*
USFWS, Juneau, Richard Enriquez*
ADF&G, Juneau, Tom Schumacher*
NMFS, HCD, Juneau, Cindy Hartmann*
NMFS, PRD, Juneau, Aleria Jensen, and Erika Phillips*
NMFS, AKR, Records
* electronic copy

References:

Dolat, S.W. 1997. Acoustic measurements during the Baldwin Bridge Demolition (final, dated March 14, 1997). Prepared for White Oak Construction by Sonalysts, Inc., Waterford, CT/34 pp + appendices.

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.

National Marine Fisheries Service. 2005. Final Environmental Impact Statement, Essential Fish Habitat Identification and Conservation in Alaska, Vol. 2, Appendix G; National Marine Fisheries Service, Department of Commerce. April, 2005.

Reyff, J.A. 2003. Underwater sound levels associated with seismic retrofit construction of the Richmond-San Rafael Bridge. Document in support of Biological Assessment for the Richmond-San Rafael Bridge Seismic Safety Project. January 31, 2003. 18pp.

Rogers, P.H. and M. Cox. 1988. Underwater sound as a biological stimulus. pp. 131-149. *In* Sensory biology of aquatic animals. Atema, J, R.R. Fay, A.N. Popper, and W.N. Tavolga, eds. Springer-Verlag. New York.