

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

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

September 20, 2007

Colonel Kevin J. Wilson District Engineer U.S. Army Corps of Engineers P.O. Box 6898 Anchorage, Alaska 99506-0898

Re: POA-1976-256-O Tongass Narrows

Attn: Nicole Hayes

Dear Colonel Wilson:

The National Marine Fisheries Service (NMFS) has reviewed the above referenced application from Mr. Joseph Machini to place approximately 1,690 cubic yards (CY) of fill and 500 CY of rip rap in an area comprising 0.22 acres of intertidal land for residential development. This application was originally approved on August 17, 1976, POA-1976-256-4, authorizing intertidal fill for a building; again on February 20, 1997 authorizing fill of 7,700 square feet of intertidal land; and again as a time extension on November 12, 2003. Despite the approvals, construction has never occurred on the project and the permit has changed hands several times since its original authorization. Also, the applicant has proposed no mitigation for this development.

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.

NMFS has no record of whether we commented on the original 1976 application. We responded to the 1996 application in a letter to Mr. Jon Glenn on December 11, 1996, concurring with recommendations provided by the U.S. Fish and Wildlife Service that were based on a site visit. Our recommendations were as follows:

- 1) Relocate the single family dwelling to an upland location that would avoid any wetland or intertidal impacts. This is the preferred alternative.
- 2) Redesign the single family dwelling to a pile supported structure, using steel, concrete or wood (treated with non-leachable waterborne salt preservatives such as ammoniacal copper arsenate and chromated copper arsenate and not creosote or pentachlorophenol, which are toxic to juvenile fish).



The Corps has concluded that the proposed project may adversely affect EFH. NMFS concurs. The proposed residence would permanently remove intertidal fish habitat. The Alaska Department of Fish and Game's Anadromous Waters Catalog identifies anadromous stream 101-47-10300 in the vicinity of the project that support runs of chum and pink salmon. Juvenile salmon use the inshore area of Tongass Narrows during spring and early summer for feeding and predator avoidance prior to migration out to sea. The project site likely is used by several species of marine forage fish as well.

In accordance with Section 305(b)(4)(A) of the Magnuson-Stevens Act, NMFS makes the following EFH Conservation Recommendations:

- 1. Under the Clean Water Act Section 404 (b)(1) Guidelines (40 CFR 230), the Corps can only permit the least environmentally damaging practicable alternative for a proposed discharge of fill into jurisdictional wetlands or waterways. The Corps should require the applicant to evaluate less damaging options such as using an upland site (preferred) or building the structure on pilings to avoid filling intertidal fish habitat.
- 2. If avoiding fill is not practicable, the Corps should require the applicant to develop and implement a suitable compensatory mitigation plan to offset any unavoidable impacts to waters of the U.S.
- 3. 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.
- 4. All work below the high tide line should be limited to low tidal stages to reduce turbidity.
- 6. No in-water work should be permitted from April 1 through June 15 of any year to protect out migrating salmon.
- 7. If the structure is built on pilings, drive piles with a vibratory hammer. Pile driving can generate intense underwater sound pressure waves that can injure or kill fish (Longmuir and Lively 2001, Stotz and Colby 2001). 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.

9. In intertidal areas, drive piles during low tide. Potentially harmful sound pressure waves are attenuated more rapidly in shallow water than in deep water (Rogers and Cox 1988).

Under section 305(b)(4) of the Magnuson-Stevens Act, the Corps is required to respond to NMFS EFH Conservation 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.

Additionally, to reduce the possibility for harassment or injury to marine mammals, pile driving should not occur if any marine mammals are observed within 200 meters of the platform. 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 recommendations for this project, please contact Timothy Wilkins at 907-586-7643 or timothy.wilkins@noaa.gov.

Sincerely,

Robert D. Mecum

Acting Administrator, Alaska Region

Robert Onew

cc: Applicant

EPA Juneau, Chris Meade*
ADNR, Mark Minnillo*
USFWS Juneau, Richard Enriquez*
ADEC Juneau, Brenda Krauss*
OHMP, Erin Allee*

^{*} e-mail PDF

Literature cited

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.

Longmuir, C. and T. Lively. 2001. Bubble curtain systems for use during marine pile driving. Report by Fraser River Pile & Dredge Ltd., New Westminster, British.Columbia. 9 pp.

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.

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.

Stotz, T. and J. Colby. 2001. January 2001 dive report for Mukilteo wingwall replacement project. Washington State Ferries Memorandum. 5 pp. + appendices.