



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

April 10, 2008

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

Re: POA-1999-377-M1
Burnett Inlet 2

Attn: Joseph W. Connor

Dear Colonel Wilson:

The National Marine Fisheries Service (NMFS) has reviewed the agency coordination letter for work proposed by Southern Southeast Regional Aquaculture Association (SSRAA) in Burnett Inlet. The proposed work includes attaching two 18.45-foot by 21-foot vertical raceways to the existing complex and relocating an existing piling.

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 MSFCMA requires federal agencies to consult with NMFS on all actions that may adversely affect Essential Fish Habitat (EFH). NMFS is required to make EFH Conservation Recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects.

Burnett Inlet is a relatively long inlet with anadromous fish streams at the head and at the mouth on the inlet. The Alaska Department of Fish and Game (ADF&G) anadromous waters catalogue lists streams 106-22-10130, 106-22-10140, 106-22-10144, and 106-22-10148 at the head of the inlet and stream 106-22-10160 near the mouth of the inlet. These streams support runs of coho, pink and chum salmon. 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 also provides important habitat for several marine species including the following groundfish species: Pacific cod; Pacific Ocean perch; walleye pollock; dusky, shorttraker, yelloweye, and roughey rockfish; sablefish; arrowtooth flounder; flathead and rex sole; skates, sculpins, and various forage fish. Marine species within the project area may be adversely affected by underwater sound pressure waves generated by pile driving.



NMFS has determined that the project, as proposed, may adversely affect EFH. We offer the following EFH Conservation Recommendations pursuant to Section 305(b)(4)(A) of the Magnuson-Stevens Act:

1. 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 20005). 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.
2. 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).
3. 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.

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 Burnette Inlet 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.

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.

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.

If you have any questions regarding our recommendations for this project, please contact Cindy Hartmann at 907-586-7585 or cindy.hartmann@noaa.gov.

Sincerely,



Robert D. Mecum
Acting Administrator, Alaska Region

cc: SSRAA, 14 Borch, Ketchikan, AK 99901
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Literature cited

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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.

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