



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

*National Marine Fisheries Service*

*P.O. Box 21668*

*Juneau, Alaska 99802-1668*

January 29, 2004

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

Re: Kasistna Bay 6 1-1988-0668

Attn: Skip Joy

Dear Colonel Gallagher:

The National Marine Fisheries Service (NMFS) has reviewed the above referenced proposal by the National Oceanic and Atmospheric Administration (NOAA). The proposed project involves retaining unpermitted existing docks, walkways, and buildings, and construction of a new trestle pier, pump house, floating dock, seawater intakes, pipeline and anchors, boardwalk, new portions of a dry lab, and an existing very important person (VIP) cabin. The purpose of the construction is to update NOAA's research facility in Kasistna Bay.

EFH and Living Marine Resources

A number of anadromous fish streams are located in the vicinity of Kasistna Bay that support runs of coho salmon, pink salmon and chum salmon. There is also a hatchery run of chinook salmon in nearby Seldovia Bay and a hatchery run of pink salmon in Tutka Bay. In addition, the area provides Essential Fish Habitat (EFH) for several species of groundfish, including flathead sole, rock sole, arrowtooth flounder, Pacific cod, walleye pollock, yellowfin sole and sculpins. NMFS' primary concern is the potential impact of construction activities on marine juvenile fish and outmigrating salmonid smolts that use the project area as EFH during the critical osmoregulatory shift from fresh to salt water.

The U.S. Army Corps of Engineers (Corps) has made a determination that the project will not adversely affect Essential Fish Habitat (EFH). NMFS agrees with this determination. The Magnuson-Stevens Fishery Conservation and Management Act requires NMFS to make conservation recommendations regarding any federal action that would adversely affect EFH. We offer the following recommendations pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Act to minimize the impact of pile driving.

General Comments

Activities associated with pile driving can cause adverse effects to EFH. We have enclosed a summary document titled "Potential Impacts to Fish From Pile Driving." This summary was prepared by NMFS staff to inform resource agencies and others about the impacts of pile driving and possible means of mitigating those impacts.



## EFH Conservation Recommendations

1) Fish are sensitive to underwater sound pressure waves. Larger pressure waves are created by impact drivers than by vibratory drivers. For this reason, vibratory hammers are preferred to lessen impacts to juvenile fish. Vibratory drivers work well in soft substrate but not as well in harder substrates. NMFS understands substrate in the project area is primarily shallow fractured bedrock and that impact hammers will have to be used for at least a portion of the project to meet stability criteria. NMFS does not object to the use of the impact hammer, however, piles should be driven as deep as possible with a vibratory hammer prior to the use of the impact hammer.

2) In-water work should normally be conducted between September 15 and March 1 to avoid impacts to juvenile fish. However, NOAA proposes to conduct pile driving activities from April 1 through November 14 to avoid impacts to wintering eiders. In order to accommodate both resource concerns, NMFS recommends that, if possible, pile driving below mean low low water (MLLW) be conducted between September 15 and November 14. If this is not feasible, we recommend that in water work be conducted during low tide levels between June 15- November 14.

3) In-water work should be conducted at the lowest tide levels. As mentioned above, fish are sensitive to underwater sound pressure waves. Working in shallow water or when the site is dry reduces sound wave propagation and subsequent impacts to juvenile fish.

4) Wooden materials associated with the dock, pier, and trestle should not be treated with preservatives containing pentachlorophenol. Specified wood treatments should be applied through pressure treatment rather than surface application. All treated wood used in conjunction with this project should be produced and installed in compliance with the most recent version of the Best Management Practices for the use of Treated Wood in Aquatic Environments published by the Western Wood Preservers Institute (<http://www.wwpinstitute.org/>).

Please note that under section 305(b)(4) of the Magnuson-Stevens Act, the Corps is required to respond in writing within 30 days to NMFS recommendations. If the Corps does not make a decision within 30 days of receiving NMFS EFH Conservation Recommendations, the Corps should provide NMFS with a letter to that effect, and indicate when a full response will be provided. Brian Lance is the NMFS contact for this project, and can be reached at (907) 271-1301.

Sincerely,



(For) James W. Balsiger  
Administrator, Alaska Region

Enclosure

cc: USFWS, EPA, ADGC, ADFG, ADEC, ADNR - Anchorage

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