



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

June 9, 2003

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

Re: 2-1988-0254
Kenai River 209

Attn: Daniel Smith

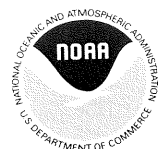
Dear Colonel Griffith:

The National Marine Fisheries Service (NMFS) has reviewed the above referenced proposal by Mr. Gary Galbraith. The proposed project involves placement of one J-hook vane structure for bank erosion protection on the Kenai River. The vane will be approximately 140 feet long and angled upstream at 15 -20 degrees, projecting approximately 45 feet out from the bank where it joins the thalweg. The vane will be constructed using boulders ranging from 3 ft to 5 ft in diameter. Re-vegetation will be incorporated into the work to restore vegetation disturbed by construction activity, provide increased bank capacity for erosion protection, and provide overhanging cover for fish.

The U.S. Army Corps of Engineers (Corps) has made a determination that the project may 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. The construction and operation of the proposed project would adversely affect EFH, and anadromous fish, if necessary conservation measures are not followed.

Background and Discussion

The project is located within the Kenai River Special Management Area. The Kenai River provides EFH for the migration, spawning, rearing, and/or over-wintering of chinook salmon (*Onchorynchus tshawytscha*), coho salmon (*Onchorynchus kisutch*), sockeye salmon (*Onchorynchus nerka*), chum salmon (*Onchorynchus keta*), and pink salmon (*Onchorynchus gorbuscha*) and is listed as anadromous (ADF&G anadromous catalog, Seward B-8).



The proposed project would be located in the river reach between Kenai Lake and Skilak Lake. This is a major spawning area for sockeye, coho, and chinook salmon, and a migratory pathway for pink and chum. Juvenile salmon migrate both upstream and downstream in this area. Coho salmon rearing habitat is abundant and large numbers of juvenile chinook salmon rear in back channels in this area due to favorable cover and current. Sockeye salmon migrate upstream through this section of the Kenai River to reach rearing lakes.

Juvenile salmon are very sensitive to current limitations and travel adjacent to the bank where protective cover and low water velocity occurs. Any obstacle, such as a rock vane, placed along the shore will force juvenile fish into swift water and impair mobility. Predators on juvenile salmon, such as Dolly Varden and rainbow trout, would likely benefit from disoriented juveniles caught in eddies created by the J-hook vane structure. Thus, this project could be a major velocity barrier to migrating juveniles; both those utilizing the immediate area and those that migrate to Kenai Lake and/or Skilak Lake to rear or overwinter.

In addition, the project may cause downstream effects on habitat as a result of changing the hydrological regime (i.e., shifting current velocity from the bank to the thalweg) of that section of the river. The stream bank in the project area is naturally eroding. This continual process of erosion provides fish habitat in a mosaic pattern along the Kenai. While the applicant's report addresses hydrological issues at the project site, it fails to consider what downstream effects on habitat may occur due to installation of the J-hook vane structure.

The proposed project calls for the vane to protrude 45 feet from the bank. The J-hook vane structure would divert stream velocity from the bank on a meander bend to the thalweg, leading to channelization with a substantial loss of habitat value. The Alaska Department of Fish and Game (ADF&G) has spent thousands of dollars over the last 20 years removing rock structures from the Kenai and promoting bio-stabilization techniques for bank erosion. NMFS is concerned that permitting this project could set a precedent for using in-stream structures in the Kenai. The cumulative effects on EFH for the Kenai River would be significant.

Conclusion and Recommendations

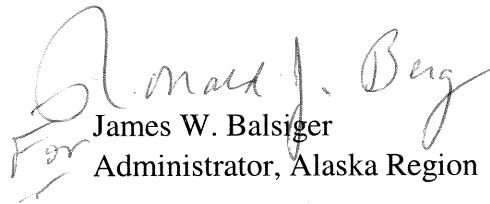
The proposed project would have an adverse effect on anadromous fish and EFH in the vicinity of the proposed project. NMFS suggests the applicant investigate alternatives that do not require in-water structures. One alternative would be to work with a contractor experienced with the successful installation of spruce tree revetments. ADF&G streambank restoration programs have demonstrated a successful record of assisting property owners on the Kenai with bank erosion. Several experienced contractors are available on the Kenai Peninsula who have worked closely with ADF&G on proper erosion control techniques. NMFS would be happy to meet with the applicant to discuss less environmentally damaging alternatives. The loss and alteration of juvenile salmonid habitat is unacceptable, particularly when alternatives exist.

The project as proposed will result in substantial and unacceptable impacts on aquatic resources of national importance. Therefore, until information is supplied on alternative plans and mitigation possibilities, NMFS recommends that proposed project be denied in accordance with Part IV, paragraph 3(b) of the 1992 Memorandum of Agreement between the Department of Commerce and the Department of the Army under Section 404(q) of the Clean Water Act. Please notify our office of the Corps' decision regarding this project in accordance with Part IV, paragraph 3(c) of the 1992 Memorandum of Agreement.

NMFS' recommendation to deny the proposed permit in favor of a less damaging alternative also constitutes our **EFH Conservation Recommendation** pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Act. 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

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