UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

April 7, 2004

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

Re: POA-2004-407
NWP 13, Bank Stabilization
Mendenhall River

Attn: Randy Vigil

Dear Colonel Gallagher:

The National Marine Fisheries Service (NMFS) has reviewed the Army Corps of Engineers April 2, 2004 response to our Essential Fish Habitat (EFH) Conservation Recommendations for Nationwide Permit Pre-Construction Notification POA-2004-407 for bank stabilization of the Mendenhall River at the residence of Jeffry and Ann Lind at 4299 Marion Drive, Juneau, Alaska. Because the proposed work will occur in the Mendenhall River during the normal closure period for in-water work, NMFS offers the following comments and clarifications to the Corps' response to NMFS' EFH Conservation Recommendations.

1) Given the urgent need for completing this project prior to summer high flow conditions, NMFS originally recommended extending the in-water work window for this project until April 15, 2004 to allow the work to be completed during low flow conditions. Because of the need to coordinate multiple state and federal permit reviews and site visits, the applicant has stated that the proposed work cannot be completed by that date. NMFS recommends changing this in-water work window to allow construction to proceed, but specifying that only fourteen consecutive days of in-water work below ordinary high water will be permitted in order to minimize disturbance to migrating fish. The start date will depend on issuance of all necessary state, federal, and municipal permits. The final day of in-water work should be no later than April 30, 2004. The applicant should notify NMFS and the Corps by phone and/or e-mail one day prior to beginning the in-water work.

2) The current bank stabilization design specifies that the toe of the rock revetment will be keyed into the streambed at a depth of three feet along most of its length, tapering to five feet at the upstream edge of the project. NMFS, after review of the U.S. Geological Survey's recent report entitled "Hydrology, Geomorphology, and Flood Profiles of the Mendenhall River, Juneau, Alaska, Water Resources Investigations Report 99-4150," is concerned that the proposed design may not provide adequate protection from erosion and may result in avoidable adverse effects to EFH. NMFS suggested that the revetment may require a more substantial footing because the river channel is incising at the project location. If the river channel downcuts below the foot of the revetment, the revetment could be undermined and would fail to provide the desired bank stabilization. NMFS suggested that further engineering review of the plans be conducted in consultation with the above cited document so that the footing is keyed in at the appropriate depth to ensure long-term stability of the bank. NMFS has since received assurance from the

project engineer, Dean Griggs, P.E., that the design is adequate to withstand a 100-year flood event, and that the rate of channel incision at the project site is such that the designed revetment will protect the site for at least 100 years at the current rate of channel incision.

3) While large rock rip-rap is the appropriate material for constructing the base of the bank revetment in the high energy environment of the active river channel, other, softer materials can be used on the upper portions of the design that would be less destructive to EFH. The Alaska Department of Fish and Game, along with the U.S. Fish and Wildlife Service, developed Technical Report No. 99-3, "Guidelines for Bank Stabilization on the Mendenhall River," that provides engineering details for a bioengineered bank stabilization design, which we recommend be incorporated into the upper portions of the bank revetment. Bioengineered bank stabilization techniques can provide adequate structural protection from erosion, equal to or sometimes even exceeding the protection of "hard engineered" designs, while improving habitat and aesthetic values.

The Corps responded to these two EFH Conservation Recommendation by stating the limit of Corps regulatory authority is the area below ordinary high water. However, we understand that the Corps will include in the transmittal letter to the applicant, an advisory of NMFS' assessment of the USGS report and suggest that the applicant consider it prior to performing the authorized work. The Corps will also recommend that the applicant consult and work with NMFS, USFWS, and Alaska Department of Natural Resources to devise a project plan that both serves the interests of the applicant and fish habitat. To that end, NMFS has enclosed a draft site plan that was developed specifically for this project site by the USFWS' habitat restoration biologist. This plan, if implemented, will enhance the bank stabilization and improve fish habitat. Please forward this site plan to the applicant with the NWP verification.

NMFS recommends that the Corps expedite review of this response. Due to the extenuating circumstances and risk to the applicant's home this project will be constructed during the height of fish migration. To promote the interest of all involved, this work should be completed as soon as possible, both to minimize impacts to fish and to avoid high summer water conditions in the Mendenhall River. Phone or e-mail communication should be sufficient to complete our consultation on the project. In the interest of expediting permitting and consequent construction of this project, NMFS waives the ten day period for review of the Corps' final decision regarding our EFH Conservation Recommendations and requests that the Corps issue a permit, if warranted, as soon as possible.

Susan Walker is the NMFS contact person for this project. She may be reached at (907)586-7510.

Sincerely,

James W. Balsiger
Administrator, Alaska Region

cc: OHMP, Juneau: Carl Schrader, Catherine Pohl
ACOE, Juneau: Randy Vigil
USFWS, Juneau: Richard Enriquez
CBJ, Engineering Department

Enclosures

Lind Property
DRAFT Revegetation and Site Plan per Fish Habitat Permit FH04-I-0017 and USCOE NWP 13

This site plan is provided to help define the revegetation and site enhancement in order to replace the form and function of existing riparian vegetation to be disturbed along 220' of Mendenhall River at 4299 Marion Drive, Juneau.

Materials Acquisition:
Vegetative materials for revegetation of this site may not be taken from within 25 feet of ordinary high water of off site riparian sources.

Materials Placement:
Riprap Face from OHW (5 feet above riverbed) to Q100 (13 feet above riverbed):

- Pole Plantings of willow (Salix sitchensis, S. commutata) or Black cottonwood (Populus trichocarpa) laid in 2 courses. Poles should be scaled from 2-8 inches diameter, 6-10 feet in length, and buried not less than 12 inches into underlying soils. Poles should be spaced at about 1.5 D100 (150% of the max rock size) both along the row and between rows, approximately 5 feet on center for the length of the face (not less than 90 poles)

From Q100 (13 ft) to Top of Bank:

- Willow live stakes and/or rooted Alder, 2 courses, 3 feet on center (not less than 150 stakes)
- Topsoil with seed (Deschampsia spp.)

Top of Bank:

- (4) Sitka spruce 6 feet or larger

Method:

Pole Plantings:

- Guidelines for Bank Stabilization on the Mendenhall River, Interfluve and Alaska Department of Fish and Game, Tech Report 99-3 1999.
- NRCS Part 650 Engineering Field Handbook, Streambank and Shoreline Protection, 16-28.
- BioDraw 3.0, Salix Applied Earthcare

Willow Stakes:

- Streambank Revegetation and Protection, Alaska Department of Fish and Game Tech Report 98-3

Monitoring:
Photopoints shall be established looking upsteam and downstream and shall be submitted after the growing seasons in August 2004 and 2005 to DNR, NMFS, USFWS, and ACOE