



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

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

February 18, 2008

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

Re: POA-2006-898
Hoonah Harbor

Attn: John C. Leeds, III

Dear Colonel Wilson:

The National Marine Fisheries Service (NMFS) has reviewed the above referenced application from the Alaska Department of Transportation and Public Facilities (ADOT&PF) to remove structures, place structures and discharge fill materials into waters of the United States for the applicant's stated purpose to "increase security safety at the ferry terminal and add new staging and parking areas." The proposal seeks to accomplish the following: 1) relocate the existing terminal building from its existing location to a new location atop the new fill, 2) construct a security fence at the head of the transfer bridge, and around the staging area in the vicinity of the relocated terminal building and 3) replace/improve the existing sewer treatment system, and the water and electric utilities.

The work would include: 1) remove four each concrete capped moorage structures, resulting in the removal of 16 each 18-inch steel piles, and 20 each steel fender piles, 2) place four each 4-pile 30-inch steel pile dolphins, 3) upgrade the existing transfer bridge with a new deck treatment, and 4) discharge approximately 42,000 cubic yards of fill, comprised of approximately 37, 400 cubic yards of shot rock and approximately 4,600 cubic yards of sub base fill, below the high tide line (19.4 foot contour above the 0.0 foot contour, or sea level) creating a footprint occupying approximately 1.6 acres of inter and sub-tidal fill.

The Alaska Department of Fish and Game's Anadromous Streams Catalog indicates that anadromous streams supporting important habitat for chum, coho, and pink salmon, and Dolly Varden char and cutthroat trout are located approximately 2 to 6 miles to the south of the project area (see USGS Quadrangle Juneau A-5: streams 114-31-10080, -10090, -10100, and -10130). Our review of this site's characteristics, as mapped by the Shorezone coastal habitat mapping project, shows that a continuous band of eelgrass, an important habitat feature that provides nursery functions for juvenile salmon, begins immediately to the south of the project area. The project area also contains biobands of barnacles and green algae and has an oil residency index of months to years. The project



The project will remove 1.6 acres of shallow water habitat for migrating juvenile salmonids and divert them into deeper water, where they will be subject to increased predation. Juvenile salmon along steep beaches tend to aggregate more than along shallower gradient shores and will even school with other species (Celewycz and Wertheimer 1994; Toft et al. 2004). These are behavioral changes that are attributed to greater exposure to predation from adjacent deep water areas by both authors. The project is also likely to affect the abundance and productivity of both salmon and their prey in the area. Studies in Prince William Sound determined that both pink and chum salmon feed on a diverse diet of zooplankton, epibenthos, and drift insects while in low to medium gradient habitats (<10% - 25% slope) (Sturdevant et al. 1996). Finally, the placement of newly quarried shot rock and sub base fill will limit the availability of epibenthic salmon prey and could also have deleterious long-term effects. A recent study on epibenthic productivity of manmade structures, including riprap (Lorenz 2004) indicated a general decline in diversity of juvenile salmon food organisms associated with shoreline armoring and development even after 20 years in place. In addition, this fill is contiguous with neighboring fills and will contribute to the cumulative alteration/loss of near shore habitat along the Hoonah waterfront.

An eelgrass bed is located along the toe of slope on the northwest flank of the proposed fill. The toe of slope line runs immediately along the bed on the upper east quarter. The contiguous proximity of the toe of fill to the eelgrass bed will alter water circulation patterns and subject it to hydrocarbon contamination from stormwater runoff from the parking lots/staging areas. This could expose juvenile salmonids to hydrocarbons especially when they use the eelgrass bed for feeding and cover.

The “Applicant Proposed Mitigation Statements” provided by ADOT&PF addresses several issues related to the Clean Water Act 404(b)(1) guidelines and final mitigation rule published in the federal register on April 10, 2008. NMFS offers the following comments regarding these issues:

Avoidance of impacts to waters of the U.S., including wetlands:

ADOT&PF maintains, *as quoted verbatim in the following bullets*, that the alternative presented is the only practicable alternative for two reasons:

- If we relocate the parking/staging area on the adjoining uplands we would impact the Port Frederick Burial site (JNU-00112).
- The topography of the adjoining uplands is very steep. If we cut into the hillside to relocate the parking I staging area we would generate approximately JOEL ? CY of excess material.

According to the Section 404(b)(1) guidelines in section 230.10 (a), “no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental cording to

long as the alternative does not have other significant adverse environmental consequences.” The guidelines go on to state, under section 230.10 (a) (3) that “where the activity associated with a discharge is proposed for a special aquatic site (as defined in subpart E) does not require access or *proximity to* (emphasis added) or siting within the special aquatic site in question to fulfill its basic purpose (i.e., is not “water dependent”), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise.”

The purpose of this project to provide staging and parking areas is a non-water dependent purpose and the immediate *proximity* to the eelgrass bed establishes the presumption that practicable alternatives are available, unless clearly demonstrated otherwise. Practicable alternatives could range from a piling supported structure, further avoidance of the eelgrass bed, or aligning parking areas in low gradient areas by linear and/or separated and/or smaller units that avoid both the burial site and the need for removal of “excess” amounts of upland material.

With the level of information provided in the “Applicant Proposed Mitigation Statements”, it is impossible to determine if there are ways to utilize the adjacent uplands for all or possibly a portion of the parking and staging space needed by this project to avoid and minimize impacts to waters of the U.S without impacting the burial site. NMFS recognizes that the locations and areal extent of burial sites are sensitive and confidential information. Consequently, NMFS requests that an interagency meeting be hosted by ADOT, and attended by the State Historic Preservation Office, NMFS and any other interested and appropriate entities to determine if the upland alternative analysis for this project is adequate to meet the requirements of the Clean Water Act 404(b) (1) guidelines.

Compensation for unavoidable impacts to waters of the U.S., including wetlands:

ADOT maintains that compensatory mitigation should not be required for this project because “there are no significant resource losses to either the aquatic nor human environment”, and that “during the project development ADOT&PF identified an eel grass bed as the only sensitive aquatic habitat. The project fill footprint will avoid the eel grass bed.”

NMFS disagrees with ADOT’s conclusion regarding the need for compensatory mitigation for this project. First, the nearshore area of the project is in fact a significant resource as it provides rearing, feeding and shelter habitat for juvenile salmonids that will be lost. Second, although the project footprint does not show direct filling of the eelgrass bed, the guidelines still require an upland alternative analysis for activities in *proximity* to special aquatic sites. Further, both the short-term construction and long-term alteration of the shoreline are likely to affect the eelgrass bed indirectly from the physical actions of heavy equipment, placement of fill, alteration of water circulation patterns and release of stormwater runoff from the parking lot/staging area with toxic contaminants such as hydrocarbons.

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

1. All measures to minimize impacts to waters of the U.S., as outlined in the “Applicant Proposed Mitigation Statements” are recommended as EFH conservation recommendations, with the following additions.
2. Drive piles during low tide when the depth of placement is affected by tidal fluctuations. Potentially harmful sound pressure waves are attenuated more rapidly in shallow water than in deep water (Rogers and Cox 1988).
3. Petroleum hydrocarbons are known to be extremely toxic to early life history stages of salmonids at extremely low levels, in the parts per billion ranges (Carls, et al., 1997; Marty, et al., 1997). Given the use of this area by migrating salmonids combined with the proximity of eelgrass beds, particular care should be taken to understand, avoid, minimize and mitigate contamination of marine waters by hydrocarbons from stormwater runoff of the parking and staging areas. Specific measures need to be outlined in the applicant prepared Stormwater Pollution Prevention Plan.
4. Conduct an interagency meeting to determine the availability of upland alternatives.
5. For unavoidable impacts, compensatory mitigation should be required.

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 Linda Shaw at 907-586-7643 or linda.shaw@noaa.gov.

Sincerely,



Robert D. Mecum
Acting Administrator, Alaska Region

cc: Applicant
John C. Leeds III, Corps*
EPA Juneau, Chris Meade*
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