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

November 9, 2006

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

Re: Knik Arm Ferry
POA-2006-1250

Attention: Ryan Winn

Dear Colonel Wilson:

The National Marine Fisheries Service (NMFS) has reviewed the above referenced Public Notice. The proposed project involves development of a commuter ferry system between Port MacKenzie and Anchorage. As currently planned, one ferry landing would be constructed off the south side of the existing dock at Port MacKenzie on the Matanuska-Susitna Borough side of Knik Arm. In Anchorage, the proposed preferred location for the ferry landing is the Ship Creek Point Alternative, extending northwest off the Ship Creek Point small boat launch. The Public Notice also describes an Alternative Configuration A, also extending northwest off Ship Creek Point, but shifted slightly to the south. Both these alternatives represent a departure from the preferred alternative listed in the June 2003 Environmental Assessment (EA), the North Star Alternative. NMFS provided conservation recommendations to the Federal Transit Authority (FTA) in a letter (April 30, 2003), that supported the North Star Alternative as having the smallest effect on essential fish habitat (EFH) and Cook Inlet belugas. These comments were reiterated in a letter (October 27, 2006) in response to the Final Supplemental Environmental Assessment (EA) and EFH assessment prepared by FTA and the Matanuska-Susitna Borough.

Effects on NMFS Trust Resources

Fish and Essential Fish Habitat

Knik Arm, including the Ship Creek estuary, provides EFH for migrating and/or rearing Chinook salmon, coho salmon, pink salmon, and chum salmon. Ship Creek, located within the Anchorage portion of the project area, is listed as an anadromous fish stream (ADF&G anadromous catalog, Anchorage A-8). In addition, EFH for several species of groundfish occurs in Knik Arm, and of these, sculpins, Pacific cod, and walleye pollock would be the most likely to utilize the nearshore area of the project.

The Corps has made a determination that the project will not adversely affect EFH. NMFS disagrees 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.

Cook Inlet Belugas

The project area for pile supported structures, as well as the ferry route, provides high value beluga habitat. The Cook Inlet beluga population is a small stock that has been shown to be geographically isolated (Laidre et al. 2000) and genetically distinct (O'Corry-Crowe et al. 1997) from other Alaska stocks. The Cook Inlet beluga's range appears to be largely confined to Cook Inlet (Rugh et al. 2000, 2005) with high density concentrations in the upper Inlet. Since 1994, the Cook Inlet beluga population has declined significantly (Hobbs et al. 2000). The Cook Inlet beluga population was designated as depleted under the Marine Mammal Protection Act (MMPA) in 2000 (65 FR 34590). The 2005 abundance estimate indicates that just 278 belugas presently comprise the population. NMFS is currently undertaking a status review of the Cook Inlet beluga stock to determine whether this beluga population should be listed under the Endangered Species Act, as amended (ESA). NMFS also received a petition to list the Cook Inlet belugas as endangered under the ESA (71 FR 44614, August 7, 2006).

The proposed ferry terminals are planned at Point MacKenzie and the mouth of Ship Creek. The ferry construction and operation, particularly at the mouth of Ship Creek could adversely impact Cook Inlet belugas. Construction noise will disturb the belugas where noise levels would be significantly elevated, particularly during pile driving and other in-water work. Operationally, the pile supported ferry terminal and access road may present a source of noise, at low levels, but which may be readily detectable to the sensitive hearing of beluga whales. Scientific research on both captive and wild belugas has demonstrated their behavioral reactions to in-water noise. Research has established noise thresholds at which belugas are harassed, and at which they are injured. Sound transmission and receipt is very important to Cook Inlet belugas, which spend their lives in the turbid and regularly darkened waters of Cook Inlet and are almost wholly dependent on the acoustic environment. Man-made noise has the capacity to harass or injure these whales. Man-made noise may also interfere or compete with the beluga's ability to communicate or locate prey (echolocation). Subtle changes in whale behavior due to noise would include avoidance of noise sources.

The ferry terminal physical structures may also impede beluga use of Ship Creek, an important feeding area for Cook Inlet belugas. It would be best to keep development of Ship Creek and Knik Arm areas confined to the developed area north of Ship Creek.

Mitigation Recommendations for EFH and Cook Inlet Beluga Whales

We offer the following conservation recommendations on 1) EFH pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Fishery Conservation and Management Act and 2) Cook Inlet belugas, pursuant to the Marine Mammal Protection Act:

1. The Corps should select the North Star Alternative as the preferred option. The proposed ferry landing at the mouth of Ship Creek, including Alternative Configuration A, would adversely affect EFH and would also impact Cook Inlet belugas. Cook Inlet belugas are regularly observed feeding and milling at the mouth of Ship Creek. In fact, Ship Creek boat launch and overlook is a favorite and accessible location for people to observe beluga whales.

Placing a ferry landing at the mouth of Ship Creek would interfere with beluga migration and feeding.

The justification for moving the ferry landing to Ship Creek Point is not clear (or clearly substantiated) in the Final Supplemental EA or Public Notice. The 2003 EA states (page 4-12) regarding the North Star Alternative, "it is not expected that the proposed changes (due to ferry landing development) will have adverse effects on land status, use, or zoning since the area is already a highly developed industrial area." The 2003 EA further states (page 4-12) that the Proposed Alternative (North Star) is consistent with current development trends and patterns and zoning in the Ship Creek Port of Anchorage area." Also, in the mitigation section of the 2003 EA (page 4-37), the document lists a number of avoidance and minimization components considered as part of the Knik Arm Ferry build alternatives. When determining the location of the Anchorage ferry landing, the first factor listed was, "Avoiding the mouth of Ship Creek, that is deemed sensitive by resource agencies." These statements suggest the North Star Alternative is practicable and meets the purpose and need of the project.

A ferry landing on the north side of Ship Creek will keep industrial activity focused in an existing industrial area. Placing the ferry landing at Ship Creek Point will expand industrial use of that area thereby potentially eliminating future multi-purpose uses (recreation, tourism, etc.) on the south side of Ship Creek. More development at Ship Creek Point will also hamper future habitat restoration efforts in the Ship Creek estuary. Most of the lower estuary for Ship Creek has been lost to industrial development. A healthy, functioning estuary is vital for maintaining populations of numerous NMFS trust resources (salmon and marine mammals). Future Ship Creek estuary restoration efforts could direct industrial development to the north of Ship Creek (North Star alternative), allowing the area to the south to be restored for increased estuarine function benefiting fish, plants, birds, mammals and other organisms. Location of the ferry landing at Ship Creek Point, particularly with the dock extending across the entrance to Ship Creek, would make restoration efforts problematic. Although no current plans exist for restoration of the Ship Creek estuary, any potential restoration options will be greatly reduced by more industrial development at Ship Creek Point.

2. In addition to the Best Management Practices listed in the EFH assessment, the Corps should require an oil/water separator (or equivalent system) and/or vegetated swales to remove total suspended solids (TSS), oil, and grease from the ferry parking lot, associated buildings, and roads. The applicant should also implement maintenance and monitoring plan for this system. Non-point source pollution can have deleterious effects on salmonids, particularly growth in juveniles. Petroleum hydrocarbons damage developing salmon eggs, larvae, and fry at extremely low concentrations. Sculpin eggs and larvae, and juvenile Pacific cod, which may occur in nearshore areas, would likely experience similar effects.

3. Pile driving and other in-water work should be avoided from May 1 through September 30 to avoid disturbance of outmigrating smolt, as well as returning adult salmon. This becomes particularly important should the Ship Creek Point alternative be selected with the dock across the mouth of Ship Creek. Pile driving can generate intense sound pressure waves that may injure and kill fish, particularly juveniles. Dredging and fill activities can contribute sediment to the

marine environment, potentially decreasing fish feeding efficiency and smothering benthic organisms.

4. Conduct in-water and intertidal work at low tide to the best extent possible. Sound from pile driving is more rapidly attenuated in shallow water than deep water due to reflection at the water surface and absorption by bottom sediments. Conducting other work at low tide will decrease the amount of sediment introduced to the water column.

5. In-water pile driving (i.e., excluding work when the entire pile is out of the water due to shoreline elevation or tidal stage) should not occur within two (2) hours on both sides of each low tide.

6. Belugas should not be exposed to sound levels in excess of 180 dB re: 1μPa. The radius surrounding such noise sources should be determined empirically and established based on propagation loss equations fit to site-specific data. (If no Small Take Authorization under section 101 (a)(5) of the MMPA is obtained, Cook Inlet beluga should not be exposed to noise in excess of 160 dB re: 1μPa).

7. Minimize beluga exposure to construction, vessel, and operational noise resulting from the ferry construction and operation. Develop, in consultation with NMFS, an underwater noise reduction plan through the use of structural design and operational procedures.

NMFS appreciates the applicant's voluntary reduction in their statement of work to exclude the public boat launch from the permitted dock expansion project at Port MacKenzie in order to protect belugas from possible harassment and harm in upper Cook Inlet. Without a public boat launch, Port MacKenzie will operate in recognition of the Cook Inlet beluga conservation needs.

Brian Lance is the NMFS EFH contact for this project, and can be reached by telephone at (907) 271-1301 or email brian.lance@noaa.gov; and Barbara Mahoney is the NMFS beluga contact for this project, and can be reached by telephone at (907) 271-3448 or email at barbara.mahoney@noaa.gov.

Sincerely,

Robert D. Mecum

Robert D. Mecum
Acting Administrator, Alaska Region

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