January 27, 2012

Colonel Reinhard W. Koenig
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
Elmendorf AFB, AK 99506-0898

Re: POA-2005-97
Knik Arm

Attn: Mary.Plumb-Mentjes

Dear Colonel Koenig:

The National Marine Fisheries Service (NMFS) has reviewed the above referenced public notice and project descriptions regarding the Knik Arm Bridge and Toll Authority's proposal to construct a bridge spanning Knik Arm from the Municipality of Anchorage to the Matanuska-Susitna Borough.

The proposed crossing of Knik Arm would be located approximately 1.25 miles north of Cairn Point and would span approximately 2.5 miles. The recently modified design proposes a 9,200 foot long pile supported bridge connected to solid fill armored approach piers extending from the eastern and western shorelines. The bridge structure would be supported on piles with 275 foot spans rising to a height approximately 80 feet above mean lower low water (MLLW) at the navigable opening. The western roadway approach is estimated to be 1,680 feet long and the eastern roadway approach is estimated to be 3,150 feet long (Personal Communication, McLarnon, 2011). Each approach would be approximately 300-500 feet wide at the seabed. These solid fill approaches would span the entire intertidal zone on both sides of Knik Arm and extend into deeper subtidal waters.

Effects of the Proposed Project on EFH

Under Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), federal agencies are required to consult with the Secretary of Commerce on any action that may adversely affect Essential Fish Habitat (EFH). EFH has been designated in the project area for anadromous salmon. EFH for salmon consists of the aquatic habitat necessary to allow salmon production needed to support a long-term sustainable salmon fishery and salmon contributions to healthy ecosystems.

NMFS previously provided comments on the proposed project (enclosed) dated November 17, 2006; February 19, 2008; and November 15, 2010. Our letter dated November 15, 2010, was in response to the Federal Highway Administration's (FHWA) EFH Assessment and contained our EFH Conservation Recommendations to the FHWA on the proposed project.

The proposed project would cause direct, indirect, and secondary impacts to salmon habitat in

Knik Arm. Direct loss of intertidal habitat would result from the construction of the solid fill approaches as well as nearly one mile of riprap fill along the Anchorage shoreline. Also, the approaches would impact juvenile salmon indirectly by restricting tidal flows and creating velocity barriers. Installation of these solid fill approaches would (1) alter tidal flows; (2) create higher tidal velocities at the distal end points of the piers that would subject migrating salmon to greater stress than the existing shallow water migratory corridor; and (3) likely increase mortality of outbound juvenile salmon as a result of increased stress and predation. Additionally, secondary effects to Knik Arm water quality would likely occur from new development on the western side of Knik Arm after the bridge is in place.

NMFS recognizes that the length of the abutments has been decreased approximately 1,000 feet from the previously proposed design, which reduces the amount of fill required and alleviates some of the hydrological effects of the project. Nevertheless, our concerns documented in previous comments remain essentially the same. As illustrated in Attachment A of the permit application, the proposed design still includes lengthy solid fill approaches that would extend 1,680 feet from the western shore to a depth approximately 8 feet below the MLLW line, and 3,150 feet from the eastern shore to a depth approximately 3 feet below MLLW line. Blocking the entire intertidal zone plus the shallowest subtidal area would fundamentally change the migratory habitat for salmon (especially smolts) even with the proposed decrease in length of the solid fill approaches.

NMFS concludes that the No-Action alternative remains the best option for the conservation of Upper Cook Inlet salmon runs. The EFH Conservation Recommendations we provided to the FHWA remain unchanged and are as follows:

EFH Conservation Recommendations

NMFS offers the following EFH Conservation Recommendations pursuant to Section 305(b)(4)(A) of the MSA:

1) Eliminate potential adverse impacts to salmon migratory corridors in Knik Arm by avoiding solid fill below the MHHW line, constructing the bridge abutments and approaches on piles similar to those proposed for the middle section of the crossing.

2) Develop a comprehensive mitigation plan to offset the adverse effects of any unavoidable fill for the bridge approaches. Suitable mitigation to compensate for the proposed impacts to EFH in Knik Arm would be costly, and reducing the need for compensatory mitigation by reducing the amount of proposed fill would offset a substantial portion of the costs of a less damaging design for the crossing.

Under section 305(b)(4)(B) of the MSA the Corps of Engineers 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, the Corps should provide NMFS with a letter within 30 days to that effect and indicate when a full response will be provided.

Effects of the Proposed Project on Endangered Species

The Corps has determined that the described work and resultant Department of the Army permit are consistent with the November 30, 2010, Biological Opinion NMFS prepared for the FHWA. NMFS cannot concur with this determination without documentation that the project authorized by the Corps (including special conditions to the permit) would be consistent with that considered in the Biological Opinion. For example, new permit conditions could change the effects of the project on beluga whales. Any deviations from the project described in the Biological Opinion, or alterations of the mitigative measures described on page 70 of the Biological Opinion, would necessitate further NMFS review to assess the consequence of any changes and the possible need to re-initiate consultation under section 7 of the Endangered Species Act.

Should you have any questions regarding EFH please contact Doug Limpinsel at 907-271-6379 or Doug.Limpinsel@noaa.gov. Questions regarding endangered species should be directed to Brad Smith at 907-271-3023 or Brad.Smith@noaa.gov.

Sincerely,

DRAFT

James W. Balsiger, Ph.D.
Administrator, Alaska Region

Enclosures (3)

cc:

Cynthia.F.Chappell@usace.army.mil
Mary.Plumb-Mentjes@usace.army.mil
Frances_Mann@fws.gov
Maureen_deZeeuw@fws.gov
Curtis.Jennifer@epa.gov
LaCroix.Matthew@epamail.epa.gov
michael.daigneault@alaska.gov
Shannon.R.Morgan@usace.army.mil
dot.knik.bridge@alaska.gov
Brad.Smith@noaa.gov
Barbara.Mahoney@noaa.gov
Mandy.Migura@noaa.gov
Loran.Frazier@alaska.gov
Dale.Paulson@alaska.gov
andrew.niemiec@alaska.gov

Reference:

McLarnon, P., 2011. Paul McLarnon acting as an Agent for the Knik Arm Bridge and Toll Authority (KABATA), answered questions posed by NMFS, and provided clarity on modifications and dimensions to the current bridge design. E-mail: Thursday, Dec 15, 2011 at 3:25 PM.