

# STATE OF ALASKA

**SEAN PARNELL, Governor**

## DEPARTMENT OF FISH AND GAME

DIVISION OF HABITAT

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January 27, 2012

Mary Lee Plumb-Mentjes  
U.S. Army Corps of Engineers  
Regulatory Division (1145)  
CEPOA-RD  
1600 A Street, Suite 110  
Anchorage, AK 99501

RE: POA-2005-97

Dear Ms. Plumb-Mentjes:

The Alaska Department of Fish and Game (ADF&G) has reviewed the above referenced public notice for a proposed bridge spanning Knik Arm between Anchorage and Port MacKenzie. The project has been proposed by the Knik Arm Bridge and Toll Authority (KABATA). The permit application is for Phase I of the project which includes approach roads on both sides beginning at milepost 9.5 of Port MacKenzie Rd on the Matanuska-Susitna (Ma-Su) Borough side and at the A-C couplet on the Anchorage side, a 1,800 foot long western permanent embankment approach fill in Knik Arm, a 9,200 foot long pile supported bridge, and a 8,900 foot long eastern permanent roadway approach fill in Knik Arm.

The ADF&G offers the following comments regarding the proposed bridge. These comments are submitted pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended: 16 U.S.C. 661 et seq.), and constitute the ADF&G's comments on the referenced activity. The proposed Knik Arm Crossing could have significant direct and indirect impacts on fish and wildlife resources in the project area. These potential impacts include both short-term construction impacts and long-term impacts to habitat from bridge approach fills, permanent piles, and increased development in the western Mat-Su Borough. The following comments are focused on potentially affected resources under our management authority. The proposed bridge project will also likely have short-term and long-term impacts on Cook Inlet beluga whales and marine invertebrates in Knik Arm.

### *Anadromous Fish*

The potential impacts to anadromous fish include disturbance and injury from bridge construction and pile driving, habitat loss from 73.46 acres of permanent fill in Knik Arm to construct bridge approaches and pile supports, impacts to fish migration from increased velocities and changes in current and sedimentation patterns, and indirect impacts to fish habitat from increased development in the southwestern Mat-Su Borough.

The applicant proposes to use drilled shaft foundations for permanent bridge supports in lieu of driven piles and has increased the bridge span lengths from 250 feet to about 275 feet. This will reduce the

amount of disturbance and potential for injury to fish from pile driving activities. However, the project description states that 670 temporary piles ranging from two to four feet in diameter will be driven to support bridge construction. Pile driving produces noise and vibrations which can harm adult and juvenile anadromous fish migrating through Knik Arm. The mitigation measures in the application materials, *Attachment D: Mitigation Statement*, include the use of a vibratory hammer to drive piles to the maximum extent possible before switching to an impact hammer. *Attachment B: Summary of Project Construction Methods* states that for the temporary piles driven for bridge pier templates (348 piles), about 0.5 hours of vibratory pile driving and 1.5 hours of impact pile driving will be required for each pile. Given the significant number of piles required and the anticipated requirement for at least 522 hours of impact pile driving, ADF&G requests that pile driving activity is conducted during the months of September to March to protect migrating anadromous fish.

The ADF&G recommends that the U.S. Army Corps of Engineers fully evaluate the potential impacts to anadromous fish migration from changes in current velocities which would result from bridge construction. These impacts are briefly discussed in the Final Environmental Impact Statement (FEIS) (section 4.8.8.2.2) and in more detail in the EFH Assessment for this project (Appendix F, FEIS).

The proposed bridge project would intensify and accelerate development and recreational activities in the southwestern Mat-Su Borough. The potential indirect impacts to anadromous fish habitat as a result of increased access and development are long-term and significant. The public notice and mitigation measures listed in *Attachment D: Mitigation Statement* do not address the adverse impacts to fish habitat from increased access and development which will result from construction of the bridge. The mitigation measures in the FEIS (section 4.8.8.2.2) include a commitment by Federal Highway Association and KABATA to fund a new staff position in the Mat-Su Borough to help facilitate the planning and permitting process and also a commitment of additional funds to be used for priority work associated with plan development. The ADF&G recommends that the U.S. Army Corps of Engineers consider and incorporate these potential impacts to anadromous fish habitat from increased access and development and require the applicant to develop mitigation measures similar to those outlined in the FEIS to avoid, minimize, and mitigate for adverse impacts to anadromous fish habitat.

#### *Moose and Terrestrial Wildlife*

The proposed bridge project will impact habitat and migration patterns for moose, bears, and other terrestrial wildlife in the project area. The proposed road connections to Anchorage and Port Mackenzie Rd. include plans for fencing and retaining walls for safety and security. These design features have the potential for impacting wildlife permeability and fragmenting available habitat. The project description also includes an underpass for an existing power line easement trail at Lake Lorraine. This underpass should be designed to accommodate moose and other wildlife. ADF&G biologists should be consulted prior to developing final design for fencing and retaining walls and the underpass crossing at Lake Lorraine.

The FEIS states that the Point MacKenzie area supports some of the highest concentrations of moose in Alaska (Section 3.8.8.5.3). Direct impacts of the proposed Mat-Su approach road and future development include increased in wildlife-vehicle collisions, altered movement corridors, and decreased access and use of seasonally important wintering and calving areas. Indirect impacts associated with increased access and development includes disruption of seasonal use patterns and

increased hunting pressure. The FEIS (section 4.8.8.5.2) estimates that about 10,700 acres of moose habitat would be adversely affected by residential and commercial development after construction of a bridge across Knik Arm. The mitigation measures listed in the FEIS to minimize impacts to terrestrial mammals include a commitment of \$50,000 from KABATA to fund additional study of moose in the Point MacKenzie area. We recommend KABATA works closely with ADF&G biologists to design a study to evaluate seasonal movement patterns, late winter distribution, and important calving areas in the Point MacKenzie area. The development of appropriate mitigation measures for road construction and increased traffic will depend, in part, on results from additional wildlife studies in the Mat-Su Borough.

*Legislatively Designated Special Areas*

The Susitna Flats and the Goose Bay State Game Refuges are located in the southwestern Mat-Su Borough and very near the proposed access corridor for the Knik Arm Crossing. While the proposed Mat-Su approach road is not directly within the refuges, there are potential project impacts to both fish and wildlife resources and public use of the refuges. Increased traffic, residential development, and increased public recreational use in the southwestern Mat-Su Borough will likely affect wildlife movements, important seasonal use areas, and sport hunting and fishing activities. We recommend the final permit decision consider impacts to the resources and public use of the Susitna Flats and Goose Bay State Game Refuges.

Thank you for the opportunity to comment on this proposed project. Please contact Megan Marie at [megan.marie@alaska.gov](mailto:megan.marie@alaska.gov) or (907) 267-2446 with any questions.

Sincerely,

Cora Campbell, Commissioner



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