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RE: Knik Arm Bridge and Toll Authority application to fill waters of the United States,
Reference Number: POA-2005-97

Dear Ms. Plumb-Mentjes:

Trustees for Alaska submits these comments on behalf of Cook Inletkeeper and North Gulf Oceanic Society, (collectively “Inletkeeper”) regarding the Knik Arm Bridge and Toll Authority’s (“KABATA”) above-referenced application to fill waters of the United States, including wetlands, for construction of approach roads and bridge abutments for the proposed Knik Arm Crossing, also known and referred to herein as the Knik Arm Bridge.

I. Factual Background.

KABATA’s proposed Knik Arm Bridge is located between the northwestern edge of the Port MacKenzie District, where a new road (Phase 1) is proposed to diverge from the existing Port MacKenzie Road at Milepost (MP) 9.5. The road would cross primarily uplands north of Lake Lorraine, heading in a southerly direction to the west bluff of Knik Arm and then end on the eastern side of the Port MacKenzie District. The western causeway starts approximately 7,200 feet north of Port MacKenzie Dock and 1,700 feet south of Anderson Dock. The 9,200-foot bridge would span east across Knik Arm to the Anchorage side and would reach the causeway on the eastern shoreline approximately 1.5 miles north of Cairn Point. The roadway would follow the Anchorage shoreline and western perimeter of the Joint Base Elmendorf Richardson at the bottom of the bluff south to Cairn Point. From the vicinity of Cairn Point, the Anchorage approach would continue south, closely following the natural shoreline, then climb in grade along the eastern boundary of the Port of Anchorage. In the vicinity of the Cherry Hill bluff, the roadway would climb slightly on a fill supported by retaining walls at the base of the bluff to provide grade separation for security and operational purposes between the roadway and the edge of the Port of Anchorage property. From this point, the roadway would follow the alignment of Erickson Street via a cut-and-cover tunnel to end on East Loop Road, the terminus of the project, where it would connect to the A and C Street Couplet.
The total discharge of fill into waters of the U.S., including wetlands, is proposed to be 2,697,349 cubic yards into 78.31 acres. Fill would be discharged into the intertidal wetlands and waters of Knik Arm to provide structural fill for construction of the approach roads and bridge abutments in the Matanuska-Susitna Borough and the Municipality of Anchorage. Structural fill would be discharged into freshwater wetlands on both sides of Knik Arm for construction of the project roadways. In addition, 1.28 acres of wetlands would be impacted by the temporary discharge of fill.

Unless the proposed design of the bridge and causeways changes again, the “in-water” portion of the construction would be completed with the conclusion of “Phase 1” of the project. The uplands portion of “Phase 2” of the project is planned to include the expansion from two-lane approach roads and bridge to four-lane approach roads and bridge. “Phase 2” expansion will directly include additional fill of wetlands, as well as indirect fill of wetlands as development occurs at Point MacKenzie.

II. Legal Background.

The Clean Water Act (“CWA”) was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.”1 The Act prohibits the discharge of any pollutant into the navigable waters of the United States, except when authorized either by a permit or by an exception spelled out in the Act.2 One of the CWA’s exceptions to the sweeping discharge prohibition is found in section 404, which authorizes the Secretary, acting through the U.S. Army Corps of Engineers (“Corps”), to authorize the discharge of dredged or fill material into wetlands.3 Wetlands fill activities usually require an “individual permit.”4 Corps regulations governing the issuance of 404 permits declare that “[s]ome wetlands are vital areas that constitute a productive and valuable public resource, the unnecessary alteration or destruction of which should be discouraged as contrary to the public interest.”5 The basic precept of Section 404 is “that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystem of concern.”6

A. The 404(b)(1) Guidelines.

The Corps’ and the U.S. Environmental Protection Agency’s (“EPA”) 404(b)(1) Guidelines (“Guidelines”) impose important limitations on when a § 404 permit may be issued.7 These guidelines play a critical role in the Corps’ pre-permitting review because the Corps cannot authorize a discharge unless there is “sufficient information to make a reasonable judgment as to

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1 33 U.S.C. § 1251(a).
2 Id. § 1311(a).
3 Id. § 1344(e)(1) and (a).
4 33 CFR § 323.2(g).
5 Id. § 320.4(b)(1); see also id. § 320.4(b)(2) (identifying eight types of wetland functions important to the public interest).
6 40 C.F.R. § 230.1(c).
7 Id. pt. 230.
whether the proposed discharge will comply with [the section 404(b)(1)] Guidelines.\textsuperscript{8} The Corps also must reject a permit application that is contrary to the 404(b)(1) Guidelines, or otherwise contrary to the public interest.\textsuperscript{9}

Pursuant to the Guidelines, no discharge of dredged or fill material shall be permitted: (1) if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem; (2) if the discharge causes or contributes to violations of applicable state water quality standards; (3) if the discharge will cause or contribute to significant degradation of the environment; and (4) unless all appropriate steps have been taken to minimize potential adverse impacts.\textsuperscript{10} The Guidelines provide that significant adverse effects on human health or welfare; aquatic life and other water dependent wildlife; aquatic ecosystem diversity, productivity, and stability; or recreational, aesthetic, and economic values are effects contributing to significant degradation.\textsuperscript{11} Significant effects are those that are more than “trivial.”\textsuperscript{12} These factors must be considered both individually and collectively when evaluating the permit application.

Under the 404(b)(1) Guidelines, “the degradation or destruction of special aquatic sites, such as filling operations in wetlands, is considered to be among the most severe environmental impacts covered by these Guidelines. The guiding principle should be that degradation or destruction of special sites may represent an irreversible loss of valuable aquatic resources.”\textsuperscript{13}

\textbf{B. The Least Environmentally Damaging Practicable Alternative.}

When the project is not a “water dependent” activity,\textsuperscript{14} such as this one, and the project would fill “special aquatic sites,” including wetlands, the Corps’ regulations create a rebuttable presumption that there are practicable and environmentally preferable alternatives, and such alternatives are presumed to have less adverse impact unless “clearly demonstrated” otherwise.\textsuperscript{15} This restriction allows only the least environmentally damaging practicable alternative (“LEDPA”) to be authorized by the Corps.

The Guidelines define practicable alternatives to include “activities which do not involve a discharge of dredged or fill material;” as well as “discharges of dredged or fill material at other

\begin{footnotes}
\item[8] Id. § 230.12(a)(3)(iv); see 33 C.F.R. §§ 320.2(f) and 320.4(a)(1).
\item[9] 33 C.F.R. § 320.4(a)(1).
\item[10] 40 C.F.R. § 230.10.
\item[11] Id. § 230.10(c)(1)–(4).
\item[14] A project is not “water dependent” when it “does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose.” 40 C.F.R. § 230.10(a)(3). In this case, the purpose of the project “is to further development of transportation systems in the Upper Cook Inlet region by providing improved vehicular access and surface transportation connectivity ….” Public Notice of Application for Permit POA-2005-97 at 2.
\end{footnotes}
locations,” where such discharges would result in fewer impacts to the aquatic environment.\(^{16}\) Pursuant to § 230.10(a)(2), “an alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.”\(^{17}\)

The applicant has the burden of demonstrating that no feasible alternative exists, and the Corps must engage in a reasoned analysis of this issue.\(^{18}\) The Corps cannot blindly and uncritically accept an applicant’s study of alternatives and its assertions that no practicable alternative exists.\(^{19}\)

Failure to “clearly demonstrate” that there is no “practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem” renders the project noncompliant with the Guidelines. The discharge of dredged or fill material is prohibited in such a case.

**C. Significant Degradation.**

The Guidelines prohibit the discharge of dredged or fill materials which will cause or contribute to significant degradation of the waters of the United States. Determining whether a proposed discharge will cause or contribute to significant degradation requires an evaluation of the potential adverse effects to waters of the U.S., including wetlands.\(^{20}\) There are four categories of effects to the aquatic ecosystem that are evaluated. These include effects on: (1) human health or welfare, including on water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites; (2) aquatic life and other wildlife dependent on aquatic ecosystems; (3) aquatic ecosystem diversity, productivity, and stability, including the loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients or purify water; and (4) recreational, aesthetic, and economic values.\(^{21}\)

**D. Public Interest Review.**

In addition to the Guidelines, the Corps is required to undertake a “public interest review” of the proposed discharge before issuing any Corps-required permit.\(^{22}\) The regulations governing the Corps’ “public interest” review require that the analysis begin with the presumption that “unnecessary alteration or destruction of [wetlands] should be discouraged as contrary to the

\(^{16}\) 40 C.F.R. § 230.10(a)(1).
\(^{17}\) Id. § 230.10(a)(2).
\(^{18}\) Id. at 1356–57.
\(^{19}\) Friends of the Earth v. Hintz, 800 F.2d 822, 835–36 (9th Cir. 1986).
\(^{20}\) 40 C.F.R. § 230.10(c).
\(^{21}\) Id. § 230.10(c)(1)-(4).
\(^{22}\) 33 C.F.R. § 320.4(a).
public interest.” The public interest review includes a “careful weighing of all those factors which become relevant in each particular case.” In its review, the Corps must consider:

(i) The relative extent of the public and private need for the proposed structure or work;
(ii) Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work; and
(iii) The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited.

In addition to these criteria, the Corps must consider “the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest.”

III. Comments.

1. The Proposed Action is Not the LEDPA.

Inletkeeper maintains that the analyses underlying the Knik Arm Crossing Environmental Impact Statement and Section 4(f) Evaluation (“EIS”) fails to support a determination that the proposed action is the LEDPA. The Knik Arm Bridge is not dependent upon access or proximity to or upon siting within wetlands. The Corps states that the purpose of the project is to “further development of transportation systems in the upper Cook Inlet region by providing improved vehicular access and surface transportation connectivity, as well as safety redundancy, between the Matanuska-Susitna region and Municipality of Anchorage with a financially feasible and efficient crossing to meet the needs for” improved regional transportation infrastructure, regional transportation connectivity and safety and transportation system redundancy. This basic purpose

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23 Id. § 320.4(b)(1); see Sierra Club v. Flowers, 423 F.Supp.2d 1273, 1356 (S.D. Fla. 2006).
24 33 C.F.R. § 320.4(a)(1). The section reads:
The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impact which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process. That decision should reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal must be considered including the cumulative effects thereof: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency’s 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines and criteria (see Section 320.2 and 320.3), a permit will be granted unless the district engineer determines that it would be contrary to the public interest.
25 Id. § 320.4(a)(2).
26 Id. § 320.4(a)(1); see also id. pt. 325 App. B. § (7)(b)(3).
can be accomplished without impacting wetlands.\textsuperscript{27} Because the project is not water-dependent, “it is reasonable to assume there will generally be a practicable site available upland or in a less vulnerable part of the aquatic ecosystem.”\textsuperscript{28}

First, the range of alternatives considered in the EIS was unreasonably narrow, constraining consideration of practicable alternatives.\textsuperscript{29} The Corps must consider practicable alternatives that were not considered by FHWA in the EIS, including practicable alternatives such as ferry and rail crossings, commuter rail options to Wasilla, Palmer and other points in the Matanuska Susitna Borough, and transportation packages that would avoid the need to build a bridge, while still addressing the overarching purpose of “further[ing] the development of transportation systems in the Upper Cook Inlet region.”\textsuperscript{30} Because the identified purpose and need provided by FHWA: to “provide[,] improved vehicular access and surface transportation connectivity between Anchorage and the Mat-Su through Port MacKenzie” is too narrow because it defines the project to allow only one alternative, the Corps must consider, amongst the least environmentally damaging practicable alternatives, other options which improve access and connectivity to the Mat-Su.\textsuperscript{31} Such alternatives are not limited to those reviewed and considered in the EIS, and they need not go through Port MacKenzie. Consideration of alternatives that do not include routing through Port MacKenzie would involve significantly less dredge and fill of waters of the U.S. and therefore would be less environmentally damaging practicable alternatives. As a result, the Corps cannot rely on the EIS to permit the Bridge under section 404 of the Clean Water Act. See Sylvester v. U.S. Army Corps of Engineers, 882 F.2d 407, 409 (9th Cir. 1989) (“Obviously, an applicant cannot define a project in order to preclude the existence of any alternative sites and thus make what is practicable appear impracticable. This court in Hintz quite properly suggested that the applicant's purpose must be ‘legitimate.’”).

Second, the Corps, itself, has repeatedly stated to the FHWA that the range of alternatives considered by the FHWA is too narrow for the Corps to use as a basis to decide whether to permit the Bridge under section 404 of the Clean Water Act. “Under the [Clean Water Act section 404] Guidelines a permit can only be issued for the least environmentally damaging practicable alternative, so long as that alternative does not have other significant adverse environmental consequences. At this point, the [preliminary draft EIS] contains insufficient information for us to determine Guidelines compliance and is inadequate with respect to our permit action.”\textsuperscript{32} The Corps went on to state that “[a]s currently presented the [Preliminary Draft EIS] supports the no-build alternative, as it appears to meet the purpose and need and would be the least environmentally damaging practicable alternative.”\textsuperscript{33}

\begin{footnotes}
\item[27] See Corps Public Notice of Application for Permit, POA 2005-97 at 2.
\item[28] 40 C.F.R. § 230.10(a)(3).
\item[31] Id.
\item[32] Corps, Comments on the Preliminary Draft EIS 1 (Apr. 28, 2006). See also 40 C.F.R. § 230.10(a).
\item[33] Comment letter from the U.S. Army Corps of Engineers to Edrie Vinson, FHWA, April 28, 2006, at 2.
\end{footnotes}
The U.S. Department of the Interior (“DOI”) also expressed serious concerns over the EIS and the alternatives assessed. In particular, DOI noted that the purpose was defined “to construct a bridge across Knik Arm,” and that, as a result, the “[DEIS] essentially only considers one alternative; namely, construction of a pile-supported 8,200 foot bridge . . . .” DOI went on to state that “[s]election of the no-action alternative, an expanded ferry system, or a 14,100-foot bridge would avoid, or minimize, potential adverse effects on DOI trust resources,” which include wetlands. For example, the “14,100-foot bridge would reduce [the] loss by approximately half” compared to the 90 acres of wetlands filled to construct the 8,200-foot bridge, while “the ferry system would result in no additional loss of these habitats.”

Inletkeeper, along with several other organizations, also commented on the Draft and Final EIS that the proposed action was not the least environmentally damaging alternative. Commenting on the Draft EIS, Inletkeeper noted that “until population growth in the Southwest and West portions of the MSB is sufficient, selection of the No-Action Alternative is reasonable, prudent, and best protects our communities, our natural resources, and our pocketbooks.” In comments on the Final EIS, Inletkeeper again reiterated its concerns, noting that the “range of alternatives considered by FHWA is too narrow for the Corps to use as a basis to decide whether to permit the bridge under section 404 of the Clean Water Act.”

Also commenting on the FEIS, the Alaska Railroad Corporation (“ARRC”) on page 2 of their February 18, 2008, comments stated that KABATA’s comment dismissing commuter rail as an alternate as not being feasible was inappropriate and irrelevant, as ARRC’s data indicates that commuter rail is feasible.

In addition, the U.S. Environmental Protection Agency (“EPA”) on page 1 of their February 15, 2008, comments stated that “other alternatives (such as the No Action or the Expandable Ferry Alternatives) appear to be available to provide improved transportation service between Anchorage and the Mat-Su while minimizing environmental and related economic and social impacts. Therefore we rated the document E), Environmental Objections, Insufficient Information.” Also on page 1, the EPA states: “The FEIS did not expand the range of alternatives beyond “No Action” and one bridge alternative with approach options. We believe that other alternatives exist that appear reasonable, feasible, and compatible with the current direction of transportation and growth in the Anchorage Bowl, and the Mat-Su Borough. These include the Expanded Ferry Alternative and the Transportation Package Alternative”.

34 Comment letter from the U.S. Department of the Interior to Edrie Vinson, FHWA, Nov. 17, 2006.
35 Id.
36 Id.
37 Comment letter from Alaska Center for the Environment, Alaska Public Interest Research Group, Alaska Wildlife Alliance, Cook Inletkeeper and Friends of Mat-Su to Edrie Vinson, FHWA, Nov. 17, 2006. The changes in the proposed action since 2006 are minor. In 2006, the DEIS noted that the proposed action would result in the fill of approximately 90 acres, only slightly higher than the 78.31 acres of wetlands that will be permanently filled. See Knik Arm Crossing Draft Environmental Impact Statement and Draft Section 4(f) Evaluation (DEIS), op. cit., p. 4-75, 4-220.
The EPA on page 2 of their February 15, 2008, comments also stated, “As presented, the range of alternatives may not comply with the Clean Water Act Section 404(b)(1) Guidelines. The range of alternatives must include those that are practicable “in light of the overall project purposes” [40 CFR 230.10(a)(2)]. In addition, the definition of “financially feasibility” is subjective, and does not constrain or change the required evaluation of practicable alternatives.”

Further, the Corps’ Public Notice (“PN”) and the EIS do not provide adequate survey or engineering information for the public or government agencies to independently evaluate all practicable alternatives. The public and the Corps need this information to adequately comment on and to make credible decisions on the project alternatives.

2. The Proposed Action Would Result in Significant Degradation of Waters of the U.S.

In order to decide whether discharges will cause or contribute to significant degradation of the affected waters, the 404(b)(1) Guidelines require the Corps to determine “the nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms.” “In determining compensatory mitigation, the functional values lost by the resource to be impacted must be considered.”

The EIS identified the following as some of the environmental consequences of the proposed action:

- Fill (approximately 90 acres) and siltation from construction runoff and infill which will harm salmon habitat,
- Increased fishing pressure on salmon streams in the Point MacKenzie area,
- Salmon and other fish movement into deeper waters in Knik Arm which will increase fish predation,
- Increased noise and visual disturbances to beluga whales, beluga prey disturbances, and changed flow regimes and ice movements,
- Increased sport hunting of moose on the west side of Cook Inlet and increased moose-vehicle accidents, which could disrupt Alaska Native subsistence use of the area,
- Increased access to migratory waterfowl (some species are in decline) on the west side of Cook Inlet, and
- Increased pollution of Knik Arm from vehicle-related run-off (oil, deicing fluids, etc.), snow-clearing, bridge maintenance, and construction run-off.

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39 40 C.F.R. § 230.11(e).
40 EPA/Corps Memorandum of Agreement (Feb. 6, 1990), Section II.
41 DEIS at 4-75, 4-220.
42 Id. at 4-157.
43 Id. at 4-223.
44 Id. at 4-76.
45 Id. at 4-76.
46 Id. at 4-189, 190.
The FHWA ignores many of the comments submitted by cooperating agencies regarding the inadequate disclosure and analysis of impacts in the draft EIS. Comments on the draft EIS by various federal agencies requested that the FHWA add to the EIS the discussions of impacts found in various reports, appendices, and other documents referenced in the EIS. These agencies include the Corps, EPA, the U.S. Fish and Wildlife Service, the U.S. Marine Mammal Commission, and the National Oceanic and Atmospheric Administration (“NOAA”). The agencies uniformly conclude that the EIS did not adequately discuss, among other things, the impacts of the Bridge on wildlife habitat and populations, and the means by which direct, indirect, and cumulative impacts on these and other resources would occur.48 However, the FHWA largely ignored their critiques,49 and the EIS consequently left decision makers and the public without a reasonably thorough discussion of the impacts of the Bridge. Even the resulting disclosure in the FEIS, however, showed that a Bridge would significantly degrade water quality and marine and terrestrial fish and wildlife habitat, leading to long-term and widespread negative impacts to fish populations, wildlife populations, and the environment generally.50

A. Essential Fish Habitat.

As discussed in the Draft and Final EIS, there will be multiple impacts to Essential Fish Habitat (“EFH”) due to the proposed Bridge, both short-term and long-term (i.e., permanent loss of approximately 90 acres of intertidal mud flats and changed fish migration pathways).51 Nine fish species have EFH in the area. Fish (salmon and eulachon) would be forced into deeper waters as a result of the bridge abutments, where they would be subject to greater predation.52 Short-term construction impacts are likely to be significant, including filling in nearshore habitats which could kill, injure, or isolate fish.53 Additionally, the noise of construction may harm or affect fish (especially juveniles as they drift with the tides back and forth through the construction zone).54 Construction impacts may negatively affect several years of salmon runs in Upper Cook Inlet.55

NOAA concluded in 2010 that “the proposed bridge with extensive solid fill approaches would adversely affect EFH for salmon.”56 Based on the information in the EFH Assessment, NOAA concluded that “the No-Action alternative is the best option for the conservation of Upper Cook

47 Id. at app. K. See also Comment letter from EPA, February 19, 2008, p. 2 (“We believe that the impacts of the direct, indirect, and cumulative effects of the project on beluga whales could be substantial.”)
48 Id. at app. K.
49 Id.
50 See e.g. FEIS at 4-185, 4-198 to 4-199, 4-201, 4-215, 4-227, 4-230, 4-243, 4-244, 4-248, 4-255, 4-259 to 4-260, 4-301, 4-309, 4-310, 4-312, 4-315 to 4-316, 4-320, and 4-322.
51 DEIS and FEIS at 4.8.8.2.1.
52 FEIS at 4-232.
53 Id. at 4-233.
54 Id. at 4-234.
55 Id. at 4-233.
56 Letter from James Balsiger, Administrator, Alaska Region, NOAA to David Miller, FHWA, Nov. 15, 2010.
Inlet salmon runs.” NOAA went on to state that while they agreed with FHWA that the project would adversely affect EFH, they disagreed with FHWA’s reasoning that the direct, indirect and cumulative impacts would be “short term and local.” In addition, NOAA identified particular concern about the loss of habitat from construction of piers and that the piers would impact juvenile salmon by restricting tidal flows and creating velocity barriers. NOAA concluded that a longer bridge, with less fill, would have less impact on salmon.

Additionally, the EIS makes clear that extensive habitat degradation and loss would occur as a result of the Bridge. For example, the EIS notes that “[f]ill placed along the Knik Arm shoreline would displace fish and permanently eliminate foraging habitat. Fill placement could adversely impact shoreline EFH used by juvenile salmon for feeding and growing during their adaptation to saltwater environments.”

Further loss of habitat is expected, as fillets are anticipated to develop on both sides of the proposed approaches of the Bridge and ultimately cover up an area of approximately 260 acres.

B. Wetland, Water Quality and Marine Impacts.

i. Wetland impacts

The FEIS identified three types of wetlands which would be impacted by the project: forested, scrub/shrub, and sedge and grass. The FEIS recognized that there would be direct, long-term impacts on wetlands. Yet, there was minimal discussion of the impacts to wetlands from this project. The lacking and inadequate analysis makes it impossible for the public to provide detailed comments to the Corps regarding impacts to wetlands from the Bridge. Due to the “geographic shift in population” associated with the Bridge, the larger impact to wetlands is attributed to development pressures brought by the Bridge. However, DOI expressed its concerns that the EIS underestimated total wetlands losses attributable to the Bridge. These impacts have not been adequately assessed.

ii. Water quality impacts.

According to the FEIS, water quality could be adversely affected but without any supporting analysis, the FEIS concludes the pollution-related impacts from the Bridge (stormwater,

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57 Id.
58 Id.
59 Id.
60 Id.
61 FEIS at 4-231.
62 Id.
63 Id. at 4-235.
64 Id. at 4-201.
65 Id.
66 See id. at 4-201 to 4-210.
67 Id. at 4-205 to 4-207.
68 Letter from Willie Taylor to Edrie Vinson, Nov. 17, 2006.
snowmelt, maintenance-related pollution) would have negligible impacts. Placement of fill could impact water quality but those impacts are not quantified or adequately assessed in the FEIS. The FEIS identified further threats to water quality including, increased watercraft use, wastewater outfalls, additional nonpoint source stormwater outfalls and accidental marine vessel or watercraft fuel spills but, again, fails to quantify or, in any meaningful way, assess these potential impacts.

While the Permit Figures in Attachment C show the use of vegetated swales to help absorb pollutants from the runoff from the roadbed, it is significant that the causeways, bridge, and roadway along the eastern side of Knik Arm do not have those features. Therefore, both nonpoint sources, such as drippings from vehicles, as well as maintenance-related pollution, such as ice melt, will flow directly into Knik Arm. Those impacts must be quantified.

### iii. Marine impacts.

Direct adverse impacts on marine habitat and wildlife would result from placement of piers in Knik Arm and placement of fill and armor rock on the margins of Knik Arm. The solid-fill embankments of the 8,200 feet-long bridge (a bridge length of the 9,200 feet was not assessed in the EIS) would intercept 34% of the channel width of Knik Arm. Placement of fill on mud flats and along the margins of the subtidal zone would result in a permanent loss of 90 acres, according to the design projections for an 8,200 foot-long bridge. It is unclear how the change in design to a 9,200 foot-long bridge would impact the mud flats and subtidal margin. Such a design was not assessed in the EIS, and must be assessed in a supplemental EIS, or a full revision of the EIS.

### C. Cook Inlet Beluga Whales.

The Cook Inlet population of beluga whales was first listed as a possible candidate for listing under the federal ESA more than twenty years ago. For the past twenty years, the Cook Inlet beluga whale, a genetically unique and geographically isolated population of beluga whales occupying the waters near Anchorage, Alaska, has been the focus of intense conservation concern, having declined from over 1200 animals to fewer than three hundred. The Cook Inlet beluga whale was listed as an endangered species in October of 2008.

Inletkeeper will not rehash the substantial literature documenting the importance of Knik Arm and the proposed Project area to the beluga’s feeding, birthing and life cycle needs, but instead

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69 FEIS at 4-198.
70 See id.
71 See id. at 4-198 to 4-199.
72 Id. at 4-214.
73 Id. at 4-189.
74 Id. at 4-215.
incorporates herein by reference the NMFS’s Conservation Plan77 and related NMFS population estimates.78

Comments on the EIS by Inletkeeper, NOAA and others identified various shortcomings in the discussion of impacts to Cook Inlet beluga whales. Among the problems identified in these comments, the discussion of impacts to the beluga whale understates the challenges the whale faces and minimizes or ignores information indicating that the Bridge may drive the whale population to extinction.79

Despite the inadequate analysis, the EIS recognized that construction activities may result in “avoidance, changes in resting or feeding cycles, displacement from habitat, alertness, masking of sounds and changes in vocal behavior, changes in swimming or diving behavior, altered direction of movement, and physical injury.”80 Pile driving, vessel activity and fill placement all are likely to impact the beluga whale.81 In addition, indirect impacts from traffic moving along the bridge, increased development along the western shoreline of Knik Arm, increased watercraft use, and increased commercial and industrial growth in the Port MacKenzie District all would pose additional pressure on the species.82 However, the EIS failed to adequately consider the direct, indirect and cumulative impacts from the Bridge on the beluga whale. Due to the environmental consequences of the proposed action, NOAA continued to support the no-action alternative “as the best option for promoting the recovery of Cook Inlet belugas …”83

3. The Proposed Action is Not In the Public Interest.

A. The Proposed Action is Not Beneficial for Anchorage.

Anchorage has real potential to mature into a great northern city to match the reputation of our natural surroundings. There is a revitalized downtown, booming redevelopment and remodeling activity across the city, transportation investments like the Connect Anchorage project,84 and world class trails and recreation opportunities. Anchorage can and should grow more like Vancouver, British Columbia (which has a thriving urban core and relatively limited sprawl), instead of becoming the sprawling “Los Angeles of the North.” Anchorage needs to continue making the right growth choices, as current planning documents recommend.85

The Bridge is not the right choice. Rather than serving the needs of existing communities, it will create a negative impact on regional transportation networks, public infrastructure, and private

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77 See http://www.fakr.noaa.gov/protectedresources/whales/beluga/management.htm#conservation.
79 E.g., NOAA, Comments on the Knik Arm Crossing Draft EIS 2 (Nov. 17, 2006).
80 FEIS at 4-252.
81 See id. at 4-252 to 4-255.
82 Id. at 4-255 to 4-256.
84 “City and state join to link local roads; Partnership: Begich, Murkowski OK $1.2 billion to Connect Anchorage,” Anchorage Daily News, October 13, 2006.
investment in Anchorage and the Palmer-Wasilla core area. A bridge will encourage sprawl in the Southwest and West portions of the Mat-Su Borough, depress the level of investment for redeveloping Anchorage, and drain resources away from existing priorities by redirecting development into a new community(s) at Point McKenzie where currently there are few roads, no schools, and no fire departments. This new development only can happen at the expense of Anchorage and the Mat-Su core area.

These conclusions are supported by scientists at the Corps and by planners from the Municipality of Anchorage (MOA).

The Corps wrote to FHWA that:

> The population growth charts shown in your document clearly indicate that the overall population of the Matanuska-Susitna Borough will increase approximately the same amount whether or not the bridge is constructed…This data also indicates that if the bridge is not constructed there will be little or no need for greater traffic flow into the Port MacKenzie area, as little growth will take place in this area. The [Preliminary] DEIS supports the addition of a ferry system as it will accommodate non-bridge related growth in the Port McKenzie area far into the foreseeable future. As currently presented the document supports the no-build alternative, as it appears to meet the purpose and need and would be the least environmentally damaging practicable alternative.86

Interestingly, in the FEIS, KABATA simply removed the portions of Section 4 on page 4-100 that compared “bridge” versus “no bridge” growth rather than responding to these concerns.

Similarly, the MOA wrote to KABATA that:

> The Anchorage 2020 Comprehensive Plan is founded on principles that encourage mixed use, infill, and redevelopment. This approach will continue to encourage investment in Anchorage which is vital for long-term economic health. Anchorage 2020, in conjunction with the [Long Range Transportation Plan] adequately addresses the demand for growth for the next twenty years and identifies the needed infrastructure to support it without a [Knik Arm Crossing]. A KAC is not needed, but will create an opportunity for new and different development than that which has been reflected in the documents being referred.

> Development in the Port Mackenzie area into an urban type environment encourages sprawl, slows growth in Anchorage, Eagle River-Chugiak, Palmer and Wasilla; shifting development away from existing supporting public infrastructure and public services.87

86 Letter from the U.S. Army Corps of Engineers to Edrie Vinson, FHWA, April 28, 2006, at 2.
87 Letter from the Municipality of Anchorage, Office of the Mayor, to KABATA, August 12, 2005, at 3.
Thus, the Bridge would adversely affect development in Anchorage at great expense to the community.

B. The Proposed Action is Not Beneficial for the Mat-Su Borough.

Anchorage is not the only area that will be negatively impacted by the Bridge, however. In fact, the drain on public and private resources is likely to be even more severe for the Mat-Su Borough (“MSB”) if the Bridge is constructed. The MSB highlights similar concerns in its comments on the Preliminary DEIS:

[Section 4.4, Economic Impacts] is limited in scope and does not address the important question as to whether or not sufficient long term commercial and industrial activity will occur to offset the costs of public infrastructure needed to support the residential expansion on the Mat-Su side….

Residential development typically provides $.65 to $.70 in revenue for every dollar in services provided by the local government. Page 4-99 points out that most of the higher value department stores, bank headquarters, home centers, other specialized professional services will remain in Anchorage with only neighborhood commercial activities located on the Mat-Su side. This discussion supports the concern that there may be a net cost to the MSB as a result of the Knik Arm Crossing.88

The MSB has been very concerned about its ability to serve the new community(s) that the Bridge will create near Point Mackenzie. The DEIS’ population estimates for the area would require six fire stations at a cost of $3 million each, six elementary schools at a minimum of $20 million each, two middle schools at $30 million each, and two high schools at $45 million each, as well as community centers, parks, swimming pools, and landfills.89 Other needed infrastructure and service costs include Trooper, police and fire personnel, water and sewer connections, and road maintenance facilities and personnel.

The 2006 MSB letter also described the Bridge’s impacts on transportation infrastructure in the MSB, including five transportation projects needed to make the connections required by the Bridge, totaling $315,000,000.90 While some of those projects have been accomplished, the MSB currently is planning 21 transportation projects requiring over $397 million; these projects likely would compete for funding with the Bridge and its connections.91

88 Letter from the Matanuska-Susitna Borough, Planning and Land Use Department, to Edrie Vinson, FHWA, and Dale Paulson, KABATA, April 21, 2006, at 3 (emphasis in original).
90 Id. at 2.
91 Id. at 3.
Currently, the MSB has a tax cap, and there is no longer any statewide municipal revenue sharing. As a result, it would be difficult – if not impossible – for the Borough to afford the costs required by the Bridge.

In addition to costs, the MSB community of Palmer would suffer since growth in the Borough will be redirected to the Southwest and West areas. Palmer currently welcomes responsible, planned growth and development and already has infrastructure in place to expand upon. Directing borough-wide growth to Palmer allows the MSB to keep land available for open space, recreation opportunities, water and wildlife protection, and avoids the problems associated with sprawl (including increased fuel consumption from larger homes and greater travel; increased fuel consumption also results in more greenhouse gas generation).

C. Impacts on the Cook Inlet Ecosystem.

The EIS stated that the Bridge would have the following adverse social and economic impacts on affected communities:

- Slower appreciation of housing values in Anchorage, including a potential decline in property values in Chugiak-Eagle River.92
- Destruction of residential, business, and municipal buildings in the historic Government Hill neighborhood, as well as adversely affecting the visual, semi-secluded, and holistic character of the neighborhood.93
- Adverse indirect impacts on pedestrians, including tourists, and bicyclists in downtown Anchorage where the Bridge enters downtown; additionally, urban core redevelopment will be compromised by the presence of high-speed traffic in downtown Anchorage. The study area for the Knik Arm Bridge conveniently stopped at 3rd Avenue on the Anchorage side, and these impacts were merely brushed aside in KABATA’s response in the FEIS, which stated, “Travel speeds through downtown will not change. The amount and type of traffic, and thus the pedestrian environment, anticipated as a result of the Knik Arm Crossing is not out of character with the functional classification identified by the Municipality’s plans.”
- The Mat-Su Borough’s current shortage of school facilities and the funds to build and operate them “would be exacerbated” if the Bridge is built;94 the DEIS estimated that Mat-Su Borough School District spending would increase by $9.7 million.95
- Anchorage spending – including schools, electrical, police, fire – would increase by several million dollars.96

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92 FEIS at 4-18.
93 Id. at 4-25, 26.
94 Id. at 4-56.
95 Id. at 4-63.
96 Id. at 4-64. Note that the exact amount of this increased spending are very unclear in the DEIS which ambiguously stated, “Anchorage spending would increase by $5 million. An additional $500,000 would be included in both the [Anchorage Police District] and [Anchorage Fire District] budgets. The [Anchorage School District] budget would increase by $4.7 million.”
- Reduced municipal (and potentially state) tax revenues from KABATA-purchased lands.\textsuperscript{97}
- Reduced lease revenues to Alaska Railroad by 8-10 percent\textsuperscript{98} (and, thus, the State of Alaska) and to Port MacKenzie by approximately $35,000\textsuperscript{99} from KABATA-utilized lands.
- The State of Alaska would spend an additional $800,000 on Troopers serving the Mat-Su Borough\textsuperscript{100} and an extra $200,000 on roads.\textsuperscript{101}
- Increased air pollution in Government Hill from construction and increased traffic during operations was not adequately addressed in the FEIS, including direct and cumulative impacts, considering that Government Hill residents currently are exposed to air pollution from idling trains and from Elmendorf’s air operations. KABATA again brushed aside comments in their evaluation of air quality concerns in section 4.9.4.5.1, ignoring the fact that homes on Government Hill will be located within 50 feet of the ends of the cut and cover tunnel, thus exposing them to concentrated air pollution. See Comment 295-5 in Appendix K of the FEIS.
- Increased traffic congestion on Mat-Su Borough roads, especially Knik Goose Bay Road and the Parks Highway intersection at Big Lake was not adequately addressed in the FEIS. The FEIS merely stated that the anticipated changes in traffic levels were shown in the appendicies, but did not discuss what improvements would be needed to accommodate the additional traffic. See Comment 295-6 in Appendix K of the FEIS,
- Over 3,500 acres of new residential, commercial, and industrial development within 300 feet of surface water bodies, including already-impaired Cottonwood Creek.\textsuperscript{102}
- A decrease in farmland in the Mat-Su Borough over the near-term.\textsuperscript{103}
- Increased siltation and costs to the Port of Anchorage from required dredging is still a major concern to the Corps and the Municipality of Anchorage, as well as to shipping companies utilizing the Port of Anchorage. While the three-dimensional hydraulic modeling conducted by the Corps has been completed, the concern is that there have been significant changes to the bathymetry of upper Knik Arm since the hydraulic model was completed in 2006, and those changes were apparently mathematically modeled based on surveys conducted in specific areas of Knik Arm, but not across the entire area of Knik Arm (See Figure 2-2 of the November 2011 Corps Model Report). The recent changes in siltation patterns in upper Kink Arm, including increased siltation that has caused shippers to both adjust their docking schedules, as well as their approach patterns to the Port of Anchorage were apparently not anticipated, and not fully understood. In addition, the design for the Port of Anchorage Expansion project is still in flux. Since there are major differences in gyre formation and scouring along a smooth dock face versus a pile

\textsuperscript{97} Id. at 4-58.
\textsuperscript{98} Id. at 4-59.
\textsuperscript{99} Id. at 4-63.
\textsuperscript{100} Id. at 4-63.
\textsuperscript{101} Id. at 4-64.
\textsuperscript{102} Id. at 4-176, Table 4-36, and 4-178.
\textsuperscript{103} Id. at 4-267.
supported dock, the evolution of the design for the Port of Anchorage remains an unknown, and thus creates the uncertainty of the siltation predictions.\footnote{104}

The FEIS stated that the Bridge would have a profound impact on population distribution in the affected communities:

relative overall regional growth in population and employment would be about the same with or without implementation of the proposed [Knik Arm Crossing] project…. Of the regional total under the No-Action Alternative, Anchorage’s population would be 66 percent of the total, with 78 percent of the regional jobs. Under the build alternatives, Anchorage’s population would be 63 percent of the regional total, with 76 percent of the regional jobs.\footnote{105}

The changes in growth locations in the region have enormous implications for overall quality of life in the region, which have not been fully addressed in the FEIS.

IV. CONCLUSION

NEPA imposes a continuing duty on federal agencies to supplement existing EISs in response to “significant new circumstances or information relevant to environmental concerns and bearing on the proposed action and its impacts.”\footnote{106} This supplementation must be achieved via a NEPA document and not some other, non-NEPA process.\footnote{107} Indeed, this is not merely a situation where the agency correctly analyzed a project under existing law and is now facing “new information.”\footnote{108} Rather, the 2006-2007 EIS never provided the appropriate analysis and is, therefore, legally deficient and fatally flawed.\footnote{109} The Corps must prepare a supplemental NEPA analysis to correct the deficiencies in the EIS and analyze the Bridge in light of the new information posed by the changes in the project as well as new information, such as the most recent Cook Inlet beluga population estimates, which show further decline.\footnote{110} Further, in order to determine the LEDPA, the Corps must consider alternatives not adequately assessed and

\footnote{104} The Corps recommended three dimensional modeling of Knik Arm in an undated letter to Edrie Vinson of the FHWA. This letter stated, “We recommend exploring a three dimensional modeling of Knik Arm, to better investigate the impacts of the bridge on the local environment. The current proposed mathematical modeling is considered adequate for theoretical design considerations, but lacks the tools to give us specific information needed to evaluate the long-term impacts of the proposed designs.” Another Corps letter from August 9, 2005, stated, “I cannot help but feel that we are rushing to decision without long-range knowledge of the impacts of this project on the delicate environment of Upper Cook Inlet.”
\footnote{105} FEIS at 4-7.
\footnote{106} 40 C.F.R. § 1509(c)(1)(ii); see also Idaho Sporting Congress v. Alexander, 222 F.3d 562, 566 n.2 (9th Cir. 2000) (citing Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 372-373, 104 L. Ed.2d 377, 109 S. Ct. 1851 (1989)); Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1152 (9th Cir. 1998).
\footnote{107} Idaho Sporting Congress v. Alexander, 222 F.3d at 567-68.
\footnote{108} Cf. Swanson v. U.S. Forest Service, 87 F.3d 339 (9th Cir. 1996).
\footnote{109} Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998).
\footnote{110} The 2011 abundance estimate of 284 whales is 20% lower than the population estimate of 320 from last year. http://alaskafisheries.noaa.gov/newsreleases/2012/cibelugas010912.htm
considered in the EIS. In addition, the Bridge would significantly degrade waters of the United States and is not in the public’s interest. For these reasons, the permit should be denied.

Thank you again for your attention to this matter, and please do not hesitate to contact me if you have any questions.

Sincerely,

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