

Marine Mammal Commission  
4340 East-West Highway, Room 905  
Bethesda, MD 20814

19 February 2008

Ms. Betty Fauber  
Administrative Director, KABATA  
550 West 7th Avenue, Suite 1850  
Anchorage, AK 99501

Dear Ms. Fauber:

On 17 November 2006 the Marine Mammal Commission commented on the Knik Arm Crossing Draft Environmental Impact Statement (DEIS) as it pertained to marine mammals that occur in Alaska and that might be affected, directly or indirectly, by the construction and use of the proposed Knik Arm bridge (see attached). The Commission also has reviewed the more recent final environmental impact statement (FEIS) on the proposed bridge and provides the following related recommendations and comments.

## **RECOMMENDATIONS**

The Marine Mammal Commission recommends that—

- the Knik Arm Bridge and Toll Authority and Federal Highway Administration refrain from making any irreversible or irretrievable commitment of resources related to bridge construction until the uncertain but potentially significant impact of bridge construction and use can be evaluated and the Administration can make an affirmative finding that such activities, once mitigated, will not have a more than negligible impact on the Cook Inlet beluga whale stock; and
- in view of the pending proposed rule to list the Cook Inlet beluga whale stock under the Endangered Species Act, the Knik Arm Bridge and Toll Authority initiate, in collaboration with the Federal Highway Administration, a conference with the National Marine Fisheries Service under 50 C.F.R. § 402.10 to evaluate the potential effects of bridge construction and use on this stock.

## **RATIONALE**

The FEIS identifies five marine mammal species that may occur in the project area. However, like the DEIS, it focuses on the Cook Inlet beluga whale stock in its assessment of the possible effects of the proposed bridge construction. This focus is appropriate because beluga whales are the marine mammals most commonly found in the proposed project area. The focus on this stock also is appropriate because it has been designated as depleted under the Marine Mammal Protection Act and has been proposed for listing as endangered under the Endangered Species Act.

Construction and use of the bridge may have a number of adverse effects on the Cook Inlet beluga whale stock. These include disturbance from the noise associated with pile driving and other construction activities. This noise might also mask natural sounds used by beluga whales for

communication, navigation, and predator detection. The disturbance from noise may lead to alteration of habitat-use patterns, particularly in the transit corridors into and out of Knik Arm; changes in the distribution and abundance of prey resulting from changes in bottom topography and currents in the inlet; increased risk of stranding; disturbance and risks of collisions associated with increased vessel activity; and disturbance from increased use of the Knik Arm resulting from greater access to the northwestern shore of the Knik Arm area.

Unmanaged subsistence harvesting contributed significantly to the beluga whale stock's decline prior to 2000. However, the stock has not recovered as expected since the harvest was brought under management. Its failure to recover has not been explained and may reflect the combined influence of multiple risk factors. The best available evidence indicates that the stock is continuing its decline, which suggests that it is not able to tolerate yet another risk factor.

Over the past several decades, managers have repeatedly misjudged the status of this stock and its resilience. Initially, the stock's tolerance for subsistence harvesting was overestimated. Managers then incorrectly assumed that such harvesting was the only factor that needed to be taken into account to bring about recovery. After the stock failed to respond as predicted, managers identified a number of other potential risk factors but, to date, a rigorous research and management program to conserve the stock has not been established. Given the severely reduced state of the stock, we believe it has no tolerance for further misjudgment.

This current situation seems to exemplify the kind of dilemma that Congress sought to address in 1972 and 1973 when it passed the Marine Mammal Protection Act and the Endangered Species Act. From an ecological and conservation perspective, the benefits of delay in constructing the bridge far outweigh the costs. A number of the potential risks to the Cook Inlet beluga whale stock are amenable to scientific investigation. If given adequate support, such investigation should reduce the uncertainty regarding potential effects and provide the information needed to devise mitigation measures to ensure that human activities in Cook Inlet have no more than a negligible impact on the stock. The Marine Mammal Commission is in the process of publishing a report on the need for additional research funding for the most endangered marine mammal taxa in U.S. waters, including the Cook Inlet beluga whale stock, and we will forward a copy of the report to you as soon as it is available.

Absent such investigation, any conclusion that construction and operation of the proposed Knik Arm bridge will have a negligible impact on Cook Inlet beluga whales would necessarily be based on speculation, as is evident from the lack of definitive data in both the DEIS and the FEIS. We believe such a conclusion is inconsistent with the requirements of the Marine Mammal Protection Act and would create a substantial risk of extending the pattern of misjudgments about (a) stock status, (b) threat factors, (c) adequacy of research, and (d) adequacy of management measures to ensure recovery.

Loss of this stock would clearly constitute a significant and likely irreversible degradation of the Cook Inlet ecosystem. All other beluga stocks in Alaska waters are geographically separated from this region by the Alaska Peninsula, and recolonization could take centuries or more, if it were to

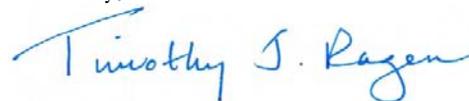
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occur at all. At a time when marine mammals in Alaska waters are already vulnerable to multiple adverse effects of human activities, we believe a reasonable measure of caution is needed. For all these reasons, the Marine Mammal Commission recommends that the Knik Arm Bridge and Toll Authority and the Federal Highway Administration refrain from making any irreversible or irretrievable commitment of resources related to bridge construction until the uncertain but potentially significant impacts of bridge construction and use can be evaluated and the Administration can make an affirmative finding that such activities, once mitigated, will not have a more than negligible impact on the Cook Inlet beluga whale stock.

In addition, as we have indicated to the National Marine Fisheries Service and others, the Commission believes that the Cook Inlet stock of beluga whales warrants listing under the Endangered Species Act. Based on its rapid decline, small size, failure to recover, and vulnerability to poorly understood and unmanaged or poorly managed risk factors, this stock has an elevated risk of extinction and is in need of the protection provided under the Endangered Species Act. Although the National Marine Fisheries Service has yet to make its final decision on the proposed listing of the stock, publication of the proposed rule is sufficient to trigger the conference requirement set forth under 50 C.F.R. § 402.10, which is designed to help ensure eventual compliance with section 7 of the Endangered Species Act, should the listing be finalized. Such a conference should be designed to provide a more robust framework for evaluating potential effects of bridge construction and use, will help identify key areas of research to characterize risks, and will help identify measures to avoid or minimize those risks. To that end, the Marine Mammal Commission recommends that the Knik Arm Bridge and Toll Authority work with the Federal Highway Administration and initiate a conference with the National Marine Fisheries Service under 50 C.F.R. § 402.10 to evaluate the potential effects of bridge construction and use on this stock.

Please contact me if you have any questions concerning these recommendations and comments.

Sincerely,



Timothy J. Ragen, Ph.D.  
Executive Director

Enclosure

cc: Mr. Andrew J. Niemiec, Executive Director, KABATA  
Mr. John Lohrey, Field Operations Engineer, FHWA