



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

December 9, 2004

Mr. Michael Carter
U. S. Department of Transportation
Maritime Administration
400 7th Street SW
Room 7209
Washington, D. C. 20590

Re: Anchorage Marine Terminal
Redevelopment Environmental
Assessment

Dear Mr. Carter,

The National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) has reviewed revisions to Chapters 2 and 3 of the draft Environmental Assessment (EA) for the Port of Anchorage (POA) Marine Terminal Redevelopment project. The project will utilize federal funding administered by the U. S. Department of Transportation Maritime Administration (MARAD). The proposed action will result in filling from 110 to 135 acres of tidelands. We offer the following comments.

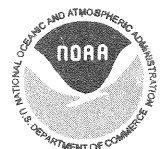
Essential Fish Habitat and Fish Resources

The Magnuson-Stevens Fishery Conservation and Management Act requires NOAA Fisheries to make conservation recommendations regarding any federal action that would adversely affect Essential Fish Habitat (EFH). NOAA Fisheries will review the final EA (or a revised Draft EA addressing our comments below) and make recommendations pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Act to minimize project impacts.

FISHERIES COMMENTS

Chapter 2 Description of the Proposed Action and Alternatives

Master Plan Alternatives 1 through 8 (pages 2.7-2.8) include filling of 40 to 110 acres of tideland fill. Those alternatives with less fill rely on using lands such as the old Defense Fuels Property administered by the U. S. Army for additional backland storage. The EA dismisses these alternatives from further consideration due to the remote location of these lands, not owned or controlled by the POA, and the U.S. Army's desire to retain the area for overflow and staging purposes during deployments. One aspect of the Purpose and Need for the project is to provide adequate space for a staging and storage area for the U. S. Army Stryker Brigade Combat Team. How many acres of this property controlled by the army? Why can't these lands be used as the staging and storage area for the U. S. Army Stryker Brigade Combat Team, rather than filling additional estuarine wetlands?



A key component of the justification for the POA expansion is based on military needs. NOAA Fisheries requests that the POA coordinate further with the U.S. Army regarding use of these lands to satisfy some of the army-related storage and staging needs. Use of these lands may allow retention of Alternatives 1 through 8 for further consideration, with a decrease in the amount of fill needed, reducing impacts to EFH. NOAA Fisheries concurs with the POA determination that all impacts cannot be avoided, but NOAA Fisheries is not convinced that the impacts of this project have been minimized to the extent practicable. Use of the US Army lands could help minimize the project footprint and environmental impact.

Management actions need to be defined (page 2.60) and separated from mitigation. All the components that are clearly mitigation should be taken out of this section and put into the mitigation section of Chapter 3. Fish studies/monitoring are not compensatory mitigation for fill of 110-135 acres of estuarine wetlands and EFH.

Bench test studies (page 2.63). As mentioned at the meeting on October 6, 2004, NOAA Fisheries does not support development of bench test studies in Area 5. NOAA Fisheries recommends bench test studies be carried out in one of the other areas to the south. Area 5 is routinely used by beluga whales for feeding and is thus likely important to fish. Monitoring and fish sampling during the bench test will not be sufficient to determine, “that associated impacts from proposed construction activities will be insignificant through the life of the project.” What criterion will determine significance and who will make this determination? If impacts are significant, will fill activities in Area 5 be aborted?

Enhancement to Ship Creek Point/Veteran’s Memorial Park (page 2.64). The revitalization of the mouth of Ship Creek for public use, while of civic value, does nothing to mitigate the loss of 110-135 acres of estuarine wetlands, and associated impacts to EFH and NOAA Fisheries trust resources.

Ship Creek 25-Acre Habitat Restoration (page 2.66). This action is described as “mitigation for the loss of any low quality tidelands and EFH from POA Expansion activities.” NOAA Fisheries takes issue with designating estuarine wetlands as low value and assumes this is only the opinion of the POA, because the EA does not present any supporting data. The estuarine wetlands targeted for fill are valuable habitat for juvenile salmonids. NOAA Fisheries does not consider restoration/establishment of freshwater wetlands as adequate mitigation for loss of estuarine wetlands and EFH. The described restoration will not create EFH for marine or anadromous fish. Further, NOAA Fisheries has doubts the design for this wetland will work. This area lacks the necessary fresh water input that is needed to form a freshwater wetland.

NOAA Fisheries supports mitigation in the form of a habitat restoration project but not at the proposed site. A better location from our perspective would be the strip of land on the east side of Ship Creek from the mouth of the creek to the existing culvert battery (soon to be a new bridge). On page 3-77, the design of drainage facilities to minimize pollution of water sources, construction of grassy swales or vegetated filter strips,

retaining natural vegetation, etc. are all mentioned to minimize potential impacts of the projects. These design alternatives could all be worked into a buffer strip along Ship Creek. This proposed restoration project would create a buffer along the creek that reduces existing pressures of development as well as improve the aesthetics of the area. A greenbelt with a conservation easement along the mouth of the estuary would improve water quality and protect the area from the encroachment of future development. The proposed freshwater wetland is on Alaska Railroad (ARR) property as is the alternative put forward by NOAA Fisheries. Either way, negotiations with the ARR are necessary.

Fish Migration Systems along Proposed Structure (page 2.66). This section does not make clear what a fish migration system would look like. The cage-like design discussed at the October 6, 2004 meeting would do little, if anything, to mitigate the loss of shallow near shore fish habitat. NOAA Fisheries is not aware of any similar systems in use on other projects and questions the efficacy of mechanical fish passage systems in Knik Arm.

LF04 Enhancement (page 2.68). The estuarine wetlands targeted for fill are valuable habitat for juvenile salmonids. NOAA Fisheries does not consider enhancement of an old dump site as adequate mitigation for loss of estuarine wetlands and EFH.

Chapter 3 Affected Environment and Environmental Consequences

Fisheries (Page 3.100-102).

1. The text should not use dBA when referring to the sound pressure levels to which the fishes will be exposed as this frequency is weighted for human hearing, and is therefore totally inappropriate for fishes. Do the author's simply mean 165 dB (re: 1 microPa)?
2. Assuming the authors actually mean 165 dB (re: 1 microPa), some vital information is lacking: 1) how were the expected frequencies or sound pressures estimated (do hydroacoustic monitoring data exist for sheet piles, or is this based on other data?); 2) does information pertain to peak pressure or root mean squared pressures (peak pressure is higher than rms pressure, and is the basis for our threshold on physical injury); 3) the distance from the noise source where this pressure would occur is not mentioned; and 4) no distinction is made between vibratory driving or impact driving of the piles. Both of these are important to evaluate the validity of the authors' argument.
3. On page 3-101, the authors state, "Permanent injury to fish from acoustic emissions has been shown only for high-intensity sounds of long duration on the order of several hours." This is not true. Ample evidence exists to show that severe injury and death can result from very brief exposure to intense sounds. McCauley et al (2003) showed that very brief exposure to the sounds from air guns (which are likely to be more intense than from pile driving) can cause long-term damage to the auditory system of fishes. Severe injury and death has also been observed from impact driving of piles. For more information on the effects of pile driving see the Biological Opinion for the Edmonds Crossing project at

http://www.nwr.noaa.gov/1publcat/bo/2004/200300756_edmonds_crossing_03-25-2004.pdf

4. The last sentence on page 3-101 incorrectly assumes that fish will not be exposed to sound pressures above 180 dB long enough for adverse effects. This is not true for two reasons: 1) injury can result from short-term exposure, as described above; and 2) some evidence suggests that fish will not avoid an area with these sounds, thus increasing the duration of exposure.

5. Page 3-102, 4th paragraph. The authors state that no significant effects will occur because the sound pressures do not exceed 180 dB. However, that ignores the potential effects to behavior.

Analysis of Potential Adverse Effects of Action on EFH Managed species. The last sentence of the first paragraph on page 3-112 incorrectly states, “Currently, Ship Creek does not support spawning or rearing of any salmon species.” This statement is contradicted numerous times in subsequent pages.

Impacts to Managed Fish Species (page 3.116). The EA states, “due to a lack of significant marine habitat and the low diversity and abundance of fish species in the vicinity of the POA, there would be no significant long-term impacts to local or regional finfish populations”. The EA does not present data to support this finding. In fact, the available data demonstrate high use of this marine habitat by local populations of juvenile salmonids.

In light of the comments already made related to pile driving, the paragraph on page 3-117 concerning the potential impacts of pile driving needs to be rewritten to acknowledge potential impacts and to discuss best management practices to minimize those impacts.

The proposed mitigation package is inadequate. Fee based compensatory mitigation is not mentioned. The Anchorage Credit/Debit methodology will most likely apply to this project. If 135 acres of wetlands are filled, the compensatory mitigation fee could be as much as \$6.75 million. Unless the POA is prepared to pay a large compensatory mitigation fee, better mitigation proposals need to be developed. The mitigation project suggested earlier in this memo would be a good starting point to initiate discussion with all involved agencies. NOAA Fisheries is interested and willing to work with the POA and other agencies to help develop a meaningful mitigation package for this project after impacts have been avoided and minimized to the greatest extent possible.

MARINE MAMMALS COMMENTS

Marine Mammals (page 3.89)

Delete “Upper and Lower.” The sentence would now read . . . occur seasonally in Cook Inlet, . . .

Beluga Whale (page 3.91-98)

1. On page 3-91, paragraph 2, sentence 2
Correct spelling for distributUion.

2. On page 3-91, paragraph 5, sentence 5
Delete “other.” The sentence would now read . . . personnel conducting research in Cook Inlet, . . .

3. On page 3-91, paragraph 5, sentence 5
Insert “pilots,” as another source of opportunistic sighting reports. The sentence would now read “. . . commercial fishermen, pilots, observations by POA personnel, . . . “

4. On page 3-92, paragraph 2, sentence 2
Insert “Alaska” The sentence would now read . . . Most Alaska belugas over winter. . .

5. On page 3-92, paragraph 2, sentence 2
Delete “entire” and insert “Upper and Mid.” The sentence would now read . . . dispersed throughout the Upper and Mid Inlet rather than. . . .
It would be an incorrect summarization to say beluga whales are dispersed throughout the ‘entire Inlet’ during the winter.

6. On page 3-92, paragraph 2, sentence 2
Delete “during” and insert “like.” The sentence would now read . . . concentrated near river mouths like the summer months

7. On page 3-92, paragraph 2, sentence 3
Delete “at the entrance to Turnagain Arm.”
The area between Kalgin Island and Point Possession is not the entrance to Turnagain Arm. The areas between Point Possession and Fire Island, and between Fire Island and Campbell Point, are the entrances to Turnagain Arm.

8. On page 3-92, paragraph 2, sentence 3.
Delete sentence “There are fewer observations near Anchorage and Knik Arm in general.”
Fewer observations of beluga whales, compared to what? Figure 3-29 and 3-32 show quite a few sightings based on irregularly reported opportunistic observations in an area not truly visible from public lands. NMFS 2001-2004 abundance surveys observed beluga whales in the Susitna delta (33%), Knik Arm (31%), and Turnagain Arm/Chickaloon Bay (36%). Satellite tag data does show high beluga use in Knik Arm, including some transmitted signal near the Port facilities.

9. Page 3-92, paragraph 3, sentence 4

Delete section “and the tracking of satellite tagged belugas” Sentence would now read “Data from NOAA Fisheries aerial surveys and opportunistic sightings confirm that they are concentrated . . .

Figures 3-30, 3-31 and 3-32 do not include any maps or information from satellite tagged beluga whales. Would need to add those maps to refer to satellite tagging information in the text.

10. Page 3-92, paragraph 4, sentence 1

Correct this first sentence to include the most recent abundance surveys in 2004.

Sentence should now read “Based on surveys of Cook Inlet in 2004, the index count of 187 belugas is lower than, . . .”

11. Page 3-92, paragraph 4, sentence 3

Correct this sentence to include the most recent abundance surveys in 2004. Sentence should now read “All the belugas observed during the 2004 surveys were seen in Susitna Delta and Turnagain Arm/Chickaloon Bay areas.

Report at:

<http://www.fakr.noaa.gov/protectedresources/whales/beluga/survey/2004.pdf>

12. Page 3-92, paragraph 5, sentence 1

Delete National Marine Fisheries Service and insert NOAA Fisheries. Sentence should now read as “. . . in consultation with NOAA Fisheries, to monitor beluga whales. . . “

Primarily refer to NOAA Fisheries not NMFS in this Environmental Assessment.

13. Page 3-93, Figure 3-28

Identify the number of aerial surveys (days or hours) and the actual years that NOAA Fisheries flew from November to April (1993-2004) in this area.

Figure 3-28 is misleading and needs to be further explained.

14. Page 3-95, Figure 3-30

Correct Figure 3-30, so that June (yellow) surveys are background and other months (other colors) are foreground.

And therefore, not buried under 11 years of June abundance surveys.

15. After page 3-97

Insert additional Figures 3-33 to 3-xx, showing satellite transmitted data from tagged belugas for Knik Arm and/or the vicinity of Anchorage from 1999 through 2002, and from 31 May 1999 through 24 May 2003.

Hobbs, R.C., K.L. Laidre, B.A. Mahoney, D.J. Vos, M. Eagleton. In press.

*Movements and area use of belugas, *Delphinapterus leucas*, in Cook Inlet, Alaska*

16. Page 3-98, paragraph 1, sentence 2

The monitoring program will include:

- Concurrent shore based observation by three observation teams. The teams would be located approximately 0.5 miles apart to provide triangulated information about observed locations. Observation and recordings would be performed for 3-hours daily, 5 days per month for a full year cycle.
- Acoustic monitoring to determine in-water noise and vibration impacts.

NOAA Fisheries requests that the monitoring program for Cook Inlet beluga whales in the project area be expanded and the following text be added:

To provide additional information on beluga whales in the POA project area, POA is working with NOAA Fisheries to monitor beluga whales, before, during and after construction activities.

- 1) Shore-based observations by at least two teams would monitor the beluga whale movements, timing, group size, locations, and identifiable behaviors near the POA project area. The study should be conducted from March through November (excluding the winter ice months) starting in 2005 and continuing through each year that construction occurs plus one year after project completion. Beluga whale observation should be performed six hours per day, twice a week. The observers should attempt to monitor beluga whale presence or absence through most tide levels for each month. Such monitoring will assess patterns of beluga whale use of the area near the POA, and if a strong correlation is found with tidal cycle, avoiding intrusive disturbances during those periods may ameliorate impacts on beluga whales. For instance, if beluga whales usually appear during low tides, then construction activity can be scheduled to avoid operations during low tides. Short term impacts can be documented if whales move out of the area when various construction activities start up. Project details, as coordinated with NOAA Fisheries, should be attached as an Appendix to the EA and can be later modified as appropriate.

The results of this monitoring study will allow managers to better understand the use of lower Knik Arm and the affects to beluga whales due to construction activities. A GIS database should be set up to manage and analyze the whale observations relative to variables such as season, bathymetry, tide, and distance from POA activities.

- 2) The POA is responsible to map the sound attenuation for the Knik Arm near the POA expansion project. This would allow NOAA Fisheries to have an idea on the project impacts, and not just monitor those impacts. Project details, as coordinated with NOAA Fisheries, should be attached as an Appendix to the EA.

The results of this sound attenuation map will allow managers to better understand the noise levels of in-water activities, such as pile driving and fill. This will help to determine a low-impact or a non-impact perimeter around the POA expansion project. A sound attenuation map will allow the project manager

to determine the distance of project construction that affects beluga whales and will allow managers to better protect the beluga whales from harm during construction activities.

17. Page 3-98, paragraph 3, sentence 3

Please explain “rapid response time” and “for rapid response.”

Not sure what studies were considered that required a rapid response.

Knik Arm Bridge and Toll Authority Study (page 3.98)

1. Page 3-98, paragraph 4, sentence 2

Delete “Later” and insert “late.” The sentence would now read “Started in late July 2004, . . .”

2. Page 3-98, paragraph 5

Insert “preliminary” The sentence would now read “The study preliminary suggests that such . . . “

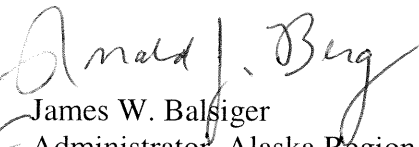
Mitigate impacts to Cook Inlet beluga whales

The POA expansion project may need to mitigate for adverse impacts to beluga whales during and after the POA construction. The POA needs to address this issue in the Final EA. This is of particular importance because the POA does not plan on any pre-construction monitoring, with a construction start date of spring 2005. As you know, beluga whales in Cook Inlet declined dramatically between 1994 and 1998. Results of aerial surveys indicated that the 1998 estimate of Cook Inlet beluga whales (n = 347 whales) represented a decline of 47 percent from the 1994 estimate (n = 653). In response to this significant decline, NOAA Fisheries designated this stock as depleted under the Marine Mammal Protection Act, 1993 on May 31, 2000 (65 FR 34590). Following the depleted determination, NMFS proposed regulations limiting the harvest of beluga whales in Cook Inlet, Alaska, on October 4, 2000 (65 FR 59164).

Subsequent surveys between 1999 and 2003 have resulted in abundance estimates from 313 to 435, with no clear trend. Harvests from this stock have been severely restricted (0-2 whales annually) since 1999, but the population has not shown significant response. Considerable concern remains regarding the recovery of this stock. Activities that might further hinder their recovery are of considerable concern, and the Knik Arm area is of great importance due to the known use by beluga whales. NOAA Fisheries remains concerned that temporary construction activities and permanent displacement of 135 acres of lower Knik Arm may adversely affect the recovery of Cook Inlet beluga whales. NOAA Fisheries looks forward to meeting with the POA to discuss mitigation options for the Cook Inlet beluga whales that were not mentioned in this EA.

If you have any questions regarding Essential Fish Habitat or fish resources, please contact Brian Lance at (907) 271-1301. Questions concerning Cook Inlet beluga whales or other marine mammals should be directed to Barbara Mahoney at (907) 271-3448.

Sincerely,


For James W. Balsiger
Administrator, Alaska Region

cc: ADEC, ADNR/OHMP, EPA, USFWS, COE - Anchorage
Applicant - Port of Anchorage, Attn: Roger Graves, 2000 Anchorage Port Road,
Anchorage, Alaska