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VIA FACSIMILE (907.586.7249) & U.S. MAIL

June 27, 2005

James Balsiger, Alaska Regional Administrator
National Marine Fisheries Service
PO Box 21668
709 W. 9th St., Rm 420
Juneau, Alaska 99802-1668

RE: COOK INLET BELUGA WHALE CONSERVATION PLAN COMMENTS

Dear Mr. Balsiger:

I. INTRODUCTION

The undersigned people and groups (Commenters) represent over 15,000 Alaskans concerned with the economic, social and ecological vitality of the Cook Inlet watershed. Please accept these comments on the draft Conservation Plan (Draft Plan) for the Cook Inlet beluga whale pursuant to the Marine Mammal Protection Act (MMPA).

NMFS's Draft Plan provides a good overview of the precarious status of Cook Inlet's white whale, and serves as a useful historical backdrop to assess future research and management directions. However, the Draft Plan places undue emphasis on subsistence hunting, which has been essentially halted, and it fails to address non-hunting impacts on whales and prime whale habitat, including: pollution, noise, oil and gas development, aviation impacts, sewage, military activities, coastal development, and food supplies, among other things. The Draft Plan also neglects to invoke NMFS's existing statutory authority to implement various management tools, and fails to identify funding mechanisms needed to meet the Draft Plan's overarching goal – to recover the Cook Inlet beluga whale population to healthy and sustainable levels.

Time is of the essence with this isolated stock of whales, and it has been 5 years since NMFS listed the whale as "depleted" under the Marine Mammal Protection Act.

Accordingly, Commenters urge NMFS in the strongest possible terms to immediately issue a Final Conservation Plan that includes the recommendations herein, and to begin implementing the research and management strategies needed to ensure the beluga whale remains part of the biological fabric in Cook Inlet for many years to come.

II. COMMENTS

A. Status & Recovery Rate

The Draft Plan correctly notes Native subsistence “harvests from this stock have been severely restricted Despite this, the population has not shown significant response (growth),”¹ and assigns “considerable concern”² to the whale’s current status. Yet while the Draft Plan references a theoretical productivity rate (R_{max}) between 2 and 6 percent, it also notes that recent abundance data indicate a 75% probability the stock is recovering at a rate less than 2 percent.³ Marine mammal expert Dr. Daniel Goodman concurs with this assessment, but adds that

based on the available estimates of the population size, reported harvest, and numbers struck and lost for the years 2004-2003, the central estimate (...called the “best estimate”) of the growth capacity is a little less than half a percent per year. This is considerably below the expected range of 2% to 6% for a normal, healthy toothed whale or dolphin population.⁴

More importantly, and most disturbingly, Dr. Goodman’s calculations showed a 46% probability that the growth capacity for the Cook Inlet beluga whale is negative.⁵ “Indeed, there is a substantial probability that the [beluga] population will actually decline during the period 2005-2009 even in the absence of any subsistence harvest.”⁶ Yet while the Draft Plan concedes “there is a small probability the stock may be increasing,”⁷ it outlines few concrete steps toward a precautionary approach that will ensure the recovery of the Cook Inlet beluga whale.⁸ As a result, Commenters agree with the Draft Plan’s intention to conduct a Status Review,⁹ and in light of the dire status

¹ Draft Plan, p. 4.

² Id.

³ Id. at 5.

⁴ Testimony of Daniel Goodman, PhD., In the Matter of Proposed Regulations Governing the Taking of the Cook Inlet, Alaska, Stock of Beluga Whales by Alaska Natives, Docket No. 000922272-0272-01, p.4 (July 15, 2004) (emphasis added) (hereinafter “Goodman Testimony”).

⁵ Id. (emphasis added).

⁶ Id. (emphasis added).

⁷ Draft Plan, p. 5.

⁸ Commenters note the Draft Plan (p.12) indicates the beluga whales observed off Yakutat are considered for management purposes part of the Cook Inlet beluga stock, yet it concedes supporting data are uncertain. If the Yakutat whales are a depleted stock separate from the Cook Inlet stock, then the current population numbers for Cook Inlet stock may be inflated, and the predicted recovery time for the Cook Inlet stock may be accordingly longer. NMFS therefore should quickly determine whether the Yakutat and Cook Inlet whales are part of the same stock.

⁹ Draft Plan, p.85-86.

of the Cook Inlet beluga whale population, recommend the Final Conservation Plan contain a date within the next three (3) months for commencement of such review.¹⁰

B. *Undue Emphasis on Subsistence Hunting*

The Draft Plan – like NMFS's management efforts over the past 5 years – focuses disproportionate attention on Native subsistence hunting.¹¹ While Commenters agree unregulated hunting has created serious concerns in the past, the voluntary step-down in 1999 by the Cook Inlet Marine Mammal Council Tribes and others, and subsequent co-management negotiations and agreements, has demonstrated the need to also pursue other concerns that appear to be depressing stock recovery.

After six years of little or no permitted subsistence hunting (three whales have been reported taken between 1999-2004), we have seen no detectable recovery of the stock, and [Dr. Goodman's] analysis shows this observation to be statistically informative. Thus, it appears that as yet unidentified factors are causing mortality or acting to depress population growth. As such, we should treat this stock with the care we would an endangered species whether it is currently listed or not.¹²

Accordingly, Commenters urge NMFS to finalize as quickly as possible any regulations and co-management agreements required between NMFS and Alaska Native Tribes, and to shift the research and management focus toward those as yet “unidentified factors” that may be “causing mortality or acting to depress population growth.”¹³

C. *Need to Address Non-Hunting Impacts on Whales & Habitat*

1) *Pollution & Noise*

For many years, some or all of the Commenters have highlighted pollution and noise issues that may be adversely affecting stock recovery. As noted above, these issues have received scant management attention from NMFS, despite the fact the near-

¹⁰ While Commenters believe evidence developed over the past several years on the current and predicted status of the whale warrants ESA listing, section 112(a)-(e) of the Marine Mammal Protection Act gives the Secretary of Commerce substantial authority to protect the Cook Inlet beluga through consultation requirements with other federal agencies and the adoption of regulatory measures. See 16 U.S.C. § 1382. The Draft Plan does not propose the Secretary use those powers in any specific way. Instead, the Draft Plan (p.56 n.10) meekly notes that the powers of the Secretary under Section 112(e) “are largely untested.” That NMFS may deem the Secretary's powers largely untested is not an excuse for failing to use them as Congress intended. Accordingly, the Draft Plan should include proposed measures that will use the full suite of powers available to the Secretary under Section 112. This includes, at a minimum, regulatory measures to protect the whale's “mating grounds, or other areas of ecological significance,” including all areas identified in the Draft Plan as Type 1, 2 or 3 habitat. Id., 16 U.S.C. § 1382(e). NMFS reluctance to implement such authorities in the Final Plan will only undermine the Plan's primary goal to recover the Cook Inlet beluga whale stock.

¹¹ “[M]anagement of this use [subsistence harvest] remains the foremost priority in our recovery strategy.” Draft Plan, p. 43 (emphasis added).

¹² Goodman Testimony, p. 12 (emphasis added)

¹³ Id.

cessation of Native subsistence hunting has not produced the population rebound predicted by agency scientists. Commenters have the following comments and recommendations on the pollution and coastal development aspects of the Draft Plan:

a. Oil & Gas

The Cook Inlet oil and gas industry operates under a federal National Pollution Elimination Discharge System (NPDES) permit pursuant to the Clean Water Act that allows billions of gallons of hydrocarbon- and heavy metals-laced produced water, drilling muds and cuttings to be dumped into Middle Cook Inlet every year.¹⁴ This dumping has been continuous for at least the past 20 years. Unfortunately, few resources have been devoted to determine the ultimate fate and effects of such discharges, including the effect on beluga whales and their feeding and calving habitats.¹⁵ As a result, data sets for metals, hydrocarbons and volatile organic chemicals (VOC) in the Upper Inlet are extremely limited. Importantly, the models used to approximate discharge plume behavior for oil and gas discharges (i.e. PLUME and COREMIX models) routinely fail to account for the loss of fresh water inputs during the winter months when streams and other freshwater inputs freeze. As a result, net water outflows from the Upper Inlet are likely overestimated based on mixing model assumptions, and the Inlet's reputed "flushing effect" is probably also overestimated during winter months. Yet waste concentrations and accumulations in the Middle and Upper Inlet are seriously under-studied. Accordingly, an important top priority for NMFS in the Final Plan should be to collect and analyze sediment quality, along with prey fish, shellfish and beluga tissues/organs, for heavy metal and VOC constituents, in the beluga's preferred habitat areas (i.e. between Anchorage and the Forelands).¹⁶ Furthermore, the number and frequency of AMMTAP samples and analyses should be increased considerably over current levels (i.e. due to the precarious status of the Cook Inlet stock compared to other Alaska stocks, Cook Inlet whales should receive disproportionately higher sampling and analysis rates).

Additionally, based on the now-discounted theory that whales migrated south beyond the Middle and Upper Inlet during the winter months, the Alaska Division of Oil & Gas Policies (with NMFS concurrence) currently allows seismic testing in those areas during the winter months. The Draft Plan, however, makes only passing reference to the potential effects of seismic activities on beluga whales and whale behavior, despite a large and growing body of scientific literature showing such activities can have adverse effects on whales and prey fish.¹⁷ After conceding that "[g]eophysical seismic has been described as one of the loudest man-made underwater noise sources, [that] has the potential to harass or harm marine mammals, including beluga whales," NMFS simply

¹⁴ See EPA, Office of Water, Development Document for Final Effluent Limitation Guidelines and Standards for the Coastal Subcategory of the Oil & Gas Extraction Point Source Category (EPA-821-R-96-023) (Oct. 1996).

¹⁵ Commenters note that while the Cook Inlet Regional Citizens Advisory Council and the federal Minerals Management Service have conducted limited studies in and around the Middle Inlet area, no studies have been comprehensive enough to truly understand oil and gas industry impacts, if any, on beluga whales.

¹⁶ Because belugas and other animals typically metabolize hydrocarbons quickly, thus making them difficult to identify in tissue and/organ sampling, Commenters recommend analysis for the P₄₅₀ enzyme.

¹⁷ See, e.g. McCauley et al. (2003); Popper (2003); Richardson et al. (1995); Hildebrand (2003).

proposes to continue to advise oil and gas lessees that such “activities may result in the taking of marine mammals, including beluga whales...[s]uch taking is prohibited by the” MMPA.¹⁸ *This refusal by NMFS to address known, substantial risks lies at the heart of the beluga whale’s perilous status.*¹⁹ Accordingly, the Final Plan must address seismic activities generally, must explicitly mandate that these activities comply with the MMPA’s incidental take provisions, and must specifically outline management and research strategies to mitigate any possible harms likely to flow from seismic activity on whales.

Commenters note with some frustration the anemic Conservation Strategy response to oil and gas issues in the Draft Plan.²⁰ In addition to the sampling and analysis recommendations above, Commenters recommend NMFS at least draft new, more-protective guidelines for seismic activity in beluga whale habitat; prompt industry to show its activities have not harmed the beluga whale; require industry to immediately report beluga whale sightings at platforms and elsewhere; recommend undersea pipeline replacements based on existing pipeline risk assessments; persuade oil and gas companies and trade associations to financially support beluga conservation efforts;²¹ educate oil companies about their potential impacts on beluga whales; use existing MMPA authorities to halt or reduce the dumping and spilling of toxic materials into beluga whale habitats; and press for tug assist vessels in Homer, Kenai and Anchorage to ensure tankers and other vessels that lose power will not run aground and spill cargo or fuel oil.

b. Aviation

The Draft Plan also neglects to mention effects from aircraft, specifically, the atmospheric deposition in Upper and Middle Cook Inlet from combusted airline and other plane fuels. Air traffic through Anchorage continues to increase, especially air cargo, yet NMFS has no understanding of the depositional effects of atmospheric pollutants on the Upper Inlet. Commenters recommend the sampling regime identified in C.1.a (above) account for and address such potential discharges to beluga whale habitat, and that NMFS develop management strategies that will reduce or eliminate any such harms.

c. Sewage

The Draft Plan makes only passing reference to sewage discharges, despite the fact the Anchorage Sewage Treatment Plant (Asplund) alone discharges up to 40 million gallons

¹⁸ Draft Plan, p. 40.

¹⁹ The Draft Plan makes the superfluous observation that a seismic noise “project was proposed” in 2003, but makes no effort to suggest actually conducting such a study. *Id.*

²⁰ *See Id.*, p. 58.

²¹ During the historical course of offshore oil and gas operations in Cook Inlet – stretching back over 30 years – Commenters are unaware of any beluga whale research or targeted conservation efforts sponsored by the oil and gas industry. If they exist, the industry has been uncharacteristically humble about such efforts.

per day of partially treated sewage in prime beluga whale habitat.²² Toxic, elemental chlorine is intentionally added to disinfect such discharges, and the formation of chlorine free radicals and other potentially harmful by-products is not uncommon. Yet nothing in the Draft Plan's research or management recommendations addresses sewage or sewage additives. The Draft Plan is also silent on Emerging Pollutants of Concern (EPOC), such as hormones (from birth control pills and sex enhancement drugs) and antibiotics (from pharmacologic uses), and such pollutants routinely bypass primary and secondary treatment techniques. Because such pollutants have the potential to adversely affect all living resources in the Upper Inlet, including the beluga whale and its prey, Commenters recommend they become part of the enhanced sampling and analysis regime referenced in section C.1.a. Similarly, the Asplund facility has hundreds of "indirect dischargers" – i.e. small-to-medium sized businesses (including auto shops, print shops, metal plating shops, and the Anchorage landfill) – that discharge production wastewater to the plant. Because the plant cannot treat the heavy metals, volatiles and other industrial pollutants discharged by these indirect users, they pass through to the Inlet untreated. These point sources should also become a focus of the Final Plan and its research and management regime.

d. Military

The Draft Plan is silent on potential impacts stemming from the Fort Richardson bombing range at Eagle River Flats. It is unclear to Commenters how a military bombing range that falls into what NMFS describes as Type 1 high value habitat could escape scrutiny in the Draft Plan. Plaintiff citizen and Tribal groups last year settled a Clean Water Act lawsuit against the Department of Defense over various issues surrounding the site, and that settlement includes research and whale observation requirements that should be incorporated in the Final Plan. Commenters also recommend the research and management action items in the Final Plan reflect actual and potential impacts from bombing range activities on Eagle River Flats. Specifically, NMFS should, at a minimum, work with DOD to monitor Eagle River Flats, ensure no bombing occurs when whales are present; ensure no contaminants reach beluga whale habitat, and work to identify alternative bombing areas away from beluga habitats.

e. Noise & Vessel Traffic

The Draft Plan correctly notes that "[b]eluga whales are among the most adept users of sound of all marine mammals," then proceeds to conclude – based on one study in one month in 2001 – "the sounds measured in Cook Inlet would not be expected to have more than a minor effect on the beluga whales living in the vicinity."²³ Clearly, NMFS cannot stand by the assertion that industrial noise measured during one summer month – August 2001 – translates into a blanket assurance that industrial noise poses no risk to beluga whales all year round. For example, a picture of the Phillips *Platform A* in the

²² This does not include sewage plant discharges from Eagle River and Girdwood, which should also be included in any sewage-related research or management efforts. Also note, the comment regarding Inlet mixing and possible elevated pollution amounts and concentrations during winter months (C.1.a) also applies to sewage discharges.

²³ Draft Plan, p. 40

cited study (figure 9) indicates there was no drill rig on the platform in August 2001. As a result, the study could not have measured drilling noise. Furthermore, industrial noise likely behaves differently in the colder, denser, more saline waters of winter, when ice sheets and their effects on noise cover a large portion of the Inlet beluga whales use. Despite the scant noise research to date on CI beluga whales, the Draft Plan simply proposes guidelines that “have not been promulgated as policy,” against which NMFS will gauge development activities and “recommend” against activities exceeding the to-be-determined thresholds of harm. Yet Commenters can find no proposal in the Draft Plan for additional acoustic research in Cook Inlet to substantiate the proposed guidelines. Accordingly, Commenters strongly urge NMFS to conduct additional acoustic studies of industrial noise in Cook Inlet, including ship traffic, especially during the winter months. Commenters further recommend NMFS re-evaluate the impact of sound on CI beluga whales, capitalize on what is known related to beluga whale hearing and echolocation, and use this information to develop a mitigation strategy to reduce the threat of noise on CI beluga whales.

Additionally, the Draft Plan rightly notes the potentially harmful effects from jet skis and similar vehicles, yet predictably, makes no recommendation to prohibit their use in important beluga habitats in the Upper Inlet. The Final Plan should include implementation steps to ban jet skis in beluga whale habitat in the Upper Inlet, and should recommend research to understand jet ski/whale conflicts elsewhere in the Inlet.

f. Coastal Development

Coastal development includes a broad range of activities. To improve success rates for research and management efforts in this diffuse area, Commenters recommend the Final Plan change this heading to “polluted run-off impacts.” Commenters further recommend that any coastal development activities that directly (i.e. physically) impact beluga whale habitat – such as the Port of Anchorage expansion, Point MacKenzie development, Alaska Railroad expansion, Seward Highway expansion, or the proposed Knik Arm bridge - be treated separately under a new Habitat Impacts (see Habitat Impacts, below) section in the Final Plan. This new section would include all activities that place fill material in beluga habitat and/or require Rivers & Harbors Act section 10 or Clean Water Act section 404 permits.

Notably, the Draft Plan neglects to focus in detail on the billions of gallons of polluted run-off that enter Cook Inlet each year from the Municipality of Anchorage alone.²⁴ The Municipality of Anchorage currently operates under a Clean Water Act municipal separate storm sewer system (MS4) that includes monitoring and other oversight that should be included in the Final Plan. Furthermore, because impervious cover is an important cause of polluted run-off, the Final Plan should include plans to develop a Geographic Information System (GIS) to map and analyze polluted run-off and other

²⁴ Proportional impacts presumably flow from Eagle River, Girdwood, Hope and any other area with concentrations of impervious cover. Road salts, antifreeze, motor oil, and fecal bacteria are but a few of the constituents routinely found in polluted run-off in the Upper Inlet.

information for Upper and Middle Cook Inlet.²⁵ Finally, the Draft Plan should include provisions to address the proposed expansion of the Tony Knowles Coastal Trail southward into areas now comprising the Anchorage Coastal Wildlife Refuge. The ACWR is a highly productive salt marsh, and construction of a trail on its very edge would undoubtedly cause erosion and sedimentation, including the addition of fill in habitats immediately adjacent to known beluga feeding grounds. Because there are only a few such saltmarshes extant in upper Cook Inlet, such disturbances could have negative affects on the beluga whale and the food chain of Cook Inlet.

Additionally, Ted Stevens Anchorage International Airport and Elmendorf's air operations deserve mention in the Plan with respect to deicing and stormwater run-off. Anchorage's airport currently uses urea for deicing, a form of fertilizer, so run-off from the airport may be impacting the marine environment. Again, NMFS needs to provide leadership in researching and managing impacts from these operations, which may be adversely affecting the belugas.

g. Habitat Impacts

As NMFS knows, there are multiple projects proposed for areas used by Cook Inlet's beluga whales, with the largest proposed projects being the proposed Knik Arm bridge, the Port of Anchorage expansion and further development in the Point MacKenzie area. The Draft Plan does not explicitly address cumulative and synergistic impacts on the whales, nor does it develop a hierarchical approach to proposed projects. Because there is strong evidence that the bridge project is not needed at the present time based on current population and cargo movement,²⁶ Commenters believe it is the most dispensable of the three projects *at the present time*. Once the beluga recovers, the question of the need for a Knik Arm bridge can be reexamined.

g.1. Port of Anchorage & Point MacKenzie

The expansions of the Ports of Anchorage and Point MacKenzie, while briefly referenced in the Draft Plan, highlight the shortfalls in NMFS's current approach, which can be described as "consultative management." For example, the Port of Anchorage and the relevant federal agency – the federal Maritime Administration (MARAD) – appear to be ignoring NMFS's stated concerns about filling 135 acres (and dredging over 800 acres) of important beluga whale habitat. As noted in Footnote 10, above, NMFS possesses the statutory authority already to take proactive conservation measures, including regulations necessary and appropriate to carry out the purposes of the MMPA. This authority should allow NMFS to require a less-harmful alternative to the proposed fill project. In light of the whale's perilous status, NMFS must take its authority and obligation under the MMPA seriously and vigorously advocate for the protections that the beluga's recovery requires. This is especially important considering that – in addition to the direct physical impacts to beluga habitat occasioned by

²⁵ Commenters recommend that a GIS-based information and analysis system should be a high priority, not only for polluted run-off, but also to capture the full range of research, habitats and potential impacts to the beluga whale.

²⁶ The timing of the project is being dictated by federal money availability, not current need.

expanded filling and dredging activities – such expansion activities will increase ship traffic, chemical spills and polluted run-off.

g.2. Proposed Knik Arm Bridge

The Knik Arm bridge would bisect the most important beluga whale habitat in Cook Inlet. While the Draft Plan rightly commits to ensuring free passage for whales, and notes the potential adverse effects from construction activities, NMFS's outlines no management tools to ensure free passage endures for the life of the proposed bridge. This is critically important, because as atmospheric warming trends continue, so too will the glacial subsidence that causes increased sedimentation in Knik Arm. As a result, the highly complex oceanography in Knik Arm makes it virtually impossible to predict whether whale passage can be secured over the long-term. Accordingly, NMFS must weigh in early and assertively on the potential negative consequences of the proposed bridge on the whale, and the Final Plan should include concrete steps for high level communications between top agency officials of the hazards the proposed bridge will have on the long term health of the Cook Inlet beluga whale.

While we don't know if Cook Inlet's beluga whales will be critically harmed by the bridge, we do know that beluga numbers are not increasing and that bridge-related habitat changes (e.g., increased water velocities underneath the bridge), and bridge construction activities may harm the whales despite whatever NMFS and other agencies do to mitigate those impacts. NMFS notes in the Draft Plan that "[d]evelopment should not result in significant increases in water velocities, which could act as a barrier or deterrent to beluga whales (especially calves).²⁷ As a result, NMFS should actively engage with the federal Maritime Administration as part of the current Environmental Impact Statement process in evaluating the need for the Knik Arm bridge and, should there be a well-substantiated need for the bridge, determining its ultimate design to ensure it is as beluga-friendly as possible. Additionally, as discussed below under Habitat, a strong case can be made that the bridge's location falls within High Value/High Sensitivity habitat, which would require NMFS to recommend that bridge development – and corresponding coastal development -- should not occur in that prime beluga habitat.

h. Climate Change

Various scientific literature suggests a strong warming trend in Southcentral Alaska. As a result, the Final Plan should incorporate climate change considerations as they may affect the beluga whale, including increased air and water temperatures, effects on sea ice abundance and distribution, effects on prey species distribution and abundance, boulder accumulation, and effects on sedimentation rates and associated dredging practices, among other things.

2) Habitat

²⁷ Draft Plan, p. 71.

In the past, NMFS had embraced the notion the whales utilized the Upper and Middle Inlet during the summer months, and retreated to the Lower Inlet and possibly beyond during the winter. The Draft Plan correctly notes, however, that observations based on traditional knowledge, aerial surveys, anecdotal accounts and satellite tracking “indicate[s] that CI beluga whales remain in the mid and upper Inlet during the winter months.”²⁸ Significantly, as the whale population has shrunk, so too has its distribution, with whales now rarely sighted in Kachemak Bay or the Kenai River, for example. As a result, whales are congregating and using with increasing frequency areas and habitats in the Upper & Middle Inlet. The Draft Plan explains this trend: “This shrinking distribution is probably a function of a reduced population with the remaining whales using the best habitat that offers abundant food, the best calving areas and the best escape from predation.”²⁹

Commenters have two serious concerns with the Draft Plan’s proposed treatment for beluga habitats. First, it is unclear from supporting materials how NMFS identified the various habitat types shown in Figure 5.³⁰ Indeed, the Plan acknowledges that its habitat type classifications are based on a shaky foundation. According to the Plan, these classifications

are based on NMFS abundance surveys, monthly aerial surveys conducted in 2001 and 2002....and satellite tracking data [But c]urrent distributions may not reflect historical habitat use or importance Additionally, these classifications may change as the population recovers and expands into other habitat areas, or as the habitat itself changes over time. These classifications will be reassessed as this Conservation Plan is periodically updated.³¹

The current population may neither recover nor expand into other habitat areas if those other habitat areas used historically are damaged or otherwise made unsuitable for use by the beluga. Additionally, despite the Draft Plan’s assertion that habitat type characterization has been based on aerial survey and satellite data, the data depicted on pages 8-10 appear to undermine such assertions.³² For example, why does Type 1 habitat stop just north of Point Cairn, when survey and satellite data indicate the whales use and rely on habitats south of that area with the same or similar frequency as areas to the north of Point Cairn? Similarly, why does the Type 2 habitat line fall just south of the Beluga River, when satellite data depicted on pages 8-10 of the Draft Plan show substantial whale use and occurrence as far south as the West Forelands. Perhaps by coincidence, the proposed Knik Arm Bridge, the expanding Port of Anchorage and Anchorage’s Asplund Sewage Treatment Plant are located south of Point Cairn, and the bulk of oil and gas industry infrastructure falls into the area between the Beluga River

²⁸ Draft Plan, p. 8.

²⁹ Id. at p. 11.

³⁰ See Id. at p. 17

³¹ Id. at p. 16.

³² Furthermore, studies by NMFS researchers, published in the peer-reviewed literature, clearly show all of Knik Arm as important beluga whale use and habitat areas. Moore et al., *Beluga, Delphinapterus leucas, Habitat Associations in Cook Inlet, Alaska* (Marine Fisheries Review, 2000)

and the Forelands. Accordingly, Commenters remain seriously concerned that industry and political considerations may have played a role in the delineation of habitat type areas. Because of the substantial implications attached to the location of the various habitat types, and the concomitant need to prioritize habitat protections in the most important habitats, Commenters urge NMFS in the strongest possible terms to broaden the Type 1 and Type 2 habitat type delineations to more accurately reflect actual Beluga habitat and usage, including but not limited to designating all of Knik Arm as Type 1 habitat based on the data shown in Figures 4a and 4b.³³

Second, the Draft Plan is inconsistent in its treatment of the different habitat types. For example, it claims that the "conservation of all known beluga whale habitats is a primary focus of this Plan."³⁴ But immediately after this apparent goal statement, the Draft Plan indicates that "the objective is to preserve [only] Type 1, High Value/High Sensitivity habitats."³⁵ NMFS must ensure that all important habitats are adequately protected, and the Draft Plan's limited intention to protect only Type 1 habitat (especially as now delineated in such limited terms) falls far short of the actions necessary to ensure whale recovery.

3) Beluga Prey Considerations

The Draft Plan indicates that the average salmon harvest (presumably including commercial, subsistence and sport fishing) for the last 49 years was estimated by ADF&G as 3,900,000 salmon, while the average harvest for the years 1992-2002 was 3,600,000 salmon.³⁶ Later the Draft Plan estimates that 400 CI beluga whales might consume 1.6 million pounds of salmon.³⁷ The Draft Plan does not, however, say whether the availability of salmon prey to beluga has been the same for the last 49 years - or even during 1992-2002 - or what might be the salmon prey consumption of a fully recovered CI beluga population. NMFS cannot determine if one of the causes of the beluga's population decline is the loss of available prey species unless a goal of the Draft Plan is to analyze the salmon and other harvest data more closely and in relation to what is known about the CI beluga's use of other prey species and habitats historically. For example, while it may be true that the average salmon harvest during what NMFS claims are the years of the CI beluga population's sharp decline (1992-2002) was roughly the same as the average historical harvest of 3,900,000 salmon, these facts are largely meaningless without comparing them to salmon return numbers, the areas of salmon harvest by humans, and the availability and consumption of other prey species. There may have been years when fisheries took a larger percentage of the returning salmon than other years, and took it in areas that historically were important feeding habitats for the CI beluga but where CI beluga have been driven away by developments, habitat changes, boat traffic or other factors,³⁸ leaving less prey

³³ Id. at pp. 9-10.

³⁴ Id. at p.15.

³⁵ Id. at p. 16.

³⁶ Id. at p. 26.

³⁷ Id. at p. 32.

³⁸ The Draft Plan indicates (p. 31) that CI belugas no longer are seen at the mouth of the Kenai River "despite high salmon escapements (returns) to this river." Inexplicably, however, the Plan does not discuss changes to the Kenai

species available for the CI beluga to forage upon and possibly contributing to the decline or lack of recovery in CI beluga population numbers. Similarly, making sure that there are adequate salmon (and other prey species) forage areas for the CI beluga and returns may be critical to the CI beluga's population recovery. Commenters recommend that NMFS attend all Alaska Board of Fisheries meetings dealing with fisheries in Upper and Middle Cook Inlet, and coordinate closely with BOF and staff.

4) Strandings

In light of the precarious status of the beluga whale in Cook Inlet, every whale is important for the ultimate survival of the stock. Commenters commend NMFS on a sound framework established in the "Turnagain Arm Marine Mammal Stranding Response Plan,"³⁹ and recommend that such capabilities extend also to Knik Arm, the Susitna River mouth and elsewhere. The Stranding Plan can be improved by identifying specific responders and their contact information (e.g., Civil Air Patrol, Coast Guard Auxiliary, local Emergency Medical Technicians, firefighters, commercial fishing interests, etc.) are included in response efforts.⁴⁰ Additionally, while the Plan addresses salvage for edible portions, it should also discuss preparation for removal, necropsy, sample collection and archival, and the development of a thorough health assessment.

D. *Specific Conservation Strategy Comments*

In addition to the comments and recommendations above, Commenters have the following comments on the Draft Plan's "Conservation Strategy and Step Down Outline:"

1. Stranding Events

The forensics workshop should be convened as soon as possible, to address strandings in 2005; the Stranding Response Plan should include whale habitat areas beyond Turnagain Arm; necropsy protocols should include sampling on all dead whales and include full suite of samples, including contaminants, biotoxins, virology, immunology and bacteriology; immediately develop the disease/pathology/health index protocol; assess all dead whales for demographic (i.e. age, genetics, etc.) indices.

2. Predation

Commenters agree NMFS should accurately monitor killer whale/beluga whale interactions, and recommend public education and outreach efforts to supplement NMFS data collection work.

River as a possible adverse "Habitat Capacity and Environmental Change" that could have adversely affected CI beluga population levels. See Id. at page 26. The Plan should discuss physical changes to habitats that historically were used by the CI beluga population, particularly those areas which may have provided good forage areas for CI beluga to find prey species.

³⁹ Draft Plan, Appendix C.

⁴⁰ It is unclear from the Stranding Plan what entities comprise the Turnagain Arm Stranding Response Network. Also, Girdwood & Anchorage Emergency Response personnel now use fire hoses to free humans stuck in the mudflats, and such equipment could be used to cool belugas left stranded for long periods in warm weather.

3. Subsistence Harvest

Commenters strongly support Government-to-Government consultations between NMFS and Cook Inlet Native Tribes on stock co-management issues, and encourage NMFS to increase the number and frequency of aerial surveys and video analyses.⁴¹

4. Commercial Fishing

Commenters agree NMFS should closely interact with the Alaska Board of Fisheries, and that NMFS should weigh in with data and policy information on BOF decisions that may affect beluga whales and their prey. Commenters also agree NMFS should immediately commence studies to better understand beluga prey species, including potential anthropogenic impacts to prey and their habitats.

5. Vessel Traffic

As previously discussed, NMFS reliance on a single one-month study to conclude large vessel noise poses few or no risks to whales is misplaced. NMFS should immediately commence additional acoustic studies that analyze both large and small vessel traffic patterns, especially with larger ships now entering Upper Cook Inlet ports, and their effects on whale behavior and distribution. Management responses, including speed limits and “no transit zones” should be listed in the Final Plan. Furthermore, while whale tagging efforts provide invaluable information, the tagging process and subsequent tag conveyance by whales poses heightened risk of stress to whales. Accordingly, NMFS should discuss within the Workshop and Recovery Team discussed in section D.9 the relative costs and benefits of tagging versus enhanced aerial surveys.

6. Tourism & Whale Watching

As the Draft Plan notes, there appear to be no current commercial beluga whale watching activities in Upper Cook Inlet, and while conditions in the Upper Inlet suggest such activities would be extremely challenging, Commenters support the adoption of protective guidelines for whale watching.

7. Noise

See comment above (additional acoustic studies necessary). Upon the adoption of noise criteria that accurately reflect the unique conditions of Upper Cook Inlet, NMFS must go further than standard “recommendations” against potentially harmful activities, and instead must employ its existing MMPA authorities to permit, mitigate or halt all activities that have a reasonable potential of harassing beluga whales.

⁴¹ To date, NMFS has only one year of continuous monthly aerial surveys, and Commenters strongly recommend continuous monthly aerial surveys for the next five years. This data will prove invaluable in ensuring accurate abundance estimates.

8. Oil & Gas

See above comments. In light of the myriad possible risks posed by the oil and gas industry to beluga whales, Commenters urge NMFS to engage industry in an ongoing dialogue. Commenters agree oil and gas surface entry activities should not occur in high value habitats,⁴² and strongly urge NMFS to press for the cessation of routine toxic dumping practices. Commenters again note the importance for NMFS to develop stringent, enforceable policies on the use of seismic techniques in Upper and Middle Cook Inlet, especially during winter months.

9. Research

Commenters make no specific comments on the Research Plan other than to say it is relatively comprehensive and, if fulfilled, would go a long way toward helping promote whale recovery. We recommend that the additional research areas identified throughout these comments be added to the Final Plan. Furthermore, Commenters again stress the need to fully fund the projects in the Research Plan, the majority of which currently have little or no dedicated funds. Importantly, the Draft Plan does not identify potential funding sources for necessary research and management. As a result, NMFS officials at the highest levels should immediately begin crafting congressional requests for at least \$20 million per year over the next 5 years. To complement this effort (and to refine the need for financial support), NMFS should immediately convene a workshop of experts and working scientists to review the priorities and funding needs identified in the "Cook Inlet Beluga Whale Cost Implementation Schedule,"⁴³ to refine and finalize the schedule, and to assist policymakers and congressional staff in understanding the pressing need to fully fund the Draft Plan's research and management efforts.⁴⁴ Furthermore, this Expert/Scientist Workshop should identify and recommend discrete, concrete mechanisms for measuring the success/challenges for Final Plan implementation – without such a plan for measuring concrete outcomes, the efficacy of the Final Plan will be impossible to gauge.

10. Oil Spills

NMFS should participate in the Coast Guard's upcoming shipping safety risk assessment for Cook Inlet/Aleutian Chain, and should work with the Cook Inlet Regional Citizens Advisory Council to identify and prompt the replacement of oil pipelines that pose an unacceptable risk of leaks or spills.

⁴² As discussed above, the accurate delineation of high value habitats is critical to make the no surface entry policy meaningful.

⁴³ Draft Plan, p. 78. This Expert/Scientist Workshop should include groups and individuals within and outside NMFS/NMML, to ensure an appropriate mix of institutional knowledge and fresh perspectives. Workshop participants should also be considered in the formation of a "Cook Inlet Beluga Whale Recovery Team," that will retain an active and regular role in implementing and periodically revising the Final Plan.

⁴⁴ Additionally, Draft Plan Appendix F (Publications & Reports) should be amended to include a more comprehensive overview of general beluga whale science and policy literature, including studies on seismic, pollution, habitat, human interaction and similar effects.

11. Enforcement

The 2002 Enforcement Plan included in the Draft Plan provides a good framework to ensure compliance with the MMPA. However, it can be improved by adding specific information on who will conduct air, boat and vehicle patrols and when, and specifically how NMFS will interface with citizens and community groups to enhance enforcement oversight.⁴⁵

12. Outreach & Education

Commenters support NMFS management actions to develop an education strategy, enhance stakeholder participation, create a community education program and coordinate with other organizations.

13. Marine Discharges & Pollution

Commenters appreciate NMFS's stance to "recommend denial" for NPDES permits in high value whale habitat, but again, the delineation of such habitat becomes an integral element of this policy.⁴⁶ Commenters recommend NMFS incorporate in the Final Plan waste stream characterizations for all major NPDES discharges in what is now defined as Type 1, 2 or 3 habitat, to allow NMFS and other scientists and experts to better approximate direct, indirect and cumulative risks to the whale and its habitat from pollution discharges. If NMFS finds that such discharges pose unacceptable risks to the whale or its prey or habitat, it should invoke its existing statutory authority under the MMPA to eliminate or reduce the problematic constituents of such discharges. Finally, the Draft Plan is silent on ballast water discharges from large ships, including cruise ships, tankers and cargo vessels, which can introduce non-indigenous species to whale habitat. The Final Plan should include research and management strategies to address possible pathogen vectors, habitat and related issues from such sources.⁴⁷

14. Knik Arm Development

Commenters support NMFS efforts to regulate construction noise and to prohibit impinging causeways in Knik Arm. Aside from these provisions, however, the Draft Plan simply advocates more of the same – i.e. consultation, monitoring, etc. In light of the apparent growing importance of Knik Arm to the entire Cook Inlet beluga whale population, Commenters urge NMFS to establish discrete protected areas within Knik

⁴⁵ For example, NMFS enforcement staff should coordinate with citizens working to implement the Cook Inlet Beluga Watch Project, which encourages citizens, businesses and groups to report beluga sightings and incidents of harassment. Contact Cook Inlet Keeper at 907.235.4068 ext. 22 for more information.

⁴⁶ As previously discussed, if Type 1 habitat lines are drawn to exclude the largest pollution discharges in Cook Inlet (i.e. oil and gas and sewage treatment), then the policy statement is rendered meaningless.

⁴⁷ For example, ConocoPhillips, in conjunction with Marathon, have been shipping Liquid Natural Gas (LNG) to Tokyo for over twenty years, with at least two tankers per month over that time period emptying ballast water from Tokyo Bay into Middle Cook Inlet at Nikiski.

Arm, within in which development and other commercial activities would fall as lower priorities to beluga whale protection.

15. Legal & Administrative Conservation Measures

The Final Plan should include discrete “action threshold triggers” that identify specific management actions NMFS will take if the CI beluga stock dips below certain pre-ascertained levels. The importance of this comment cannot be overstated: without discrete triggers to prompt specific actions, the Draft Plan will remain a passive document devoid of the policy and enforcement hand-holds needed to promote true beluga whale recovery. These triggers should be a central topic for discussion at the expert/scientist workshop identified in section D.9 (above).

E. *Need to Identify Funding Sources*

Many of the research and management items outlined in the Conservation Strategy lack funding. Commenters appreciate the difficulty in procuring appropriations for such efforts, but submit that the dire circumstances of the whale necessitate immediate and substantial support. In light of the federal funding for the Steller sea lion work in Alaska, NMFS should immediately ask Congress for no less than \$20 million per year over the next 5 years to manage and research the Cook Inlet beluga whale stock. Furthermore, the Knik Arm crossing presents an opportunity to seek study monies, using Section 112(c), 16 U.S.C. § 1382(c), which allows the Secretary to enter into cooperative agreements and contracts with other agencies in order to carry out the purposes of the Act. A continued piecemeal approach to whale research and management will no longer suffice, and NMFS must immediately begin the process to receive considerably more support during the next relevant congressional appropriation.

F. *Agency Cooperation*

Section 112(b) of the MMPA indicates that each federal agency “is directed to cooperate with the Secretary in such manner as may be mutually agreeable” to carry out the Act.⁴⁸ Yet the Draft Plan proposes few if any specific protective measures that require the Secretary to seek cooperation from other federal agencies. Accordingly, NMFS should immediately enter agreements with relevant federal agencies – including but not limited to MARAD, DOI, USFWS, USCG, EPA, Army Corps and others – to ensure enhanced protection measures are in place for issues and/or development projects falling outside NMFS direct jurisdiction.

III. CONCLUSION

As Dr. Daniel Goodman rightly noted:

Time is of the essence in population recovery [for the Cook Inlet beluga whale], because harmful genetic effects accrue at low population sizes,

⁴⁸ 16 U.S.C. § 1382(b).

the population will be vulnerable to random environmental disturbances that raise the probability of extinction at low population sizes, and while the population is at low population sizes it may not be functioning fully in its usual role in the ecosystem, contrary to the declared policy of the Marine Mammal Protection Act, and with possible adverse consequences for recovery.⁴⁹

It has been 5 years since NMFS listed the Cook Inlet beluga whale stock as “depleted” under the MMPA. According to agency scientists speaking on the condition of anonymity, the Cook Inlet beluga whale population has “flat lined” – i.e. it is not recovering with the marked decrease in Native subsistence hunting as previously predicted. Accordingly, the undersigned groups urge NMFS in the strongest possible terms to take the immediate actions noted above, and to begin a serious and committed effort to recover this magnificent but severely depleted stock of white whales.

Thank you for the opportunity to comment, and please feel free to contact me at 907.235.4068 ext 22 or bob@inletkeeper.org with any questions, feedback or recommendations.

Very truly yours,



Bob Shavelson
Cook Inlet Keeper

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⁴⁹ Goodman Testimony, p.3 (emphasis added).

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