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### Re: Proposed Incidental Harassment Authorizations for Construction at the Port of Alaska NES<sub>1</sub> Project

On behalf of the Center for Biological Diversity, these comments oppose the proposed incidental take authorization and one-year extension for construction and associated activities related to the NES<sub>1</sub> Project, which is part of the Port of Alaska Modernization Program. The proposed actions will further imperil the already critically endangered Cook Inlet beluga whale. While it is important to address safety risks at the Port, we oppose the Service's failure to adequately protect Cook Inlet beluga whales. The Service should not issue this authorization without first conducting a programmatic Environmental Impact Statement and Biological Opinion.

The take authorization proposed here threatens the very survival of this iconic beluga whale. The removal of even one endangered Cook Inlet beluga whale will impede the recovery of this species.<sup>1</sup> We cannot stress enough that most of the proposed activities should not be authorized until and unless the National Marine Fisheries Service can ensure that take will not impede the survival and recovery of the Cook Inlet beluga whale population. Cook Inlet beluga whales are in trouble, and they have shown no signs of recovery since they were protected under the Endangered Species Act.<sup>2</sup> There are an estimated 331 Cook Inlet beluga whales, and changes in survey methods bring into question the approach of determining any trend in population status.<sup>3</sup> Recent advancements in integrated population modeling confirmed the negative trend in the Cook Inlet beluga population.<sup>4</sup> The results indicate that low survival may be impeding

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<sup>&</sup>lt;sup>1</sup> Muto, M., Stock Assessment Report: Beluga Whale (*Delphinapterus leucas*) Cook Inlet Stock (Dec. 30, 2021). <sup>2</sup> Valdivia, Abel, et al. (2019) Marine mammals and sea turtles listed under the U.S. Endangered Species Act are recovering, PLoSONE 14(1): e0210164.

<sup>&</sup>lt;sup>3</sup> NOAA, Abundance and Trend of Belugas (Delphinapterus Leucas) in Cook Inlet, Alaska, June 2021 and June 2022 (2023).

<sup>&</sup>lt;sup>4</sup> Jacobson, E. K., Boyd, C., McGuire, T. L., Shelden, K. E., Himes Boor, G. K., & Punt, A. E. (2020). Assessing cetacean populations using integrated population models: an example with Cook Inlet beluga whales30(5) Ecological Applications e02114, at 1, 8, 9 (2020).

recovery.<sup>5</sup> A population viability analysis estimates that the population will decline at an average rate of 1.6% per year in the coming decades.<sup>6</sup>

Noise is one of the primary threats to Cook Inlet belugas since harvest has ceased.<sup>7</sup> The Marine Mammal Commission has repeatedly recommended, and specifically recommended for Port of Alaska construction activities, that the Service "defer issuance of the final incidental harassment authorizations to [Port of Alaska] or any other applicant proposing to conduct sound-producing activities in Cook Inlet until [it] has a reasonable basis for determining that authorizing any additional incidental harassment takes of Cook Inlet beluga whales would not contribute to or exacerbate the stock's decline."<sup>8</sup>

The proposed incidental harassment authorization would allow marine mammal takes from construction of an end-state embankment and removal of old infrastructure. The project includes vibratory installation and removal of 81 piles and vibratory removal of 4,216 sheet piles. The pile driving activities could occur up to 110 days between April through November.

The Service's authorizations of Cook Inlet beluga take are impeding its survival and recovery, and it must conduct a comprehensive analysis of all Cook Inlet beluga take. The proposal estimates 362 instances of Level A and Level B take of seven species of marine mammals, including 72 instances of take of endangered Cook Inlet beluga whales. This proposed authorization is only one among several that are port of the Modernization Program for the Port of Alaska. In 2020, the Service gave the Port of Alaska authorization to for 90 instances of take of endangered Cook Inlet beluga whales for construction of the cement and petroleum terminal. In fact, as of December 31, 2020, NMFS authorized *nearly 120,000 takes* of Cook Inlet belugas from 2017 to 2025. In 2020 alone, NMFS authorized the equivalent of 50 percent of the entire Cook Inlet beluga whale population to be "incidentally" harassed by industrial projects in the Inlet, such as oil and gas development and pile driving activities.<sup>9</sup>

#### 1. The Service must comply with the Marine Mammal Protection Act

#### a. The Service's negligible impact determination is arbitrary and capricious

The Service's negligible impact determination is flawed. Notably, the authorization for take of critically endangered Cook Inlet beluga whales may contribute to their continued decline and impedes their recovery. As stated previously, the concerns are so great that the Marine Mammal Commission has warned the agency to defer any authorizations for take of Cook Inlet beluga whales. The Service has decided to ignore this recommendation and instead proceed (without the

<sup>&</sup>lt;sup>5</sup> *Id*.

<sup>&</sup>lt;sup>6</sup> Warlick, A. J. et al., Identifying Demographic and Environmental Drivers of Population Dynamics and Viability in an Endangered Top Predator Using an Integrated Model, *Animal Conservation* (2023).

<sup>&</sup>lt;sup>7</sup> National Marine Fisheries Service, Recovery Plan for the Cook Inlet Beluga Whale (*Delphinapterus leucas*) (Dec. 2016).

<sup>&</sup>lt;sup>8</sup> Marine Mammal Commission letter to Ms. Jolie Harrison, National Marine Fisheries Service, Comments on Proposed Incidental Harassment Authorization and Possible Renewal for Port of Alaska's Petroleum and Cement Terminal, Anchorage, Alaska, 4 (Jan. 23, 2020).

<sup>&</sup>lt;sup>9</sup> Migura, M. & Bollini, C. To take or not take? Examination of the status quo process for issuing take authorizations of endangered Cook Inlet beluga whales and implications for their recovery, *Conservation Science and Practice*, e590 (2021).

reasonable basis advised by the Commission) to approve activities that will have a greater than negligible impact on Cook Inlet belugas.



**Fig. 1 Population-level trends of cetacean marine mammals listed under the ESA.** Trend lines (gray area: 95% confidence interval) are loess curves with span of 0.5 to aid in visual representation. Grey dots are estimated number of individuals. Panels are organized by decreasing length of time listed and then in alphabetical order based on species names. Dashed vertical red lines indicate the year of ESA listing.

The Service fails to substantiate its assumption that impacts are negligible because Cook Inlet beluga whales remained in the area during similar construction activities. While it acknowledges that behavior changes were observed and anticipates masking, disturbance, and other harassment it nonetheless concludes that there will be negligible impact on Cook Inlet beluga whales and other marine mammals.

The impacts of pile driving on beluga whales has been underestimated. Pile driving threatens marine mammals by potentially displacing them from key foraging habitat, causing hearing loss, masking communications, and interfering with natural behaviors. Modeling showed that pile driving could mask strong bottlenose dolphin vocalizations 10-15 km from the source.<sup>10</sup> A recent study determined that beluga whales exhibited behavioral responses to vessel noises that were 50 to 79 kilometers away.<sup>11</sup> Pile driving has adverse effects on behavior and foraging of beluga whales.<sup>12</sup> Bailey et al. measured 205 dB of broadband sound at 100 meters from one pile-driving source.<sup>13</sup> Some marine mammals have been observed to avoid areas where pile driving was occurring and staying away for more than three days after those activities ceased.<sup>14</sup> A resident population, like the Cook Inlet beluga whale, is particularly vulnerable to the impacts from high-intensity noise.<sup>15</sup>

<sup>&</sup>lt;sup>10</sup> David, J.A. (2006) Likely sensitivity of bottlenose dolphins to pile-driving noise, *Water and Environment Journal* 20, pp. 48-54.

<sup>&</sup>lt;sup>11</sup> Martin, Morgan J. et al., Exposure and Behavioral Responses of Tagged Beluga Whales (*Delphinapterus Leucas*) to Ships in the Pacific Arctic, 39 *Marine Mammal Science* 2 (2023)

<sup>&</sup>lt;sup>12</sup> Saxon Kendall, Lindsey & Cornick, Leslie, Behavior and distribution of Cook Inlet beluga whales, Delphinapterus leucas, before and during pile driving activity. Marine Fisheries Review, 77, 106-114 (2016).

<sup>&</sup>lt;sup>13</sup> Bailey, Helen, *et al.* (2010) Assessing underwater noise levels during pile-driving at an offshore windfarm and its potential effects on marine mammals, *Marine Pollution Bulletin* 60, pp. 888. Note, however, that the thresholds used for TTS and PTS in this study are not stringent enough.

<sup>&</sup>lt;sup>14</sup> Leunissen, E. M., Rayment, W. J. and Dawson, S. M. (2019) Impact of pile-driving on Hector's dolphin in Lyttelton Harbour, New Zealand, *Marine Pollution Bulletin* 142(January), pp. 31–42.

<sup>&</sup>lt;sup>15</sup> Forney, K. A. *et al.* (2017) Nowhere to go: noise impact assessments for marine mammal populations with high site fidelity. *Endanger. Species Res.* 32, 391–413.

The Service's take estimates fail to explain how it accounts for pods of animals, which may result in higher take than anticipated. Cook Inlet beluga whales aggregate in large groups when rearing calves and feeding.<sup>16</sup> Some groups can be between 61 and 313 whales.<sup>17</sup> Thus, exposure by one pod of whales to harassment by the construction could far exceed the take authorized or anticipated. Furthermore, the Service improperly discounts the estimated take with a 59% adjustment based on one data point from the PCT project marine monitoring program. The analysis should be done on the take estimated and then describe the impact of mitigation.

The proposed incidental harassment authorizations likely underestimate take of beluga whales, which are highly sensitive to noise. One study shows that wild beluga whales have sensitive hearing.<sup>18</sup> The Service here uses thresholds of 120 dB re 1 $\mu$ Pa (rms) for continuous and 160 dB re 1 $\mu$ Pa (rms) for impulsive or intermittent sources. These are insufficiently conservative to protect Cook Inlet beluga whales. At minimum, the Service should use a 120 dB threshold for all sound sources. Additionally, the Marine Mammal Commission commented that the Service has underestimated the Level B harassment zones, and thus needs to extend the zones and revise its analysis accordingly.<sup>19</sup>

The Service should undertake analysis using the recent framework created by experts on how to assess risk of anthropogenic disturbances on marine mammals. In a 2023 paper, Southall et al. describe a species- and activity-specific framework that can be used to determine the vulnerability of marine mammals to noise disturbance.<sup>20</sup>

The areas adversely affected by the proposed activities are important for Cook Inlet beluga whales. Knik Arm is one of three areas in upper Cook Inlet where beluga whales concentrate during spring, summer, and early fall. The Service acknowledges that areas of critical habitat for Cook Inlet belugas will be ensonified by the proposed activities, yet the Service's negligible impact fails to adequately consider the adverse impacts to critical habitat. Critical habitat is defined as the area *essential* to the conservation and recovery of a species. Notably, the critical habitat rule for Cook Inlet beluga whales includes the acoustic environment as an *essential* physical feature for beluga whales.<sup>21</sup> The Service has noted the importance of sound to Cook Inlet belugas:<sup>22</sup>

Beluga whales are known to be among the most adept users of sound of all marine mammals, using sound rather than sight for many important functions, especially

<sup>&</sup>lt;sup>16</sup> McGuire, Tamara L. et al., Distribution and Habitat Use by Endangered Cook Inlet Beluga Whales: Patterns Observed during a Photo-identification Study, 2005–2017, 30 *Aquatic Conservation: Marine and Freshwater Ecosystems* 12 (2020)

<sup>&</sup>lt;sup>17</sup> *Id*.

<sup>&</sup>lt;sup>18</sup> Mooney, T. Aran, et al. (2018) Variation in Hearing within a Wild Population of Beluga Whales (Delphinapterus Leucas) Journal of Experimental Biology, 221: jeb171959.

<sup>&</sup>lt;sup>19</sup> Marine Mammal Commission at 6-7 (2020).

<sup>&</sup>lt;sup>20</sup> Southall, Brandon L. et al., Managing Human Activity and Marine Mammals: A Biologically Based, Relativistic Risk Assessment Framework, 10 *Frontiers in Marine Science* (2023)

<sup>&</sup>lt;sup>21</sup> National Marine Fisheries Service, Designation of Critical Habitat for Cook Inlet Beluga Whale, 74 Fed. Reg. 63080 (Dec. 2, 2009)

in the highly turbid waters of upper Cook Inlet. Beluga whales use sound to communicate, locate prey, and navigate, and may make different sounds in response to different stimuli. Beluga whales produce high frequency sounds which they use as a type of sonar for finding and pursuing prey, and likely for navigating through ice-laden waters. In Cook Inlet, beluga whales must compete acoustically with natural and anthropogenic sounds.

The incredibly complex calls with combined calls of Cook Inlet belugas are believed to be important for group cohesion.<sup>23</sup> Thus, masking of certain parts of the call can also have impacts on the group. The Service itself marks "[r]educing in-water noise as an especially important focal effort due to the importance of hearing to the Cook Inlet belugas' survival in the extraordinarily turbid waters of Cook Inlet."<sup>24</sup> Thus, its determination that the noise from these construction activities is negligible is insufficiently supported.

Further, the area that will be ensonified includes biologically important areas for Cook Inlet belugas. The Service states that it has reduced impacts to biologically important areas, however, the proposed project does not avoid or impose any specific mitigation for this year-round biologically important area.<sup>25</sup> The impacts to these key habitat areas need to be considered by the Service in making its negligible impact determination.



Fig. 2. Cook Inlet beluga (*Delphinapterus leucas*) small and resident population biological important areas (BIAs). These BIAs were substantiated through boat-based and aerial survey data, acoustic recordings, satellite-tagging data (Cook Inlet only), traditional ecological knowledge, photo-identification data, and genetic analyses. Both areas are considered BIAs during the entire year.

The Service should have analyzed the potential impact on feeding of preferred prey in making its determination. According to researchers, "[f]or Cook Inlet belugas, it could be that underwater noise reduces foraging opportunities in situations where prey availability is already diminished,

<sup>24</sup> National Marine Fisheries Service, Species in the Spotlight—Cook Inlet Beluga, Priority Actions: 2021–2025.

<sup>&</sup>lt;sup>23</sup> Brewer, A., et al. Communication in Cook Inlet beluga whales: Describing the Vocal Repertoire and Masting of Calls by Commercial Ship Noise, 154 J. Acoust.Soc. Am 3500 (2023).

<sup>&</sup>lt;sup>25</sup> Ferguson et al. (2015) Biologically Important Areas for Cetaceans Within U.S. Waters – Gulf of Alaska Region, Aquatic Mammals; Wild, Lauren A. et al., Biologically Important Areas II for Cetaceans within U.S. and Adjacent Waters – Gulf of Alaska Region, 10 *Frontiers in Marine Science* 1 (2023).

hindering the recovery of the population after decades of hunting pressure."<sup>26</sup> The Cook Inlet belugas have a preference for Susitna River Delta feeding during eulachon and salmon run periods.<sup>27</sup> Analysis of the feeding behavior of beluga whales may influence the peak timing for Cook Inlet belugas to be near port construction. Scientists have concluded that reproductive success of Cook Inlet beluga whales is tied to feeding on salmon in the Deshka River, and the importance of prioritizing management actions to ensure access to these salmon runs.<sup>28</sup> During these peak feeding times the noise from construction is also more likely to interfere with echolocation needed to locate prey.

#### b. Small numbers determination

The Service's small numbers determination is flawed even accepting the agency's approach to making its determination. Here, the Service decided that as long as the number is less than one-third of the species or stock abundance, the take is considered to be of small numbers. Given the small population and documented decline of belugas, the Service cannot rationally argue that 22 percent of the stock is a small number. Courts have concluded that "[a] definition of 'small number' that permits the potential taking of as much as 12% of the population of a species is plainly against Congress' intent."<sup>29</sup>

The Service's definition of small numbers also conflates this criterion with the negligible impact requirement. Although the Service uses different headings for its small numbers and negligible impact findings, by defining small numbers to be relative to the overall population the criterion ends up being similar to the negligible impact finding. Instead, the small numbers requirement is intended to protect individual marine mammals. As the Ninth Circuit stated in Center for Biological Diversity v. Salazar, "[1]egislative history confirms our reading of the statute if such confirmation is needed. The House Report accompanying Section 101(a)(4)-(5) of the MMPA indicates that Congress intended "small numbers" and "negligible impact" to serve as two separate standards."<sup>30</sup> The requirement that the Service authorize the take of only "small numbers" of individual animals is no mere technicality. Congress's intent was that the MMPA protect not only populations, but individual marine mammals.<sup>31</sup> While the "negligible impact" standard should serve to protect the species or population as a whole, the "small numbers" requirement guarantees that Congress's directive to protect individual marine mammals is carried out. The incidental harassment authorizations here violate the MMPA because it does not guarantee that only small numbers of Cook Inlet beluga whales and the other marine mammals impacted by the Port of Alaska's activities will be taken.

<sup>&</sup>lt;sup>26</sup> Warlick 2023.

<sup>&</sup>lt;sup>27</sup> Castellote, Manuel et al., Beluga Whale (Delphinapterus Leucas) Acoustic Foraging Behavior and Applications for Long Term Monitoring, 16 *PLOS ONE* 11 (2021)

<sup>&</sup>lt;sup>28</sup> Norman, Stephanie A. et al., Relationship between per Capita Births of Cook Inlet Belugas and Summer Salmon Runs: Age-structured Population Modeling, 11 *Ecosphere* 1 (2020)

<sup>&</sup>lt;sup>29</sup> Natural Res. Def. Council v. Evans, 279 F. Supp. 2d 1129, 1152 (N.D. Cal. 2003).

<sup>&</sup>lt;sup>30</sup> Center for Biological Diversity v. Salazar, 695 F.3d 893 (9th Cir. 2012).

<sup>&</sup>lt;sup>31</sup> See 16 U.S.C. § 1362 (18)(A) (definition of "harassment" expressly applies to acts that affect "a marine mammal or marine mammal stock in the wild."); see also Natural Res. Def. Council v. Evans, 364 F. Supp. 2d at 1109 ("In expressing concern about harassment to 'a marine mammal,' Congress was concerned about harassment to individual animals.").

In sum, the Service may not rely on its flawed small numbers analysis.

### c. The Service should reconsider least practicable adverse impact

The Service has failed to implement "means of effecting the least practicable impact"<sup>32</sup> on marine mammals. The Service relies on visual monitoring that is known to be ineffective and inadequate to protect marine mammals. Lookouts are not as effective in mitigating acoustic impacts as time-area restrictions.<sup>33</sup>

Finally, the Service failed to consider many other mitigation measures to reduce the proposed activities' impacts to the least practicable level.

*Bubble Curtain:* Bubble curtains were required to reduce noise for other Port of Alaska pile driving and removal activities. The Port and Service claim that this mitigation is not practicable here because of spacing and safety concerns. However, the bubble curtain could be placed beyond the construction area, and the Service could consider other noise mitigation technologies such as pile caps, dewatered cofferdams, and other physical barrier mitigation.

*Limit on cumulative beluga whale takings in Cook Inlet:* The Service should place an overall cap on authorizations for Cook Inlet beluga whale incidental take. The various construction, vessel traffic, oil and gas, and other activities are cumulatively threatening the conservation and recovery of Cook Inlet beluga whales. An overall limit on taking beluga whales for all activities needs to be set.

*Time-area restrictions*: The Service should consider time restrictions during months, August through October, when Cook Inlet beluga whales frequent the project area. The Service must not allow pile driving during times when beluga whales aggregate in the area. The Service should also consider time area restrictions that would further mitigate impacts to beluga whales and other marine mammals.

*Passive acoustic monitoring:* The Service should require passive acoustic monitoring for marine mammals. The Service should well know that visual monitoring to avoid impacts to marine mammals is insufficient mitigation.

Larger exclusion zones: The Service should require larger exclusion zones.

*Sound source verification:* The Service should require that the in-situ, sound-source verification be used to ensure that the Level A and Level B zones are sufficient.

Avoid overlapping one-year renewals: The proposal includes the possibility of a one-year renewal. The potential extension should require new permitting and programmatic analysis of impacts.

<sup>&</sup>lt;sup>32</sup> *Id.* at § 1371(a)(5)(A)(ii)(I).

<sup>&</sup>lt;sup>33</sup> NRDC v. Pritzker 828 F.3d 1125, 1133 (9th Cir. 2016), Conserv. Council of Hawaii v. National Marine Fisheries Serv., 97 F. Supp. 3d 1210, 1230 (D. Haw. 2015).

## d. The proposed activities will have an unmitigable adverse impact on subsistence uses.

The proposed action may have an adverse impact on the availability of beluga whales, harbor seals, and Steller sea lions for Native Alaskan subsistence harvest. For example, the authorization to take 72 endangered Cook Inlet belugas has an adverse impact on subsistence use, which is suspended due to conservation concerns. Limits on the harvest of beluga whale are in place because of their low population and lack of recovery. The proposed activities are stressors on beluga whales, which will contribute to their imperilment. Therefore, any take of beluga whales has an adverse impact on their availability for subsistence use and must be fully mitigated.

Additionally, the proposed rule should require consultation with Native Alaskan communities to ensure adequate mitigation for subsistence harvest for harbor seals and Steller sea lions. The Service must not allow unmitigatable adverse impacts on subsistence use of marine mammal stocks.<sup>34</sup>

## 2. The Service must prepare a programmatic environmental impact statement (EIS) for its Cook Inlet beluga whale take authorizations

NEPA's implementing regulations specifically call for a programmatic EIS in certain circumstances. As explained by the NEPA regulations, "[e]nvironmental impact statements may be prepared, and are sometimes required, for broad Federal actions such as the adoption of new agency programs or regulations. Agencies shall prepare statements on broad actions so that they are relevant to policy and are timed to coincide with meaningful points in agency planning and decisionmaking."<sup>35</sup> The regulations advise that when preparing programmatic EISs, agencies can evaluate the action using a few different criteria, for example, "[g]eographically, including actions occurring in the same general location, such as a body of water, region, or metropolitan area," as well as "[g]enerically, including actions which have relevant similarities, such as common timing, impacts, alternatives, methods of implementation, media, or subject matter."<sup>36</sup>

On October 14, 2014, the Service announced its intent to prepare a programmatic EIS under NEPA to analyze the effects of issuing authorizations for the incidental take of marine mammals from activities occurring in both the state and federal waters of Cook Inlet, Alaska.<sup>37</sup> This notice of intent proposed to analyze the effects of "issuing take authorizations for the incidental take of marine mammals from activities occurring in both the state and Federal waters of Cook Inlet, AK, from Knik Arm in the northern part of the Inlet to the southern edge of Kachemak Bay on the southeastern part of the Inlet and to the southern edge of Cape Douglas on the southwestern part of the Inlet."<sup>38</sup>

<sup>&</sup>lt;sup>34</sup> 16 U.S.C. § 1371(a)(5)(A)(i)(I).

<sup>&</sup>lt;sup>35</sup> 40 C.F.R. § 1502.4(b).

 <sup>&</sup>lt;sup>36</sup> *Id.* § 1502.4(c)(1), (2); Memorandum from Michael Boots, Council on Environmental Quality, to Heads of Federal Departments and Agencies, Effective Use of Programmatic NEPA Reviews (Dec. 18, 2014), at 6.
<sup>37</sup> Notice of Intent to Prepare an Environmental Impact Statement on the Issuance of Take Authorizations in Cook Inlet, Alaska, 79 Fed. Reg. 61,616 (Oct. 14, 2014).

<sup>&</sup>lt;sup>38</sup> *Id.* at 61,617.

The Service recognized the value of analyzing "multiple activities over multiple years," which would provide "a comprehensive decision-support tool for [the Service], allowing us to address cumulative effects over a longer time frame, consider a wider range of reasonable alternatives consistent with our statutory mandates, and analyze a wider range of practicable mitigation and monitoring measures for protecting marine mammals and the availability of marine mammals for subsistence uses."<sup>39</sup>

Nine years ago, the Service understood the need to undertake a comprehensive analysis of the impacts of take authorizations on Cook Inlet beluga whales. Yet the agency kept issuing take authorizations without this analysis and while the Cook Inlet beluga population continued its decline. Given the state of the population, this assessment is grossly overdue. The Service must revive and expand upon what it began in 2014 and prepare a programmatic EIS to analyze the environmental effects of authorizing take of Cook Inlet beluga whales from all activities in state and federal waters in Cook Inlet, Alaska.<sup>40</sup>

Additionally, in the Recovery Plan for Cook Inlet belugas the Service identified three threats of high relative concern to belugas and their habitat: the risk of a catastrophic event (such as an oil spill); noise disturbance from a range of vessels and activities in the Inlet; and the cumulative effects of multiple stressors. Based on the particular concern surrounding cumulative effects, a central recommendation of the plan is to revise how the agency authorizes beluga take and recommends a "review [of] the current system for allocation of takes (by harassment) of CI belugas to see if a comprehensive approach, rather than by individual project, increases managers' ability to reduce the cumulative effects of harassment takes by numerous projects."<sup>41</sup>

The Service must complete a comprehensive analysis of all its activities authorizing Cook Inlet beluga whale take in a single programmatic EIS. At minimum, the Port of Alaska Modernization Program should be analyzed in a single NEPA review that considers all cumulative, indirect, and direct environmental effects. The Service has already segmented analysis of the Cement Terminal and South Floating Dock and, here, the NES<sub>1</sub> construction. The subsequent phases of the program include construction of two cargo terminals, a petroleum terminal, and NES<sub>2</sub>. Each of these phases will further imperil endangered Cook Inlet belugas and must be considered together.

## **3.** The draft Environmental Assessment fails to comply with the requirements of the National Environmental Policy Act.

### a. The Service must prepare a full Environmental Impact Statement

The Service must prepare a full environmental impact statement (EIS) for this proposed action and circulate it for public notice and comment before finalizing the proposed incidental harassment authorizations. The draft Environmental Assessment is inadequate to fulfill the Service's duties under the National Environmental Policy Act (NEPA). NEPA requires federal

<sup>&</sup>lt;sup>39</sup> Id.

<sup>&</sup>lt;sup>40</sup> Center for Biological Diversity, Petition to Cap Cook Inlet Beluga Whale Take Authorizations (2022).

<sup>&</sup>lt;sup>41</sup> National Marine Fisheries Service, Recovery Plan for the Cook Inlet Beluga Whale (*Delphinapterus leucas*) (December 2016) at VI-30.

agencies to prepare an EIS for all "major federal actions significantly affecting the quality of the human environment."<sup>42</sup> A full EIS is required if "substantial questions are raised as to whether a project . . . may cause significant degradation of some human environmental factor."<sup>43</sup> To trigger this requirement, the plaintiff "need *not show* that significant effects will *in fact* occur;" but rather, "raising substantial questions whether a project may have a significant environmental effect is sufficient."<sup>44</sup>

Whether an action may have "significant" impacts on the environment is determined by "the potentially affected environment and degree of the effects of the action."<sup>45</sup> The affected environment means "agencies should consider, as appropriate to the specific action, the affected area (national, regional, or local) and its resources, such as listed species and designated critical habitat under the Endangered Species Act."<sup>46</sup>

If any one of these factors is met, then the agency must prepare an EIS. Here, for example, the impacts on an endangered species like the environmentally and culturally significant Cook Inlet beluga and its designated critical habitat is sufficient to trigger a full environmental impact statement.

### b. The Environmental Assessment is inadequate

### i. The Service has failed to consider a reasonable range of alternatives

The draft Environmental Assessment fails to consider a reasonable range of alternatives by examining only the proposed action and a no action alternative. The alternatives analysis must include "a reasonable range of alternatives that are technically and economically feasible, and meet the purpose and need for the proposed action."<sup>47</sup> An alternative that should have been considered is an overall reduction in the construction planned for Port of Alaska as part of the Modernization Program, such as eliminating the petroleum terminal or cargo terminal construction. Additionally, the Service could have evaluated an alternative that limited activities to the months when Cook Inlet belugas are less likely to be in the area and prohibiting construction during August to October. This approach to alternatives fails to meet the requirements of NEPA to consider alternatives.

## ii. The draft Environmental Assessment lacks meaningful environmental and cumulative impacts analyses

The Service's description of the impacts of the project on Cook Inlet beluga whales acknowledges the potential for masking, disturbance, and possible reduced feeding, but it does not analyze what the effects of the construction impacts will be on Cook Inlet beluga whales or

<sup>&</sup>lt;sup>42</sup> 42 U.S.C. § 4332(2)(C).

<sup>&</sup>lt;sup>43</sup> *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1149-50 (9th Cir. 1998).

<sup>&</sup>lt;sup>44</sup> *Id.* (emphasis in original).

<sup>&</sup>lt;sup>45</sup> 40 C.F.R. § 1501.3(b)

<sup>&</sup>lt;sup>46</sup> 40 C.F.R. § 1501.3(b)(1).

<sup>&</sup>lt;sup>47</sup> 40 C.F.R. § 1508.1.

other marine mammals. Without sufficient support, it says that the animals will move quickly through the area and concludes that the impacts will be negligible.<sup>48</sup>

For example, the beluga whale section describes the total amount of estimated harassment for the animals, but it does not evaluate what that level of take will have on individual whales or the population. Simply restating the estimated take level does not provide the hard look that NEPA requires to promote informed decision making. The analysis fails to take into account that beluga whales travel in pods, the potential for a pod to be exposed to pile driving noise all at once, and how that impacts them. Nowhere does the draft Environmental Assessment describe the overall effect of taking critically endangered belugas 72 times other than a conclusory assumption that it is negligible. Additionally, the analysis discounts the estimated take of 121 instances of beluga whale take by a 59% adjustment factor due to mitigation without providing support for why that discount is appropriate.

The Service does not include the most recent available information about the impacts of noise on marine mammals, and new information about Cook Inlet belugas.<sup>49</sup> Cook Inlet beluga whales face many threats that are impeding their recovery, and noise is among the most important.<sup>50</sup> Beluga whales use echolocation to find their prey.<sup>51</sup> Beluga whales depend on communication for hunting and reproduction, and high-intensity noise can mask key communications that may have population level impacts that the Service has failed to consider.<sup>52</sup> Scientists measured noise in Cook Inlet, and they found that noise levels from anthropogenic activities often exceed thresholds for Cook Inlet beluga whales.<sup>53</sup> The study noted that a high concentration of noise was at Knik Arm and noted the importance of this area for foraging beluga whales.<sup>54</sup>

The draft Environmental Assessment names, but fails to evaluate the cumulative impacts on Cook Inlet beluga whales, numerous other proposed projects and ongoing activities in Cook Inlet. It fails to adequately consider the proposal to take marine mammals for the entire Port of Alaska Modernization Program and the proposed Alaska LNG project, among other reasonably foreseeable projects that must be analyzed. Moreover, the significant number of take authorized for research permits is not fully examined and combined with other authorizations to understand the cumulative impacts. It is insufficient to merely identify the other projects. NEPA requires that the Service consider the proposed activities in combination with the cumulative impacts.

There is also unpermitted take of Cook Inlet belugas that should be accounted for in the cumulative impacts analysis. Castellote (2018) documented at least two activities in April 2012 at Kenai that created noises but were not permitted even though permits should have been

<sup>&</sup>lt;sup>48</sup> Draft EA at 60.

<sup>&</sup>lt;sup>49</sup> L. Weilgart (2018), The Impact of Ocean Noise Pollution on Fish and Invertebrates; Convention on Biological Diversity (2012).

<sup>&</sup>lt;sup>50</sup> Norman et al. (2015) Potential Natural and Anthropogenic Impediments to the Conservation and Recovery of Cook Inlet Beluga Whales, Marine Fisheries Review.

<sup>&</sup>lt;sup>51</sup> Song, Zhongchang et al., Variability of Echolocation Clicks in Beluga Whales (Delphinapterus Leucas) Within Shallow Waters, 49 *Aquatic Mammals* (2023)

 <sup>&</sup>lt;sup>52</sup> Erbe, Christine, Colleen Reichmuth, Kane Cunningham, Klaus Lucke, and Robert Dooling. Communication Masking in Marine Mammals: A Review and Research Strategy. Marine Pollution Bulletin 103: 15–38 (2016).
<sup>53</sup> Castellote, Manuel et al. (2019) Anthropogenic Noise and the Endangered Cook Inlet Beluga Whale,

Delphinapterus leucas: Acoustic Considerations for Management, Marine Fisheries Review. <sup>54</sup> *Id.* 

required, concluding that activities involving important acoustic disturbances within beluga critical habitat are occurring without prior evaluation of their potential impact.<sup>55</sup> Further, activities proceeding under the Nationwide Permit for the Port do not appear to have take authorizations. McGuire et al. (2020) analyzed Cook Inlet beluga whale photographs and stranding records to determine the prevalence of scars indicative of anthropogenic trauma, and classified these scars according to their likely sources (e.g., entanglements, vessel strikes, puncture wounds, and research) and found that over one-third of the individuals in the examined dataset had scars indicative of human-caused trauma.<sup>56</sup> They conclude the medium rank of unauthorized takes was too low and did not consider many factors, namely, how (1) the low carcass recovery rate, especially of younger animals that may sink after death, precludes knowledge of the true extent of anthropogenic-caused trauma and mortality, and (2) long-term effects from anthropogenic-caused injury may lead to a reduced lifespan or reduced reproduction in animals that survive traumatic events.<sup>57</sup> They also found that females had more scars indicative of anthropogenic trauma than males and that males may be more prone to death from anthropogenic trauma due to accumulation of other stressors (e.g., higher contaminant accumulation).<sup>58</sup>

Additionally, the draft Environmental Assessment's consideration of climate change is inadequate and fails to discuss the impact of the proposed activities on climate change in Cook Inlet. The proposed project is for cement and petroleum, the products that contribute the most carbon pollution. The Service acknowledges climate change, it's conclusion that the impacts are "unclear" is insufficient to meet NEPA's requirements.

Climate change is likely to result in habitat loss or alteration for marine mammals, including Cook Inlet beluga whales. As a non-migratory population that exhibits high fidelity to summering areas and occupies a small, constricted range, Cook Inlet beluga whales may be particularly vulnerable to climate-induced habitat alteration and reduction of their prey base. This population of belugas relies largely on Pacific salmon (*Oncorhynchus* spp) runs in Cook Inlet, yet these runs are threatened by increasing water temperatures both in marine waters of Alaska and freshwater spawning habitat.<sup>59</sup> Water temperature is known to have a strong effect on the abundance and health of anadromous fish populations, with warmer than usual temperatures associated with increases in disease, depressed oxygen levels, reduced growth and reduced survival in salmonids and other fishes.<sup>60</sup>

<sup>&</sup>lt;sup>55</sup> Castellote, M., Thayre, B., Mahoney, M., Mondragon, J., Lammers, M.O., & Small, R.J. Anthropogenic Noise and the Endangered Cook Inlet Beluga Whale, *Delphinapterus leucas*: Acoustic Considerations for Management, 80(3) Marine Fisheries Review 63–88 (2018).

<sup>&</sup>lt;sup>56</sup> McGuire, T.L., Stephens, A.D., McClung, J.R., Garner, C., Burek-Huntington, K.A., Goertz, C.E.C., Shelden, K.E.W., O'Corry-Crowe, G., Himes Boor, G.K., & Wright, B.A., Anthropogenic scarring in long-term photoidentification records of Cook Inlet beluga whales, 82 Delphinapterus leucas. Marine Fisheries Review 20–40 (2020).

<sup>&</sup>lt;sup>57</sup> *Id.* at 37.

<sup>&</sup>lt;sup>58</sup> Id.

 <sup>&</sup>lt;sup>59</sup> Kyle R.E., and Brabets, T.P., Water temperature of streams in the Cook Inlet Basin, Alaska, and implications of climate change (2001) (USGS Water Resources Investigations Report 01-4109).
<sup>60</sup> See, e.g., id.

Increasing ocean acidification is also likely to impact coastal Alaskan fish populations and ultimately the marine mammals that depend on them, including Cook Inlet beluga whales. Ocean acidification is occurring more rapidly in the coastal and pelagic waters of Alaska than in tropical climates, and is likely to result in a decrease in abundance of pteropods and other shelled planktonic species, which are unable to grow as rapidly in acidic waters.<sup>61</sup> These species represent an important food source for pink salmon and other species; given the short life cycle of salmon, prey quality and availability during the juvenile stage strongly affect salmon biomass and abundance.<sup>62</sup> Studies estimate that a 10% reduction in pteropods could result in a 20% decrease in the weight of adult salmon. While the full impact of warming waters and ocean acidification on beluga prey species is difficult to predict, these changes will almost certainly be negative and the MMPA requires the agency to take a precautionary approach.

### 4. The Fisheries Service must comply with the Endangered Species Act

We do not believe that the Service should issue take authorization under the Endangered Species Act for the proposed activities because they will jeopardize the continued existence of Cook Inlet beluga whales and adversely modify their critical habitat.

Section 7(a)(2) of the Endangered Species Act requires federal agencies to "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the adverse modification of habitat of such species . . . determined . . . to be critical . . . .<sup>763</sup> To accomplish this goal, agencies must consult with the delegated agency of the Secretary of Commerce (through the National Marine Fisheries Service) or Interior (through the U.S. Fish and Wildlife Service) whenever their actions "may affect" a listed species.<sup>64</sup> The Service has the discretion to impose terms, conditions, and mitigation on any authorization.

The proposed action here clearly affects listed species — the critically endangered Cook Inlet beluga whale, other whales, and Steller sea lions— and therefore the Service must consult. The proposed action also affects designated critical habitat for Cook Inlet beluga whales. Importantly, a primary constituent element essential to the conservation of Cook Inlet beluga whales is "the absence of in-water noise at levels resulting in the abandonment of habitat by Cook Inlet beluga whales."<sup>65</sup> The proposed notice indicates that the Service will complete consultation before authorizing any take of marine mammals, and we urge the Service to fulfill this commitment. We strongly believe that the Service cannot authorize the activities proposed here because they will jeopardize the recovery and survival of Cook Inlet beluga whales.

<sup>&</sup>lt;sup>61</sup> Fabry, V.J., Seibel, B.A., Feely, R.A., and Orr, J.C., Impacts of ocean acidification on marine fauna and ecosystems processes, *ICES J. Mar. Sci.* 65: 414-432 (2008).

<sup>&</sup>lt;sup>62</sup> Aydin, K.Y., McFarlane, G.A., King, J.R., Megrey, B.A., and Myers, K.W., Linking oceanic food webs to coastal production and growth rates to Pacific salmon (Oncorhynchus spp.), using models on three scales, *Deep Sea Res. II* 52: 757-780 (2005).

<sup>63 16</sup> U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a).

<sup>&</sup>lt;sup>64</sup> Id.

<sup>&</sup>lt;sup>65</sup> National Marine Fisheries Service, 74 Fed. Reg. 63080 (Dec. 2, 2009).

For similar reasons counseling for a programmatic EIS, programmatic consultation on the Service's system of issuing take authorizations for Cook Inlet belugas is warranted. Consultation can be done at a programmatic level to address multiple agency actions on a program, region, or other basis.<sup>66</sup> Such consultations allow federal agencies to consult on "multiple similar, frequently occurring, or routine actions" in a particular geographic area and on a proposed program, policy, or regulation that would provide a framework for future actions.<sup>67</sup> In some circumstances, programmatic review and consultation is "the only way to avoid piecemeal destruction of species and habitat."<sup>68</sup> A programmatic consultation would provide a better ecosystem-wide and species range-wide evaluation of the effects NMFS's issuance of take authorizations is having on this geographically limited and highly endangered Cook Inlet beluga whale population.

The Service should also use its authorities under section 7(a)(1) to further the conservation of critically endangered Cook Inlet beluga whales. This should include, among other measures, a cap on take of Cook Inlet beluga whales. As recommended by the Marine Mammal Commission, unless and until the Service definitively determines a specific reason or reasons for the lack of recovery of this beluga population that can be adequately controlled and until the population's downward trend is reversed and Cook Inlet beluga whales are recovering, that cap must be set at zero authorized takes per year with limited exceptions for emergency and carefully-designed research and other activities with clear conservation benefits for the belugas and minimal potential harm to the population (i.e. abundance or stranding response aerial surveys, photo identification research, and non-invasive research on the impacts of pollution on Cook Inlet belugas).

#### 5. Conclusion

For all of the above reasons, we believe that the Service should not authorize take of Cook Inlet beluga whales and other marine mammals for the Port of Alaska project in Cook Inlet. To the extent that the Service is still considering take authorization, it must impose stringent mitigation measures to ensure the least adverse impact on protected species. Thank you for your consideration of these comments.

Sincerely,

<u>/s/ Miyoko Sakashita</u> Miyoko Sakashita Oceans Program Director Center for Biological Diversity miyoko@biologicaldiversity.org

<sup>&</sup>lt;sup>66</sup> Endangered and Threatened Wildlife and Plants; Regulations for Interagency Cooperation, 84 Fed. Reg. 44,976 (Aug. 27, 2019).

<sup>&</sup>lt;sup>67</sup> NOAA, Section 7: Types of Endangered Species Act Consultations in the Greater Atlantic Region. https://www.fisheries.noaa.gov/insight/section-7-types-endangered-species-act-consultations-greater-atlantic-region#programmatic-consultation (last visited Dec. 4, 2023).

<sup>&</sup>lt;sup>68</sup> North Plains Res. Council v. U.S. Army Corps of Eng'rs, 460 F. Supp. 3d 1030, 1035 (D. Mont. 2020)



ITP Tyson Moore - NOAA Service Account <itp.tyson.moore@noaa.gov>

# Request fo Inclusion of Dena'ina People in Monitoring and Support Positions for the NES1 P oject

**Kyle Foster** <kfoster@ekl tnainc.com> u To "ITP.tyson.moore@noaa.gov" <ITP.tyson.moore@noaa.gov> Cc Jody br zzino <jabr zzino@ekl tnainc.com>, Joanna White <joanna@ekl tnainc.com> T e, ov 14, 2023 at 7 0 P

Jolie Harrison Chief, Permits and Conservation Division Office of Protected Reso rces ational rine Fisheries Service

Møear . Harrison,

I am writing to yo in my capacity as the CEO of Ekl tna, Inc., an laska ative Corporation that pro dly represents the indigeno s Dena'ina people of the nchorage, laska area. O r comm nity has a profo nd connection with the marine environment, which forms an integral part of o r c lt ral heritage and way of life.

With reference to the recent notice by the **latia** rine Fisheries Sel**M**i $\mathcal{E}$ e (S) regarding the req est from the Port of laska (POA) for an incidental harassment a thorization (IH) n**Wea** the rine Mammal Protection ctl/(IP) for the ES1 project, I wish to address an important aspect of comm nity involvement in this project.

The Dena'ina people possess a deep-seated knowledge and nderstanding of the local marine ecosystem, partic larly concerning the marine mammals that the S affirms to protect thro gh its monitoring efforts. Given the significance of these species to o r way of life and the potential impacts of the ES1 project, we propose that members of o r comm nity be actively involved in the monitoring and s pport roles.

In line with the S g idelines that stip late the employment of q alified, S-arpproved Protected Species Observers (PSOs), we s ggest that Dena'ina individ als from the local area be trained and employed in these roles. This initiative wo ld not only ens re effective monitoring of marine mammals b t also foster a sense of ownership and participation among the indigeno s comm nity in the conservation efforts.

O r proposal aligns with the mitigation and monitoring meas res o tlined by S and adheres to the standards set forth in yo r notice dated October 30, 2023, as iss ed by Kimberly Damon-Randall, Director of the Office of Protected Reso rces. The involvement of local Dena'ina people, eq ipped with traditional ecological knowledge and a vested interest in the preservation of marine life, wo Id significantly contrib te to the effective observation and reporting req irements stip lated by S.

We eagerly await the opport nity to disc ss this proposal f rther and are ready to assist in identifying comm nity members that can contrib te in the ES1 project's monitoring framework.

Thank yo for considering o r req est.

Sincerely,

Kyle Foster CEO, Ekl tna, Inc.

https://www.federalregister.gov/doc\_ments/2023/11/06/2023-24238/takes-of-marine-mammals-incidental-to-specified-activities-taking-marine-mammals-incidental-to-the