



Via Electronic and First Class Mail

June 22, 2016

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RE: Offshore Fracking in Cook Inlet Threatens Critically Endangered Beluga Whales

Dear Ms. Harrison and Ms. Migura,

On behalf of the Center for Biological Diversity, I am writing to alert the National Marine Fisheries Service (“NMFS”) to significant new information regarding the risks of oil and gas activities to imperiled species in Alaska. Specifically, new information reveals that an oil company intends to drill multiple new offshore wells and conduct the first multi-stage horizontal fracks ever done in Cook Inlet this summer. These unprecedented offshore fracking plans threaten Cook Inlet beluga whales—one of the most endangered whale species in the world—and require immediate action from NMFS to ensure these majestic animals are adequately protected from the significant dangers of this hazardous oil-production technique.

Fracking, which blasts vast volumes of water mixed with toxic chemicals down oil and gas wells at pressures high enough to fracture rocks, is inherently risky and has no place in fragile coastal ecosystems. Offshore fracking increases environmental damages beyond those of conventional oil development alone and poses a threat of serious harm to marine life, the coastal environment, and communities living on and near the coast.

Nevertheless, new information reveals that BlueCrest Energy intends to use offshore fracking in its oil and gas activities in Cook Inlet this summer.¹ And a review of FracFocus.org—a website on which oil and gas companies disclose where and when they have used fracking in Alaska—reveals that oil companies are increasingly using offshore fracking in Alaska, including in Cook Inlet.² However, according to state oil regulators, the prior activities in the Inlet have been small “fracture stimulations,” and BlueCrest’s activities would be the first large effort with

¹ Alex DeMarban, Groundbreaking fracking effort, plus first new oil production in years, on tap in Cook Inlet, Alaska Dispatch News, Apr. 2, 2016, <http://www.adn.com/energy/article/groundbreaking-fracking-plus-first-new-oil-production-years-tap-cook-inlet/2016/04/02>.

² FracFocus, <http://www.fracfocusdata.org/DisclosureSearch/SearchResults.aspx>. Oil companies have fracked at least 40 times, including at least five times in the Inlet and at least 34 times in the Beaufort Sea. However, because disclosures on this website were voluntary until Alaska’s recently enacted fracking regulations, it is possible the practice is more widespread. See 20 AAC 25.283, eff. Jan. 1, 2015.

a horizontal well.³ Indeed, as stated by a BlueCrest representative, “[t]here’s never been any wells like this (in the Inlet), the long horizontal well with the huge multistage frack.”⁴

This unprecedented level of offshore fracking in Cook Inlet has potential significant, detrimental effects that were not considered in NMFS’s draft assessment under the National Environmental Policy Act (“NEPA”) on the environmental impacts of NMFS’s authorization of oil and gas activities in the Inlet for 2016.⁵ Thus, NMFS must supplement its prior NEPA analysis and issue a draft analysis for public notice and comment. NMFS must also consider this information in analyzing whether to authorize such activities under the Marine Mammal Protection Act (“MMPA”) and the Endangered Species Act (“ESA”).⁶ As part of these analyses, NMFS must consider—and should adopt—a mitigation measure prohibiting BlueCrest from using offshore fracking if NMFS authorizes BlueCrest’s oil and gas activities in the Inlet.

Additionally, the Center urges NMFS to immediately inform BlueCrest, and any other oil and gas company intending to conduct drilling activities in the Inlet, that they cannot frack unless and until NMFS conducts supplemental environmental review under NEPA and the companies receive MMPA and ESA authorizations from NMFS that consider the impacts of offshore fracking. Such actions are necessary to protect critically endangered Cook Inlet belugas from the toxic impacts of offshore fracking, and ensure that NMFS complies with its legal obligations under NEPA, the ESA, and the MMPA.

I. Cook Inlet Beluga Whales Are Critically Endangered

Cook Inlet is a remarkable aesthetic, economic, and environmental resource to both the state of Alaska and the nation. The waters of Cook Inlet provide rich habitat where marine mammals feed, mate, give birth, and nurse their young. Marine mammals inhabiting the Inlet include beluga whales, harbor seals, harbor porpoises, killer whales, and Steller sea lions. Cook Inlet is also home to many bird and fish species, including important prey species for beluga whales such as eulachon, salmon, cod, herring, flounder, sole, pollock, lamprey, and lingcod.

The Inlet is also one of the most populated and industrialized regions in Alaska. According to NMFS, “Cook Inlet belugas are unique among marine mammals in Alaska given that their core habitat and range is in close proximity to a large proportion of Alaska’s human population.”⁷ Humans use the waters and shores of Cook Inlet for fishing, hunting, timber harvest, mining, shipping, dredging, wastewater discharge, military activities, and oil and gas development, among other activities.⁸ The health and habitat of Cook Inlet beluga whales are therefore continuously threatened.

³ Groundbreaking Fracking Effort, *supra* n. 1.

⁴ *Id.*

⁵ See e.g., 81 Fed. Reg. 12474 (Mar. 9, 2016) (NMFS’s Notice of Availability of a Draft Environmental Assessment for Oil and Gas Activities in Cook Inlet, Alaska in 2016).

⁶ NMFS recently issued a proposed harassment authorization for BlueCrest’s activities in the Inlet during the summer of 2016. 81 Fed. Reg. 35,547 (June 2, 2016). However the proposed authorization does not consider the impacts of offshore fracking on Cook Inlet belugas or any other marine mammals.

⁷ National Marine Fisheries Service, Cook Inlet Beluga Whale 5-Year Action Plan at 2, Jan. 2016.

⁸ *Id.*

Oil and gas exploration, development, and production activities represent a serious threat to Cook Inlet beluga whales. In addition to noise, oil industry activities pose risks to belugas and their habitat from oil spills, permitted discharges of wastes, increased vessel traffic, and physical displacement of the animals and their prey. And these risks are exacerbated by the other development activities in Cook Inlet. The cumulative impacts of these activities on beluga whales are significant.

The population of Cook Inlet beluga whales has declined precipitously in the last 30 years. In 1979, the estimated population of Cook Inlet beluga whales was approximately 1,300.⁹ By 2012, the population had dropped by more than 75 percent to only 312 whales, where the population remains today.¹⁰ Despite a cessation of subsistence hunting in 1999, the population of Cook Inlet beluga whales has not rebounded. In fact, it declined at an average rate of 1.5 percent per year between 1999 and 2008.¹¹

Accordingly, NMFS listed the Cook Inlet beluga whale as endangered under the ESA in October 2008.¹² And NMFS designated 3,013 square miles of biologically important marine habitat in the Inlet as critical habitat in April 2011.¹³ Despite these increased protections, the population has not rebounded and remains critically imperiled.

In 2015, NMFS issued a draft recovery plan for Cook Inlet beluga whales in which it found the whales face a high threat of extinction for the foreseeable future. Threats with the potential to limit the recovery of the species include anthropogenic noise; catastrophic events such as oil spills or earthquakes; prey reduction; pollution; and the cumulative effects of multiple stressors, among others.¹⁴ In 2016, NMFS released its “Species in the Spotlight: Survive to Thrive” initiative, a concerted agency-wide effort to spotlight and save highly at-risk species. Cook Inlet belugas are one of the eight species. According to NMFS, “[t]he rapid decline and dire status of the Cook Inlet beluga whale population makes it a priority for NMFS and [its] partners to prevent extinction and promote recovery of this iconic species.”¹⁵

II. Cook Inlet Beluga Whales Are Threatened By Offshore Fracking

On land, fracking, drilling and the resulting toxic wastewater have acquired an extensive track record of spills, accidents, leaks, pollution, public health threats, and property damage. Experiences with onshore fracking, along with the added stressors that conducting such activities offshore entails, demonstrate that this activity poses a grave and imminent threat when conducted in our oceans. Fracking in the Inlet will increase the risk of spills, earthquakes, and toxic

⁹ National Marine Fisheries Service. 2008. Conservation Plan for the Cook Inlet beluga whale (*Delphinapterus leucas*). National Marine Fisheries Service, Juneau, Alaska at 29.

¹⁰ Sheldon et al., Aerial Surveys of Belugas in Cook Inlet, Alaska, June 20, 2012; National Marine Fisheries Service, Alaska Marine Mammal Stock Assessment Report: BELUGA WHALE (*Delphinapterus leucas*): Cook Inlet Stock, Dec. 30, 2015.

¹¹ NMFS, Conservation Plan at 1.

¹² 73 Fed. Reg. 62919 (October 22, 2008).

¹³ 76 Fed. Reg. 20180 (April 11, 2011).

¹⁴ See National Marine Fisheries Service, Draft Recovery Plan for the Cook Inlet Beluga Whale (*Delphinapterus leucas*), May 15, 2015.

¹⁵ Cook Inlet Beluga Action Plan, *supra* n. 5 at 2,

pollutants killing and harming Cook Inlet belugas and their prey. Offshore fracking will also increase risks to the species through increased noise impacts.

A. Offshore Fracking Increases the Risk of Spills and Earthquakes that Will Harm Cook Inlet Belugas and Their Prey

Fracking in Cook Inlet threatens beluga whales and their prey due to the toxic chemicals used in fracking fluid. Scientific research has indicated that 40 percent of the chemicals used in fracking can harm aquatic animals and other wildlife.¹⁶ For example, some of the chemicals used in fracking operations can break down into nonylphenol, a very toxic endocrine disrupting substance with a wide range of harmful effects that include the development of intersex fish and altered sex ratios at the population level.¹⁷ Nonylphenol can also inhibit the development, growth, and survival of marine invertebrates, and has been shown to bioaccumulate in marine mammal species.¹⁸

Phenol formaldehyde resins are also used in offshore fracking, including in the prior fracture stimulations in Cook Inlet.¹⁹ These resins are toxic and can cause cancer and mutations; and if released into the marine environment, these pollutants have the potential to absorb other chemical compounds such as nonylphenol, increasing their toxicity to marine life.²⁰ Other chemicals also previously used in offshore fracks in the Inlet are inherently toxic to marine life.²¹ Indeed, some chemicals used in fracking are among the most toxic in the entire world with respect to aquatic life.²²

Wastewater from well stimulation in the Inlet would either be reinjected into the seafloor or transported onshore and injected there. This disposal method can result in leaks and contamination through the loss of well casing integrity. For example, studies have shown that 30 percent of offshore oil wells in the Gulf of Mexico experienced well casing damage in the first five years after drilling, and damage increased over time to 50 percent after 20 years.²³ Well stimulation can increase the risk of well casing damage.²⁴ A recent scientific study found that wells can become pathways for fluid migration over time, and that the high injection pressures

¹⁶ CCST. 2014. Advanced Well Stimulation Technologies in California: An Independent Review of Scientific and Technical Information. August 28, 2014.

¹⁷ Diehl, J., et al. 2012. The distribution of 4-nonylphenol in marine organisms of North American Pacific Coast estuaries. *Chemosphere* 87:490-497.

¹⁸ *Id.*

¹⁹ See Hydraulic Fracturing Fluid Product Component Information Disclosure, Hilcorp Alaska, State Waters - Kenai Quadrangle, Apr. 6, 2013.

²⁰ Mato, Y. et al. 2001. Plastic resin pellets as a transport medium for toxic chemicals in the marine environment. *Environmental Science & Technology* 35:318-324.

²¹ Fluid Product Disclosure, *supra* n. 16.

²² CCST. 2015, Vol. II at 76.

²³ Vengosh, A. et al. 2014. A critical review of the risks to water resources from unconventional shale gas development and hydraulic fracturing in the United States. *Environmental Science & Technology* 48:8334-8348; Davies, R.J. et al. 2014. Oil and gas wells and their integrity: Implications for shale and unconventional resource exploitation. *Marine and Petroleum Geology* 56:239-254.

²⁴ Davies, et al. 2014; U.S. EPA, Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources, External Review Draft (June 2015) at 6-11.

used in fracking can “increase this risk significantly.”²⁵ For this same reason, fracking can also increase the risk of oil spills.

Other studies have also drawn a strong connection between the recent rise in fracking wastewater injection and increased earthquake rates.²⁶ For example, the USGS has recognized that wastewater disposal from fracking is a “contributing factor” to the six-fold increase in the number of earthquakes in Oklahoma.²⁷ Another study also found that wastewater injection is responsible for the dramatic rise in the number of earthquakes in Colorado and New Mexico since 2001.²⁸ In fact, wastewater injection has been scientifically linked to earthquakes of magnitude three and greater in at least seven states: Arkansas,²⁹ Colorado,³⁰ Ohio,³¹ Oklahoma,³² Texas,³³ New Mexico,³⁴ and California.³⁵

But it is not just wastewater injection that can lead to earthquakes. The practice of fracking itself has been found to contribute directly to seismic events.³⁶ And even if the earthquakes that fracking directly generates are small, fracking could be contributing to increased stress in faults that leaves those faults more susceptible to otherwise naturally triggered earthquakes of a greater magnitude.³⁷ This is a significant concern for a place like Alaska, which is already prone to earthquakes, particularly in locations surrounding Cook Inlet.³⁸

²⁵ California Council on Science and Technology. 2015. An Independent Scientific Assessment of Well Stimulation in California, Volume II. Potential Environmental Impacts of Hydraulic Fracturing and Acid Stimulation, 20 July, at 39 (“CCST”).

²⁶ Van de Elst, Nicholas J. et al. 2013. Enhanced Remote Earthquake Triggering at Fluid-Injection Sites in the Midwestern United States, 341 *Science* 164.

²⁷ Sumy, D. F., et al. 2014. Observations of static Coulomb stress triggering of the November 2011 M5.7 Oklahoma earthquake sequence, *J. Geophys. Res. Solid Earth*, 119, 1904–1923, DOI:10.1002/2013JB010612; USGS, *Record Number of Oklahoma Tremors Raises Possibility of Damaging Earthquakes*, May 2, 2014, <http://www.usgs.gov/newsroom/article.asp?ID=3880>.

²⁸ Justin L. Rubinstein, et al. 2014. The 2001 – Present Induced Earthquake Sequence in the Raton Basin of Northern New Mexico and Southern Colorado. *Bulletin of the Seismological Society of America*, 2014 DOI: 10.1785/0120140009.

²⁹ E&E News, USGS, Okla. warn of more drilling-related earthquakes in State, Mike Soraghan. Oct. 25, 2013.

³⁰ *Id.*

³¹ Ohio Dept. of Nat. Resources (2012) *Executive Summary: Preliminary Report on the Northstar 1 Class II Injection Well and the Seismic Events in the Youngstown, Ohio Area*; Fountain, Henry, Disposal halted at well after new quake in Ohio, *New York Times*, Jan. 1, 2012.

³² Holland, Austin, Examination of possibly induced seismicity from hydraulic fracturing in the Eola Field, Garvin County, Oklahoma, Oklahoma Geological Survey Open-File Report OF1-2011 (2011).

³³ Frohlich, Cliff (2012) Two-year survey comparing earthquake activity and injection-well locations in the Barnett Shale, Texas. *Proceedings of the National Academy of Sciences*. Vol 109. No. 35.

³⁴ Rubinstein, J. L., et al. 2012. The 2001-present triggered seismicity sequence in the Raton Basin of southern Colorado/Northern New Mexico, Abstract S34A-02 presented at 2012 Fall Meeting, AGU, San Francisco, Calif. Dec. 3-7, 2012.

³⁵ T. H. W. Goebel, et al. 2016. Wastewater disposal and earthquake swarm activity at the southern end of the Central Valley, California, *Geophysical Research Letters*. Vol. 43, Issue 3. Pages 1092–1099.

³⁶ Van der Elst, 2013; BC Oil & Gas Commission, Industry Bulletin: 2015-32, Dec. 15, 2015, <https://www.bcogc.ca/node/12951/download>.

³⁷ Van der Elst, et al. 2013.

³⁸ See e.g., Earthquake Track, *Recent Earthquakes Near Anchorage, Alaska, United States*, <http://earthquaketrack.com/us-ak-anchorage/recent>.

In other words, fracking in the Inlet increases the likelihood that toxic chemicals would be released into the Inlet through spills, earthquakes, or other accidents. Such an event would increase threats to Cook Inlet beluga whales given their vulnerability to pollutants. For example, NMFS's draft recovery plan for Cook Inlet belugas lists the presence of pollutants in the Inlet as an "increasing" threat to the species and endocrine disruptors (which are used in fracking operations) as an "emerging pollutant of concern" given the potential health impacts.³⁹ Belugas can be exposed to such pollutants through direct contact with contaminants found in the water; inhalation of contaminants in the air; or ingestion of contaminants found in prey, mud, or silt.⁴⁰

NMFS's draft recovery plan also lists prey availability as an important factor affecting the survival and recovery of the species.⁴¹ Fracking therefore imperils Cook Inlet belugas by threatening fish populations. Numerous cases of pipeline spills, blowouts, and trucking accidents across the country have exposed fish to wastewater from fracking. These contamination incidents, both accidental and intentional, have caused large-scale fish kills. For example, in Kentucky, when an oil company dumped fracking waste fluids into the fork of a stream, contaminating it with hydrochloric acid and other chemicals, "the discharges killed virtually all aquatic wildlife in a significant portion of the fork, including fish and invertebrates."⁴² According to scientists, the abrupt and persistent changes in post-fracking water quality resulted in toxic conditions.⁴³ Several spills of fracking fluid from pipelines in Pennsylvania over the last few years also resulted in significant fish kills.⁴⁴

B. Offshore Fracking Threatens Cook Inlet Belugas through Increased Noise

BlueCrest's proposal will also increase threats to Cook Inlet belugas through increasing noise pollution. For example, to execute its fracking plan, it appears that BlueCrest intends to drill at least one well beyond that analyzed by NMFS, which will increase noise in the Inlet.⁴⁵ Moreover, offshore fracking could increase vessel traffic needed to service the wells to be fracked. Offshore fracking may also increase vessel traffic as a result of extending the life of oil and gas operations and increasing interest in oil development in the Inlet. Increased vessel traffic means increased noise through propeller cavitation, engines, and depth sounders.⁴⁶

³⁹ Draft Recovery Plan at 75, 81.

⁴⁰ *Id.* at 82.

⁴¹ *Id.* at 75; 80.

⁴² U.S. Fish and Wildlife Service, Office of Law Enforcement, Case at a Glance: U.S. v. Nami Resources Company, LLC. www.fws.gov/home/feature/2009/pdf/NamiInvestigation.pdf.

⁴³ Papoulias, D.M. and A.L. Velasco. (2013). Histopathological analysis of fish from Acorn Fork Creek, Kentucky, exposed to hydraulic fracturing fluid releases. *Southwestern Naturalist* 12 (Special Issue 4): 92-111.

⁴⁴ MIT Energy Initiative. (2011). "The future of Natural Gas, An Interdisciplinary MIT study." <http://web.mit.edu/mitei/research/studies/natural-gas-2011.shtml>.

⁴⁵ See Draft Recovery Plan at 85-86 (noting that oil/gas exploitation creates noise impacting Cook Inlet belugas through platform noise (in-air noise radiated into the water), drilling noise (in water and/or bottom substrate), and air/water vessels during operations); Draft Environmental Assessment at 7 (analyzing impacts of three wells); Elizabeth Earl, BlueCrest applies to drill offshore, Peninsula Clarion <http://peninsulaclarion.com/news/2016-04-18/bluecrest-applies-to-drill-offshore> (describing BlueCrest's plans to drill a total of four wells in the Inlet); State of Alaska, Online Public Notices, BlueCrest Energy Lower Cook Inlet Exploratory Offshore Delineation Drilling Project, Apr. 12, 2016, <https://aws.state.ak.us/OnlinePublicNotices/Notices/View.aspx?id=181040> (noting that BlueCrest applied to drill a total of four wells in the Inlet).

⁴⁶ See e.g., Draft Recovery Plan at 102.

Anthropogenic noise pollution can mask marine mammal communications at almost all frequencies these mammals use.⁴⁷ “Masking” is a “reduction in an animal’s ability to detect relevant sounds in the presence of other sounds.”⁴⁸ Vessel noise can cover important frequencies these animals use for more complex communications. NMFS has recognized that this masking may affect marine mammal survival and reproduction by decreasing these animals’ ability to “[a]ttract mates, [d]efend territories or resources, [e]stablish social relationships, [c]oordinate feeding, [i]nteract with parents, or offspring, [and] [a]void predators or threats.”⁴⁹ Studies have also found that chronic exposure to boat traffic and noise can cause whales to reduce their time spent feeding.⁵⁰

In addition to masking effects, marine mammals have displayed a suite of stress-related responses from increased ambient and local noise levels, including beluga whales. For example, in a noise exposure study using a captive beluga, increased levels of stress hormones were documented.⁵¹ Stress due to noise can lead to long-term health problems, and may pose increased health risks for populations by weakening the immune system and potentially affecting fertility, growth rates, and mortality.⁵²

Moreover, NMFS’s draft recovery plan for Cook Inlet belugas states that “[t]he effect of anthropogenic noise, particularly the combined effect of different sound sources occurring simultaneously or consecutively, has the potential to affect beluga acoustic perception, communication, echolocation, and behavior (such as foraging and movement patterns).”⁵³ Additionally, the long-term effects of such impacts “may induce chronic effects altering the health of individual [Cook Inlet] belugas, which in turn have consequences at the population level (i.e., decreased survival and reproduction).”⁵⁴

III. Offshore Fracking Constitutes Significant New Information Triggering NMFS’s Duty To Supplement its NEPA Analysis of Oil and Gas Activities in the Inlet

NMFS must prepare a supplemental analysis of the environmental impacts of oil and gas activities in Cook Inlet for 2016 because its prior assessment did not consider the new information detailed in this letter or the significant impacts of offshore fracking. NEPA is America’s “basic national charter for protection of the environment.”⁵⁵ NEPA requires federal agencies to take a “hard look” at the environmental consequences of their actions before taking

⁴⁷ See, e.g., Hildebrand, J.A., *Impacts of Anthropogenic Sound, in MARINE MAMMAL RESEARCH: CONSERVATION BEYOND CRISIS* (Reynolds, J.E. III et al., eds. 2006); Weilgart, L., 2007, *The Impacts of Anthropogenic Ocean Noise on Cetaceans and Implications for Management*, 85 *CANADIAN J. ZOOLOGY* 1091-1116 (2007).

⁴⁸ *OCEAN NOISE AND MARINE MAMMALS*, *supra* note 23, at 96.

⁴⁹ Jason Gedamke, *supra* note 22, at 2; Clark, C.W. *et al.*, *supra* note 22, at *3.

⁵⁰ See *i.e.* Williams, R. D., et al., 2006, *Estimating relative energetic costs of human disturbance to killer whales (Orcinus orca)*, *Biological Conservation*, 133: 301-311.

⁵¹ Romano, T.A. *et al.*, 2004, *Anthropogenic sound and marine mammal health: measures of the nervous and immune systems before and after intense sound exposure*, *Canadian Journal of Aquatic Science*, 61: 1124-1134.

⁵² *Id.*

⁵³ Draft Recovery Plan at 103.

⁵⁴ *Id.*

⁵⁵ 40 C.F.R. § 1500.1(a).

action.⁵⁶ In this way, NEPA ensures that federal agencies “will have available, and will carefully consider, detailed information concerning significant environmental impacts” and that such information “will be made available to the larger [public] audience that may play a role in both the decisionmaking process and the implementation of the decision.”⁵⁷

The “hard look” required under NEPA obligates NMFS to obtain high-quality information and accurate scientific analysis and to include a “full and fair discussion” of the direct and indirect environmental impacts of the proposed activity, among other requirements.⁵⁸ The “hard look” obligation is ongoing—as the U.S. Supreme Court has stated, an agency must “take a ‘hard look’ at the environmental effects of their planned action, even after a proposal has received initial approval.”⁵⁹ And NEPA’s implementing regulations make clear that where there are “significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts,” a supplement to either draft or final analyses “shall” be prepared.⁶⁰

NMFS’s draft environmental assessment on oil and gas activities in Cook Inlet, which was issued for public comment in March 2016 and included an examination of BlueCrest’s drilling activities, did not consider the environmental impacts of offshore fracking.⁶¹ The information in this letter that BlueCrest intends to use fracking in the Inlet, and that it will drill a new well to do so, has only just come to light and is therefore “new.”⁶² And it is “significant” on its face. It suggests that NMFS’s environmental assessment of oil and gas activities in the Inlet has severely underestimated the impacts of the proposed activity on Cook Inlet beluga whales and reveals a “seriously different picture of the environmental impact of the proposed project from what was previously envisioned.”⁶³

NMFS must therefore prepare a supplemental analysis that fully considers these impacts. Given the potentially significant impacts on Cook Inlet beluga whales and the environment, a full environmental impact statement should be prepared.⁶⁴ As part of this analysis, NMFS must consider an alternative that would prohibit offshore fracking in the Inlet in order to mitigate the significant impacts of the practice and ensure more protections for critically endangered Cook Inlet beluga whales.⁶⁵ And because NEPA evaluation must take place “*before* decisions are made and *before* actions are taken,”⁶⁶ NMFS must inform BlueCrest that it cannot frack in the Inlet

⁵⁶ *Kleppe v. Sierra Club*, 427 U.S. 390, 410, n. 21 (1976); 40 C.F.R. § 1500.1(a).

⁵⁷ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

⁵⁸ 40 C.F.R. §§ 1500.1(b); 1502.1.

⁵⁹ *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 374 (1989).

⁶⁰ 40 C.F.R. § 1502.9(c)(1)(ii); see *Friends of the River v. F.E.R.C.*, 720 F.2d 93, 109 (D.C. Cir. 1983).

⁶¹ See 81 Fed. Reg. at 12,474 and NMFS’s Draft Environmental Assessment for Oil and Gas Activities in Cook Inlet for 2016, https://alaskafisheries.noaa.gov/sites/default/files/analyses/cook_inlet_ihas_draft_batched_ea_2016.pdf. NMFS must also supplement its analysis because the draft assessment only analyzed test drilling operations, not the production operations now proposed. See e.g., 81 Fed. Reg. at 35,548.

⁶² *Greer Coalition, Inc. v. U.S. Forest Service*, No. 11–15531 2012 WL 690435 at *2 (9th Cir. Mar. 2, 2012).

⁶³ *Hickory Neighborhood Defense League v. Skinner*, 893 F.2d 58, 63 (4th Cir.1990); see *City of Olmsted Falls, OH v. Fed. Aviation Admin.*, 292 F.3d 261, 274 (D.C. Cir. 2002).

⁶⁴ See e.g., 42 U.S.C. § 4332(2)(C); *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1149–50 (9th Cir. 1998). (an EIS is required when the proposed action *may* have significant impacts).

⁶⁵ See e.g., 40 C.F.R. § 1502.14(a); 1502.16(h).

⁶⁶ 40 C.F.R. § 1500.1(a) (emphasis added).

unless and until NMFS issues a revised draft for public notice and comment and completes its supplemental NEPA analysis.

IV. NMFS's ESA and MMPA Analyses Must Consider the Additional Impacts from Offshore Fracking

Because Cook Inlet beluga whales are endangered marine mammals impacted by oil and gas exploration and development, oil and gas companies cannot lawfully engage in such activities in the Inlet unless and until they obtain permits from NMFS under both the ESA and MMPA. NMFS can only issue such permits, however, if it first makes certain findings to ensure the authorized activities do not negatively impact the population. NMFS must consider the new information detailed in this letter, and the direct, indirect, and cumulative impacts of offshore fracking on Cook Inlet belugas as part of its ESA and MMPA analyses.

A. NMFS's ESA Analysis Must Consider the Impacts of Offshore Fracking

In enacting the ESA, Congress recognized that certain species “have been so depleted in numbers that they are in danger of or threatened with extinction.”⁶⁷ Accordingly, a primary purpose of the ESA is “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such . . . species.”⁶⁸

To reach these goals, Section 9 of the ESA prohibits any person, including any federal agency, from killing, harming, or harassing any endangered species without proper authorization through a valid incidental take permit.⁶⁹ Additionally, Section 7(a)(2) requires federal agencies to “insure that any action authorized . . . by such agency . . . is not likely to jeopardize the continued existence of any [listed] species or result in the destruction or adverse modification of [the critical] habitat of such species.”⁷⁰ To facilitate compliance with Section 7(a)(2), federal agencies must consult with NMFS (or the U.S. Fish and Wildlife Service depending on the species) whenever their actions “may affect” a listed species and utilize the “best scientific and commercial data available” in doing so.⁷¹

This consultation process results in the issuance of a biological opinion to determine whether the agency action is likely to “jeopardize” any species’ existence. A jeopardy analysis requires the agency to consider the aggregate effects of past and ongoing human activities that affect the current status of the species and its habitat (“environmental baseline”), the indirect and direct effects of the proposed action, including the effects of interrelated and interdependent activities (“effects of the action”), and the effects of future state and private activities that are reasonably certain to occur (“cumulative effects”).⁷²

⁶⁷ 16 U.S.C. § 1531(a)(2).

⁶⁸ *Id.* § 1531(b).

⁶⁹ *See* 16 U.S.C. § 1538 (prohibiting take); 16 U.S.C. § 1532(19) (defining take); *see also* 50 C.F.R. § 17.31(a) (extending the “take” prohibition to threatened species managed by the U.S. Fish and Wildlife Service).

⁷⁰ 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a).

⁷¹ 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a).

⁷² 50 C.F.R. §§ 402.14(g); 402.02.

If NMFS concludes that the action, or reasonable and prudent alternatives imposed to mitigate the impacts, will not cause jeopardy but will result in take, NMFS must issue an incidental take statement (“ITS”) that specifies the amount of incidental taking that can occur and measures to minimize the impact of such takes on the species.⁷³ When the species to be taken are marine mammals, the take must first be authorized pursuant to the MMPA, and the ITS must include any additional measures necessary to comply with the MMPA take authorization.⁷⁴ The take of a listed species in compliance with the terms of a valid ITS is not prohibited under Section 9 of the ESA.⁷⁵

As explained above, offshore fracking increases the risk to Cook Inlet beluga whales by increasing the risks of oil spills, earthquakes, and other accidents. BlueCrest’s proposal also increases the amount of noise pollution caused by its oil and gas activities in the Inlet. These factors are therefore relevant to the direct, indirect, and cumulative effects of the action on the species, and thus the agency’s jeopardy analysis. It is also relevant to the agency’s issuance of take authorization under the ESA, as it increases threats to and the level of harassment to be faced by the species. NMFS must therefore consider offshore fracking in analyzing the impacts of oil and gas activities in the Inlet, and whether, and to what extent, to allow such activities.

B. NMFS’s MMPA Analysis Must Consider the Impacts of Offshore Fracking

The MMPA seeks to maintain stable, functioning marine ecosystems, to secure and restore healthy marine mammal populations, and to protect individual animals from harm.⁷⁶ The MMPA also seeks to achieve and maintain an “optimum sustainable population” of each marine mammal stock, defined as “the number of animals which will result in the maximum productivity of the population or the species,” considering both carrying capacity of the habitat and ecosystem health.⁷⁷

To reach these goals, the MMPA generally prohibits the take of marine mammals. Prohibited takings include actions that kill or injure marine mammals and those that disrupt behavioral patterns, such as migration, breathing, or feeding.⁷⁸ Limited exceptions apply, including for the take incidental to an otherwise lawful activity, such as oil and gas exploration and development. In order to authorize such take, however, NMFS must first determine that the activity will take only a “small number” of marine mammals and will have no more than a “negligible impact” on the marine mammal species or stock to be taken, among other findings.⁷⁹ NMFS must prescribe methods affecting the “least practicable impact” on the species or stock and its habitat.⁸⁰

⁷³ 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(h)(3).

⁷⁴ *Id.*

⁷⁵ 16 U.S.C. §§ 1536(b)(4), (o)(2); 50 C.F.R. § 402.14(i)(5).

⁷⁶ 16 U.S.C. §§ 1361(2); 1362(18)(A); *Animal Welfare Inst. v. Kreps*, 561 F.2d 1002, 1007 (D.C. Cir. 1977) (“the MMPA is an unusual statute . . . motivated by considerations of humaneness towards animals, who are uniquely incapable of defending their own interests”).

⁷⁷ 16 U.S.C. §§ 1361(6), 1362(9).

⁷⁸ *Id.* §§ 1362(13), (18).

⁷⁹ 16 U.S.C. §§ 1371(a)(5)(A); (D);

⁸⁰ *Id.*; 50 C.F.R. §§ 216.105, 216.107.

NMFS recently issued a proposed incidental harassment authorization for BlueCrest's oil and gas activities in the Inlet for the open water season of 2016, beginning in August.⁸¹ However, the proposal does not consider the additional, unique impacts from offshore fracking.⁸² Yet, as explained above, offshore fracking increases the risk of oil spills, earthquakes, and other accidents; it can also increase noise pollution. NMFS's small numbers and negligible impact determination must properly account for these risks. And given the significant threat that offshore fracking poses to Cook Inlet beluga whales, NMFS must consider—and should adopt—a mitigation measure that prohibits the practice altogether in any permit authorizing oil and gas drilling in the Inlet.

V. Conclusion

In sum, offshore fracking poses a grave and imminent threat to critically endangered Cook Inlet beluga whales. The new information detailed in this letter triggers NMFS's duty to supplement its prior NEPA analysis and issue a revised draft analysis for public comment that considers the unique, additional impacts of offshore fracking. NMFS must also ensure that its analyses under the ESA and MMPA consider the impacts of offshore fracking on Cook Inlet belugas. Given the significant risk that offshore fracking poses to Cook Inlet beluga whales, NMFS should prohibit offshore fracking in order to help protect these critically endangered animals as a condition of any authorization of oil and gas drilling in the Inlet.

Sincerely,

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⁸¹ 81 Fed. Reg. at 35,547–35,578.

⁸² *See id.*