

Via Electronic and Certified Mail, Return Receipt Requested

October 8, 2021

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RE: Endangered Species Act Compliance Regarding Offshore Drilling Activities on the Pacific Outer Continental Shelf

Dear Secretary Haaland, Secretary Raimondo, Director Lefton, Acting Director Mabry, Principal Deputy Director Williams, and Assistant Administrator Coit:

As you are well aware, Pipeline 00547 from Platform Elly to shore in San Pedro Bay recently ruptured, spewing over 144,000 gallons of crude oil into the Pacific Ocean and California's coastal environment. The spill has fouled sensitive marine, beach, and wetland habitat; forced closure of fisheries; and harmed and killed birds, fish, plants, invertebrates, and marine mammals. Already, the spill has impacted animals protected under the Endangered Species Act ("ESA"), including threatened snowy plovers. The spill highlights one of the numerous harmful impacts of offshore oil drilling and why we must immediately transition away from this dirty, dangerous practice for good.

The spill also triggers the duties of the Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement (collectively, "Bureaus") and the U.S. Fish and Wildlife Service, and National Marine Fisheries Service (collectively, "Services") to reinitiate and complete section 7 consultation under the ESA. Indeed, the spill is more than *17 times larger*

than what the agencies considered in their existing ESA analyses. In addition to the spill, other new information reveals effects of the Bureaus' authorization of oil and gas activities on the Pacific Outer Continental Shelf ("OCS") to an extent the agencies have not previously considered, including the frequency with which endangered whales are getting run over and killed by vessels, and how continued oil drilling is deepening the climate crisis. Reinitiating consultation is therefore necessary to ensure that the Bureaus' ongoing authorization and management of oil and gas activities in federal waters off California do not jeopardize threatened or endangered species or adversely modify their critical habitat, as required by the ESA. 2

If the Bureaus and the Services do not promptly reinitiate section 7 consultation, this letter serves as the Center for Biological Diversity's notice of intent to sue the Bureaus and the Services for violations of the ESA.³ Moreover, because of the of ongoing threat oil and gas drilling activity poses to numerous endangered and threatened species that call California's coastal and marine environments home, the Bureaus must stop issuing new permits to drill while this consultation is ongoing. A robust analysis of oil and gas activities on the Pacific OCS should show that the aging infrastructure has outlived its intended lifespan; poses a serious risk to the environment, including endangered species and our climate; and must be immediately phased out and scheduled for decommissioning.

LEGAL BACKGROUND

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." 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." 5

To reach these goals, section 9 of the ESA generally prohibits any person, including any federal agency, from "taking" any endangered species. The term "take" is statutorily defined broadly as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The definition of "harm" has been defined broadly by regulation as "an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Courts have found federal agencies liable for take of listed species where agency authorized activities resulted in the killing or harming of ESA-listed species.

¹ NMFS, Endangered Species Act Section 7(a)(2) Concurrence Letter for the Proposed Continuation of Offshore Oil and Gas Development and Production Activities in the Southern California Planning Area, Dec. 4, 2017.

² 16 U.S.C. § 1536(a)(2).

³ *Id.* § 1540(g).

⁴ *Id.* § 1531(a)(2).

⁵ *Id.* § 1531(b).

⁶ *Id.* § 1538(a)(1)(B).

⁷ *Id.* § 1532(19).

⁸ 50 C.F.R. § 17.3; see also Babbitt v. Sweet Home Ch. of Communities for a Great Oregon, 515 U.S. 687 (1995) (upholding regulatory definition of harm).

⁹ See e.g., Defenders of Wildlife v. Envtl. Prot. Agency, 882 F.2d 1294, 1300-01 (8th Cir. 1989); Strahan v. Coxe, 127 F.3d 155, 163 (1st Cir. 1997).

Additionally, section 7(a)(2) of the ESA 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 destruction or adverse modification of [the critical] habitat of such species."¹⁰ "Action" is broadly defined to include "all activities or programs of any kind authorized, funded, or carried out, in whole or in part" by federal agencies and includes conservation measures, granting permits and licenses, as well as actions that may directly or indirectly cause modifications to the land, water, or air.¹¹

To facilitate compliance with section 7(a)(2), an "agency shall . . . request" from the Services information regarding whether any listed species "may be present" in a proposed action area, and if so, the "agency shall conduct a biological assessment" to identify species likely to be affected. The agency must then initiate formal consultation with the Services if a proposed action "may affect" any of those listed species. The "may affect" standard broadly includes "[a]ny possible effect, whether beneficial, benign, adverse or of an undetermined character."

At the completion of formal consultation, the Services issue a biological opinion to determine whether the agency action is likely to "jeopardize" any species' existence. If so, the opinion may specify reasonable and prudent alternatives ("RPAs") that avoid jeopardy. ¹⁵

If the Services conclude that the action or the RPAs will not cause jeopardy, but will result in the take of listed species, the Services will issue an incidental take statement ("ITS") as part of the biological opinion that specifies "the impact, i.e., the amount or extent, of . . . incidental taking" that may occur, and any measures necessary or appropriate to minimize such impact on the listed species. When those listed species are marine mammals, the take must first be authorized pursuant to the Marine Mammal Protection Act ("MMPA"), and the ITS must include any additional measures necessary to comply with the MMPA take authorization. The take of a listed species in compliance with the terms of a valid ITS is not prohibited under Section 9 of the ESA.

ESA regulations define "[j]eopardize the continued existence of" as "to engage in an action that reasonably would be expected, either directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." A jeopardy analysis requires the agency to consider the aggregate effect 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

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

¹¹ 50 C.F.R. § 402.02.

¹² 16 U.S.C. § 1536(c).

¹³ 50 C.F.R. § 402.14(a).

¹⁴ 51 Fed. Reg. 19,926 (June 3, 1986).

¹⁵ 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14(g).

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

¹⁷ 50 C.F.R. § 402.14(i).

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

¹⁹ 50 C.F.R. § 402.02.

("cumulative effects"). 20 The Services must consider all of these factors in context of the current status of the species and its habitat.²¹ Only where the Services conclude that all of these elements added together do not threaten a species' survival and recovery can the agency issue a noieopardy opinion.²²

After completion of consultation, if a biological opinion does not satisfy the ESA's standards, the action agency may not rely on it to fulfill its section 7 duties.²³ Furthermore, the action and consulting agencies' ESA duties do not end with the completion of the initial consultation. The agencies must review the ongoing impacts of the action and reinitiate consultation when: (a) the amount or extent of taking specified in the incidental take statement is exceeded; (b) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (c) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (d) if a new species is listed or critical habitat designated that may be affected by the identified action.²⁴ "The duty to reinitiate consultation lies with both the action agency and the consulting agency."25

When reinitiation is required, "the original opinion loses its validity, as does its accompanying incidental take statement, which then no longer shields the action agency from penalties for takings."²⁶ Finally, during the consultation process and until the requirements of section 7(a)(2) are satisfied, section 7(d) provides that an agency "shall not make any irreversible or irretrievable commitment of resources" toward an action that would foreclose "the formulation or implementation of any reasonable and prudent alternative measures."27

FACTUAL BACKGROUND

On October 2, 2021, Beta Offshore reported to the National Response Center that its pipeline from Platform Elly to shore had spilled oil.²⁸ The spill was initially estimated at 126,000 gallons of crude oil and has since been increased to 144,000 gallons.²⁹ The pipeline serviced offshore oil

²² See Pac, Coast Fed'n of Fishermen's Ass'n v. U.S. Bureau of Reclamation, 426 F.3d 1082, 1093 (9th Cir. 2005)

²⁰ *Id.* at §§ 402.14(g), 402.02.

²¹ *Id.* at § 402.14(g).

⁽the proper "analysis is not the proportional share of responsibility the federal agency bears for the decline in the species, but what jeopardy might result from the agency's proposed actions in the present and future human and natural contexts").

²³ See, e.g., Fla. Key Deer v. Paulison, 522 F.3d 1133, 1145 (11th Cir. 2008) (action agency must independently ensure that its actions are not likely to cause jeopardy); Pyramid Lake Paiute Tribe of Indians v. U.S. Dep't of Navy, 898 F.2d 1410, 1415 (9th Cir. 1990) (same); Ctr. for Biological Diversity v. BLM, 422 F. Supp. 2d 1115, 1142 (N.D. Cal. 2006) (rejecting Forest Service's reliance on legally inadequate biological opinion). ²⁴ 50 C.F.R. § 402.16.

²⁵ Salmon Spawning & Recovery Alliance v. Gutierrez, 545 F.3d 1220, 1229 (9th Cir. 2008).

²⁶ Ctr. for Biological Diversity v. BLM, 698 F.3d 1101, 1108 (9th Cir. 2012).

²⁷ 16 U.S.C. § 1536(d); 50 C.F.R.§ 402.09.

²⁸ Hannah Fry, et al., Massive oil spill sends crude onto Orange County beaches, killing birds, marine life, LA Times, Oct. 2, 2021, https://www.latimes.com/california/story/2021-10-02/coast-guard-rushes-to-contain-newportbeach-oil-slick.

²⁹ See, e.g., Maeve Reston, A strong gasoline odor. Plumes of oil. And now California's coastal residents brace for damage, CNN, Oct, 5, 2021, https://www.cnn.com/2021/10/05/us/california-oil-spill-local-

and gas drilling and processing platforms authorized by the Bureaus and the rupture occurred in federal waters off Huntington Beach.³⁰ The oil slick has spread over an area greater than 25 square miles of ocean, and many miles of beach in Orange County have been oiled.³¹ The state has closed all fishing from Huntington Beach to Dana Point, including in shorelines and offshore areas and all bays.³²!

Although it will be many months and years before the true wildlife toll is known, there have already been significant impacts to wildlife and sensitive marine and coastal habitat. Specifically, five threatened western snowy plovers have been rescued by wildlife experts, many more birds have been killed or covered in oil, and dolphins were observed swimming through the slick.³³ And Whale Safe—a technology-powered mapping and analysis tool displaying near real-time whale data for the Santa Barbara Channel—indicates that the presence of humpback whales off southern California is currently "very high."³⁴ There are numerous ESA-listed species that inhabit the area affected by the spill.³⁵

This tragic spill highlights yet one of the many dangers to wildlife of drilling for oil. Indeed, even before the most recent spill, new information highlighted the risks and dangers of oil spills. For example, a recent analysis of federal records from the Pipeline and Hazardous Materials Safety Administration ("PHMSA") found that from 1986 to July 2021, nearly 1,400 oil and gas pipeline leaks, spills, and other significant incidents in California have caused at least \$1.2 billion in damages, as well as 230 injuries and 53 deaths. ³⁶ Nationally, there were nearly 8,000 significant incidents with U.S. pipelines, involving death, injury, and economic and environmental damage, from 1986 to 2013—more than 300 per year.³⁷ The PHMSA data also indicate that there are more incidents in the first two years of pipeline's life than in the next seven years combined.³⁸

The risks of an oil spill or other accident are all-the-more heighted on the Pacific OCS, where oil and gas companies have been drilling for decades from infrastructure that went into place

³⁸ *Id*.

residents/index html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+rss%2Fcnn_latest+ %28RSS%3A+CNN+-+Most+Recent%29.

³⁰ See, e.g., Letter Approving Plan of Development for the Beta Unit, OCS-P 0300 and P 0301, https://www.boem.gov/sites/default/files/about-boem/BOEM-Regions/Pacific-Region/DPPs/DPP 1980-DPP-POD.pdf.

³¹ Elisha Fieldstadt, Tim Stelloh and The Associated Press, Ship's anchor seen as possible cause for massive oil spill in Southern California, NBC, Oct. 4, 2021, https://www.nbcnews.com/news/us-news/stretch-shoreline-affectedsouthern-california-oil-spill-grows-n1280715.

³² California Department of Fish and Wildlife, Southern California Fisheries Closure Implemented Due To Oil Spill, Oct. 4, 2021, https://wildlife.ca.gov/News/southern-california-fisheries-closure-implemented-due-to-oil-spill.

³³ See, e.g., UC Davis, Oiled Wildlife Care Network, Pipeline P00547 Incident Wildlife Numbers, https://owcn.vetmed.ucdavis.edu/pipeline-p00547-incident (last updated Oct. 6, 2021); Alyse Stanley, Major Oil Spill Off the Coast of Southern California Has 'Dolphins Swimming Thru the Oil', Gizmodo, Oct. 3, 2021, https://gizmodo.com/major-oil-spill-off-the-coast-of-southern-california-ha-1847790676

³⁴ Whale Safe, https://whalesafe.com/methodology/.

³⁵ U.S. Fish and Wildlife Service, Information for Planning and Consultation (Oct. 7, 2021).

³⁶ https://biologicaldiversity.org/w/news/press-releases/analysis-even-before-orange-county-leak-california-pipelineincidents-caused-12-billion-in-damages-2021-10-07/email view/; see also Stover, Richard, Review of the US Department of Transportation Report The State of the National Pipeline Infrastructure, Aug. 2013. ³⁷ *Id*.

between the 1960s and 1980s.³⁹ For example, the 1985 environmental impact statement prepared for the construction and operation of the Plains All American Pipeline (a pipeline that ruptured and caused a massive oil spill in California's coastal environment in 2015) by the Bureau of Land Management and California State Lands Commission acknowledged that spills happen, and determined that the risk of a spill *more than doubles* as the pipeline aged from 20 to 40 years.⁴⁰

Moreover, according to scientists, aging poses risks of corrosion, erosion and fatigue stress to subsea pipelines. Subsea pipeline corrosion appears to accelerate over time, and can act synergistically with fatigue stress to increase the rate of crack propagation. Marine environments are especially known to produce significant corrosion on steel surfaces, and when a steel structure is at or beyond its elastic limit, the rate of corrosion increases 10 to 15 percent. One offshore pipeline study found that after 20 years the annual probability of pipeline failure increases rapidly, with values in the range of 0.1 to 1.0, which equates to a probability of failure of 10 to 100 percent per year. Another study covering 1996 to 2010 found that accident incident rates, including spills, increased significantly with the age of infrastructure.

Oil Spills Cause Significant Harm to a Variety of Wildlife

Oil and gas activity causes oil spills and other accidents that can harm threaten and endangered wildlife. For example, oil spills have a wide array of lethal and sublethal impacts on marine species, both immediate and long-term.⁴⁷ Direct impacts to wildlife from exposure to oil include behavioral alteration, suppressed growth, induced or inhibited enzyme systems, reduced immunity to disease and parasites, lesions, tainted flesh, and chronic mortality.⁴⁸ Oil can also exert indirect effects on wildlife through reduction of key prey species.⁴⁹ Oil destroys the water-

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³⁹ See, e.g., BOEM, Pacific OCS Region Map, https://www.boem.gov/sites/default/files/documents/newsroom/POCSR-Map.pdf

⁴⁰ California State Lands Commission & Bureau of Land Management, Draft Environmental Impact Report/ Environmental Impact Statement for the Celeron/All American And Getty Pipeline Projects (Aug. 1984) at 4-166.
⁴¹ Petroleum Safety Authority Norway. 2006. Material Risk – Ageing offshore installations. Prepared by Det Norske Veritas on request from Petroleum Safety Authority Norway. Available at http://www.psa no/report-archive/category1033 html.

⁴² Mohd, M.H. and J.K. Paik. 2013. Investigation of the corrosion progress characteristics offshore oil well tubes. Corrosion Science 67:130-141.

⁴³ PSA Norway 2006.

⁴⁴ Mohd, M.H. and J.K. Paik (2013) Investigation of the corrosion progress characteristics of offshore subsea oil well tubes. Corrosion Science 67: 130-141; A. Igor, R.E. Melchers, Pitting corrosion in pipeline steel weld zones, Corros. Sci. 53 (12) (2011) 4026–4032; R.E. Melchers, M. Ahammed, R. Jeffrey, G. Simundic, Statistical characterization of surfaces of corroded, Mar. Struct. 23 (2010) 274–287.

⁴⁵ Bea, R., C. Smith, B. Smith, J. Rosenmoeller, T. Beuker, and B. Brown. 2002. Real-time Reliability Assessment & Management of Marine Pipelines. 21st International Conference on Offshore Mechanics & Arctic Engineering. ASME.

⁴⁶ Muehlenbachs, et al. 2013. The impact of water depth on safety and environmental performance in offshore oil and gas production. Energy Policy 55:699-705.

⁴⁷ Peterson, C. H., S. D. Rice, J. W. Short, D. Esler, J. L. Bodkin, B. E. Ballachey, and D. B. Irons. 2003. Long-term ecosystem response to the Exxon Valdez oil spill. Science 302:2082-2086; Venn-Watson, S. *et al.* Adrenal Gland and Lung Lesions in Gulf of Mexico Common Bottlenose Dolphins (Tursiops truncatus) Found Dead following the Deepwater Horizon Oil Spill. *PLoS ONE* 10, e0126538 (2015).

⁴⁸ Holdway, D. A. 2002. The acute and chronic effects of wastes associated with offshore oil and gas production on temperate and tropical marine ecological processes. Marine Pollution Bulletin 44:185-203.

⁴⁹ Peterson et al. 2003.

proofing and insulating properties of feathers and fur of birds and mammals, respectively, thereby compromising their buoyancy and ability to thermoregulate. ⁵⁰

Marine mammals can be exposed to oil internally by inhaling volatile compounds at the surface, swallowing oil, consuming oil-contaminated prey, and externally by swimming in oil.⁵¹ Exposure to toxic fumes from petroleum hydrocarbons during oil spills have been recently linked to mortality in cetaceans, even years after such accidents.⁵² Studies have determined, for example, that the Deepwater Horizon oil spill caused adrenal and lung lesions in bottlenose dolphins which led to an unusual mortality event in which dolphins died over the course of several years.⁵³

If an oil spill were to occur from OCS operations in the Santa Barbara Channel, sea otters may be affected. ESA-listed sea otters are particularly vulnerable to contamination from oil spills. When sea otters come into contact with oil, it causes their fur to mat, which prevents the fur from insulating their bodies. Without this natural protection from the cold water temperature, sea otters can quickly die from hypothermia. The toxicity of oil can also be harmful to sea otters, causing liver and kidney failure and damage to their lungs and eyes. ⁵⁴

In addition, oiled shores can affect nesting and foraging areas of bird species. Oiled adults returning to the nest can contaminate their eggs and chicks with oil. Studies on the effects of oil on eggs have shown significant mortality and developmental defects in embryos. ⁵⁵ Oiled birds are also at high risk of ingesting oil when they preen their feathers. Ingested oil can damage the gastrointestinal tract, evidenced by ulcers, diarrhea, and a decreased ability to absorb nutrients, and inhibit proper hormone function. ⁵⁶ ESA-listed western snowy plovers and the California least tern are extremely sensitive to disturbances such as oil spills, especially during the nesting season. ⁵⁷ In the past few years, snowy plovers have begun successfully nesting and raising young again at Huntington Beach after a more than five decade absence. ⁵⁸ This oil spill threatens the conservation gains snowy plovers have made on southern California beaches.

Exposure to crude oil also adversely affects fish at all stages.⁵⁹ Early life stages of fish are particularly sensitive to the effects of toxic oil components such as polycyclic aromatic

⁵⁴ USFWS, Southern Sea Otter (*Enhydra lutris nereis*) 5-Year Review: Summary and Evaluation, Sept. 15, 2015.

⁵⁰ Jenssen, B. M. 1994. Review Article: Effects of oil pollution, chemically treated oil, and cleaning on the thermal balance of birds. Environmental Pollution 86:207-215; Peterson et al. 2003.

⁵¹ NOAA. 2010. Analysis of Hydrocarbons in Samples Provided from the Cruise of the R/V WEATHERBIRD II, May 23-26, 2010, National Oceanic and Atmospheric Administration, Silver Spring, Maryland, 20910.

⁵² Venn-Watson et al. 2015.

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⁵⁵ Jenssen 1994.

⁵⁶ *Id*

⁵⁷ US Fish and Wildlife Service 1985.

⁵⁸ Audubon, Western Snowy Plovers nest at Huntington State Beach for the first time in five decades, Aug. 2018, https://ca.audubon.org/news/western-snowy-plovers-nest-huntington-state-beach-first-time-five-decades.

⁵⁹ Carls, M. G., S. D. Rice, and J. E. Hose. 1999. Sensitivity of fish embryos to weathered crude oil: part I. Low-level exposure during incubation causes malformations, genetic damage, and mortality in larval pacific herring (Clupea pallasi). Environmental Toxicology and Chemistry 18:481-493; Bernanke, J., and H.-R. Kohler. 2009. The impact of environmental chemicals on wildlife vertebrates. Reviews of Environmental Contamination and Toxicology 198:1-47.

hydrocarbons which can cause larval deformation and death. Adult fish exposed to oil can suffer from reduced growth, enlarged liver, changes in heart and respiration rates, fin erosion, and reproductive impairment. Additionally, fish and sharks are at risk from lethal coating of their gills with oil, and declines in and contamination of their food sources. Exposure to crude oil has also been linked to long-term population effects in fish. A recent study based on 25 years of research demonstrated that embryonic salmon and herring exposed to very low levels of crude oil can develop heart defects that impede their later survival, indicating that the spill may have had much more widespread impacts than previously thought.

ESA-listed California tiger salamanders are also particularly vulnerable to oil spills. The U.S. Fish and Wildlife Service's 5-year review for the species specifically states that "sources of chemical pollution that may adversely affect Central California tiger salamanders include hydrocarbon and other contaminants from oil production ..." and that spilled oil can "negatively affect the food chain, with effects to algae growth and less prey species available, resulting in smaller salamander larvae."

Threatened and endangered plants, such as marsh plants, are vulnerable to oil spills. When marsh plants come into contact with crude oil, it can cause nearly complete mortality. Additionally, the oil can reside in the soil and cause longterm stress for marsh vegetation and erosion of marshlands. Salt marsh bird's-beak, Ventura marsh milkvetch, and other threatened and endangered plants along the Southern California coast are at risk.

Oil and Gas Activity Increases Vessel Traffic and the Risk of Vessel Strikes

Oil and gas activity also increases vessel traffic, for example, from servicing wells and transporting materials, or responding to oil spills. This increases the risk of vessel strikes of various endangered animals, including several species of whales.

New information reveals that vessel strikes are having than previously understood. New information reveals, for example, that whales are increasingly being struck by vessels off California, and that these incidents may be negatively affecting whale recovery. Carretta et al. 2020 found, for example, that in 2018, vessels killed or seriously injured 13 whales in California—the highest number on record number since NMFS began keeping records in 1982. Vessel strikes represent the majority of human-caused large whale deaths on the U.S. West Coast from 2014 to 2018, with a total of at least 26 whale deaths, followed by fishery-related

⁶¹ Incardona, et al. 2015. Very low embryonic crude oil exposures cause lasting cardiac defects in salmon and herring. Scientific Reports 5, Article number: 13499, doi:10.1038/srep13499.

⁶⁰ Bernanke and Kohler 2009, USFWS 2010.

⁶² USFWS, California Tiger Salamander Central California Distinct Population Segment (Ambystoma californiense) 5-Year Review: Summary and Evaluation (Oct. 21, 2014). ⁶³ NOAA, Oil Spills in Marshes (2013).

⁶⁴ B.M. Levine, J.R. White, R.D. DeLaune, K. Maiti. 2017. Crude Oil Effects on Redox Status of Salt Marsh Soil in Louisiana. Soil Science Society of America Journal, 81 (3): 647.

⁶⁵ Carretta, James V. et al. 2020. Sources of Human-Related Injury and Mortality for U.S. Pacific West Coast Marine Mammal Stock Assessments, 2014- 2018, U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC631.

entanglements (at 21 deaths).⁶⁶ For fin whales, eight died from vessel strikes during this time, representing the leading cause of human-caused injury and death.⁶⁷ For both blue whales (three deaths) and humpback whales (13 deaths), vessel strikes are the second leading cause of injury and death after fishery interactions.⁶⁸

These reported collisions vastly underestimate actual strikes because many go unseen. Rockwood et al. 2017 created a model that calculated encounter risk, strike risk, and mortality estimates. The results estimated 18 blue whale mortalities due to ship strikes annually, including only the period of July to November when whales are most likely to be present in the U.S. West Coast EEZ.⁶⁹ The authors also estimated that 22 humpback whales and 43 fin whales died per year during this time period.⁷⁰ Given the uncertainty in accounting for whale collision avoidance, they also calculated strike mortality in the case of no avoidance, producing estimates of 40 blue, 48 humpback, and 95 fin whale deaths.⁷¹ At least one new study indicates that blue whales have a limited ability to avoid collisions with vessels. The study concluded that while whales have some cues to avoid ships, this is true only at close range, under certain oceanographic conditions, and if the whale is not otherwise distracted by feeding, breeding, or other behaviors.⁷²

Updated abundance estimates for humpback whales off Southern California allowed Rockwood and Jahncke 2019 to estimate that humpback mortality from January to April in Southern California alone was 6.5 whales (1.63/month). When added to the estimated mortality from July to November, this means that the total estimated annual humpback mortality from vessel strikes in California alone is 23.4 deaths (16.9 + 6.5). This study neither included information for January to April for fin or blue whales, nor estimated humpback mortality in central or Northern California. Thus, even this updated study underestimates whale mortality.

This level of vessel strike is impeding the recovery of endangered whales off California. Indeed, scientists have concluded that "death from vessel collisions may be a significant impediment to population growth and recovery." For example, the minimum estimate of blue whale abundance is 1,050 whales, which gives a PBR level for U.S. waters of 1.23 whales. Ship strikes alone exceed the blue whale's PBR several times over. Additionally, the current stock assessment report for humpback whales off California provides a PBR for U.S. waters of 16.7 whales (which does not properly account for the listing of the Central America and Mexico DPSs

⁶⁶ *Id*.

⁶⁷ *Id*.

⁶⁸ Id

⁶⁹ Rockwood, R., et al., 2017. High mortality of blue, humpback and fin whales from modeling of vessel collisions on the U.S. West Coast suggests population impacts and insufficient protection. PLOS ONE 12(8): e0183052. ⁷⁰ *Id.*

⁷¹ Id.

⁷² Szesciorka, A.R., et al. 2019. A Case Study of a Near Vessel Strike of a Blue Whale: Perceptual Cues and Fine-Scale Aspects of Behavioral Avoidance. Front. Mar. Sci., vol. 6, art. 761, https://doi.org/10.3389/fmars.2019.00761.
⁷³ Rockwood, C and Jahncke J. 2019. Management recommendations to reduce deadly whale strikes off California. Unpublished report for the National Oceanic and Atmospheric Administration, the United States Coast Guard, and the Maritime Industry. 16 p.

⁷⁴ *Id*.

⁷⁵ Rockwood, et al. 2017.

⁷⁶ NMFS. 2020. Stock Assessment Report: BLUE WHALE (Balaenoptera musculus musculus): Eastern North Pacific Stock at 188.

under the ESA or the low population size of the endangered Central America humpback whale DPS).⁷⁷ The estimated humpback whale mortality from vessel strikes is over this PBR level.

Oil and Gas Activity Exacerbates the Climate Crisis

New information reveals the extent of the climate crisis and the role that continued oil drilling plays in fueling the climate emergency. This in turn has harmful effects on numerous imperiled species.

The climate crisis is already causing devastating impacts from rising seas and coastal erosion; more destructive hurricanes and wildfires; increasing heatwaves, droughts, and floods; imperiling food and water security; and the collapse of ecosystems. The overwhelming scientific consensus has conclusively determined that without significant, rapid emissions reductions, warming will exceed 1.5 degrees Celsius and will result in catastrophic damage around the world. Every fraction of additional warming above 1.5 degrees Celsius will worsen these harms, threatening people's lives, health, safety, and livelihoods; as well as the economy and national security for this generation and future generations.

For example, the Intergovernmental Panel on Climate Change ("IPCC")'s most recent report in August 2021 finds that it is now unequivocal that human influence has warmed the climate and caused widespread, rapid changes to every inhabited region across the globe. Nover the next 20 years, it is likely that global temperatures will meet or exceed 1.5°C of warming with current emissions. The report confirms that aggressive reductions in greenhouse gas emissions are necessary. Unless there are immediate and rapid reductions in emissions, limiting warming to 1.5°C or even 2°C will be beyond reach. The report shows that extreme climate changes will be more widespread at 2°C compared to 1.5°C warming, including increased heat waves, more severe storms, and greater sea level rise. For instance, the report states that extreme sea level events that only used to occur once every 100 years could happen every year by the end of the century.

This follows the IPCC's 2018 Special Report on Global Warming of 1.5°C that quantified the devastating harms that would occur at 2°C warming, also highlighting the necessity of limiting warming to 1.5°C to avoid catastrophic impacts to people and life on Earth.⁸³ The report provides overwhelming evidence that climate hazards are more urgent and more severe than

⁷⁷ NMFS. 2020. Stock Assessment Report: HUMPBACK WHALE (Megaptera novaeangliae): California/Oregon/Washington Stock at 179–80.

⁷⁸ IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J. B. R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press. In Press. Available at https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf.

⁷⁹ *Id.* at SPM-17–18 (Summary For Policy Makers available at https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC AR6 WGI SPM.pdf).

⁸⁰ *Id.* at SPM-36.

⁸¹ *Id.* at SPM-32.

⁸² *Id.* at SPM-33.

⁸³ Intergovernmental Panel on Climate Change, Global Warming of 1.5°C, An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the

previously thought, and that aggressive reductions in emissions within the next decade are essential to avoiding the most devastating climate change harms. The IPCC report concludes that pathways to limit warming to 1.5°C with little or no overshoot require "a rapid phase out of CO₂ emissions and deep emissions reductions in other GHGs and climate forcers." In pathways consistent with limiting warming to 1.5°C, global net anthropogenic CO₂ emissions must decline by about 45 percent from 2010 levels by 2030, reaching net zero around 2050; for a two-thirds chance for limiting warming to 1.5°C, CO₂ emissions must reach net zero in 25 years. 85

And a 2018 report from the U.S. Geological Survey estimated that carbon emissions released from extraction and end-use combustion of fossil fuels produced on federal lands alone—not including non-federal lands—accounted for approximately one quarter of total U.S. carbon emissions during 2005 to 2014. 86 This research further establishes that the United States must halt new fossil fuel projects and close existing fields and mines before their reserves are fully extracted to achieve the Paris climate targets and avoid the worst damages from climate change.

A 2019 study also highlighted the importance of immediately halting all new fossil fuel infrastructure projects to preserve a livable planet.⁸⁷ The study found that every year of delay in phasing out fossil fuel infrastructure makes carbon "lock-in" more difficult to escape and the possibility of keeping global temperature rise below 1.5°C less likely. The study concluded that although difficult, "1.5 °C remains possible and is attainable with ambitious and immediate emission reduction across all sectors." Another 2019 analysis also underscored that the United States must halt new fossil fuel extraction and rapidly phase out existing production to avoid jeopardizing our ability to meet the Paris climate targets and avoid the worst dangers of climate change. ⁸⁹

The United Nations' November 2019 "Emissions Gap" report reiterated the need for urgent action to cut fossil fuel emissions. According to the report, if the world is to limit global warming to 1.5°C, countries must cut emissions by at least 7.6 percent per year over the next decade, for a total emissions reduction of 55 percent between 2020 and 2030. The United Nations' November 2019 "Production Gap" report shows that countries like the United States are on course to extract vastly more fossil fuels than what is allowed to meet a 1.5°C or even 2°C target. Countries' current fossil fuel production plans would lead to 120 percent more fossil fuel emissions by 2030 than would be consistent with a 1.5°C pathway, and 210 percent more by

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context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (Oct. 6, 2018), http://www.ipcc.ch/report/sr15/.

⁸⁴ *Id.* at 2-28.

⁸⁵ *Id.* at SPM-15.

⁸⁶ Merrill, Matthew D. et al., Federal lands greenhouse gas emissions and sequestration in the United States—Estimates for 2005–14: U.S. Geological Survey Scientific Investigations Report 2018–5131 (2018) at 8.

⁸⁷ Smith, Christopher J. et al., Current fossil fuel infrastructure does not yet commit us to 1.5°C warming. Nature Communications (2019), doi.org/10.1038/s41467-018-07999-w; *see also* Green, Fergus and Richard Denniss, Cutting with both arms of the scissors: the economic and political case for restrictive supply-side climate policies, 150 Climatic Change 73 (2018) (describing carbon lock-in).

⁸⁸ Smith 2019.

⁸⁹ Oil Change International, Drilling Toward Disaster: Why U.S. Oil and Gas Expansion Is Incompatible with Climate Limits (Jan. 2019), http://priceofoil.org/drilling-towards-disaster.

⁹⁰ Emissions Gap Report 2019 at 25, 26.

2040. 91 The United States is a primary contributor to this dangerous over-production of fossil fuels as the world's largest oil and gas producer and second largest coal producer, with current policies projected to lead to a 30 percent increase in oil and gas production by 2030. ⁹² And the International Energy Agency ("IEA") recently issued a report concluding that "hav[ing] a fighting chance of . . . limiting the rise in global temperatures to 1.5°C. . . requires nothing short of a total transformation of the energy systems that underpin our economies. "93

Upon the release of the Working Group I contribution to the IPCC's Sixth Assessment Report, U.N. Secretary António Guterres said "This report must sound a death knell for coal and fossil fuels, before they destroy our planet. . . . Countries should also end all new fossil fuel exploration and production."94 Fatih Birol, Executive Director of the IEA, said upon the release of the IEA's climate report in May 2021: "If governments are serious about the climate crisis, there can be no new investments in oil, gas and coal, from now – from this year."95

President Biden himself has acknowledged the science and directed federal agencies to take all necessary action. For example, in his January 27, 2021 Executive Order on Tackling the Climate Crisis at Home and Abroad, he wrote:

There is little time left to avoid setting the world on a dangerous, potentially catastrophic, climate trajectory....we face a climate crisis that threatens our people and communities, public health and economy, and, starkly, our ability to live on planet Earth....We must listen to science — and act....It is the policy of my Administration to organize and deploy the full capacity of its agencies to combat the climate crisis to implement a Government-wide approach that reduces climate pollution in every sector of the economy.⁹⁶

Drilling off California contributes to the climate emergency. One study estimated, for example, that for each unit (OBtu) of federal oil production cut, other oil supplies would substitute for about half a unit (0.56 QBtu) and net oil consumption would drop by nearly half a unit (0.44 OBtu). 97 In short, every barrel of federal oil left undeveloped would result in nearly half a barrel reduction in net oil consumption, with associated reductions in greenhouse gas emissions. The analysis recommended that "policy-makers should give greater attention to measures that slow

⁹¹ Production Gap Report 2019 at 4, 14.

⁹³ International Energy Agency, Net Zero by 2050: A roadmap for the global energy system (2021), available at: https://www.iea.org/reports/net-zero-by-2050.

⁹⁴ United Nations Secretary-General, Secretary-General's statement on the IPCC Working Group 1 Report on the Physical Science Basis of the Sixth Assessment, Aug. 9, 2021, https://www.un.org/sg/en/content/secretary-generalsstatement-the-ipcc-working-group-1-report-the-physical-science-basis-of-the-sixth-assessment.

⁹⁵ Fiona Harvey, No new oil, gas or coal development if world is to reach net zero by 2050, says world energy body, Guardian, May 18, 2021, https://www.theguardian.com/environment/2021/may/18/no-new-investment-in-fossilfuels-demands-top-energy-economist.

⁹⁶ Exec. Order No. 14,008, supra note Error! Bookmark not defined..

⁹⁷ P. Erickson and M. Lazarus, How would phasing out US federal leases for fossil fuel extraction affect CO2 emissions and 2°C goals?, Stockholm Environment Institute, Working Paper No. 2016-2 (2016).

the expansion of fossil fuel supplies." Other studies have reached similar conclusions. For example, an analysis published in the journal *Nature Climate Change* concluded that increased oil production would significantly increase global oil consumption as the result of greater supplies and lower global oil prices. Using publicly available global oil supply curves from the International Energy Agency and peer-reviewed elasticities of demand, the analysis estimated that each barrel of increased oil production would result in an increase of 0.59 barrels of global oil consumption. Description of the production would result in an increase of 0.59 barrels of global oil consumption.

Although this study focused on the effects of increases in Canadian tar sands production, the lead author used the same model to estimate that, for each barrel of California oil left in the ground, an added 0.4 to 0.8 barrels would be produced elsewhere. This yields a net reduction in global oil consumption of between 0.6 and 0.2 barrels, "as consumers respond to the small price increase by making shifts in their vehicle purchases, driving habits, and other decisions." 103

THE BUREAUS AND SERVICES MUST COMPLY WITH SECTION 7 OF THE ESA

As explained above, agencies are required to reinitiate consultation when, *inter alia*, "new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered" or there is newly designated critical habitat that may be affected by the action. ¹⁰⁴ Both these triggers are met here.

The recent oil spill constitutes new information revealing effects of the Bureaus' ongoing authorization and management of oil and gas activity on the Pacific OCS to an extent not previously considered. For example, in concluding that oil and gas activities on the Pacific OCS are not likely to adversely affect endangered species, the National Marine Fisheries Service ("NMFS") relied on the fact that there was a "low likelihood" an oil spill occurring and the fact that—in the event an oil spill did occur—it would be a "small" spill consisting of no more than 200 barrels, or 8,400 gallons. NMFS relied on the "small" size of an unlikely oil spill for all of

⁹⁸ *Id*. at 1.

⁹⁹ P. Erickson and M. Lazarus, Impact of the Keystone XL Pipeline on Global Oil Markets and Greenhouse Gas Emissions, 4 Nature Climate Change 778 (2016); see also P. Erickson, Rebuttal: Oil Subsidies—More Material for Climate Change Than You Might Think (Nov. 2, 2017); United Nations Environment Programme, Emissions Gap Report 2019, UNEP, Nairobi (2019), at 25, 26, https://wedocs.unep.org/bitstream/handle/20.500.11822/30797/ EGR2019.pdf?sequence=1&isAllowed=y; United Nations Environment Programme, et al., The Production Gap: The discrepancy between countries' planned fossil fuel production and global production levels consistent with limiting warming to 1.5°C or 2°C (2019), at 4, 14, http://productiongap.org/.

¹⁰⁰ Erickson, P. & Lazarus, M., Impact of the Keystone XL Pipeline on Global Oil Markets and Greenhouse Gas Emissions, 4 Nature Climate Change 778 (2014).

¹⁰² Erickson, P. & Lazarus, M., How Limiting Oil Production Could Help California Meet Its Climate Goals, Stockholm Environment Institute Discussion Brief (2018) at 2.

¹⁰⁴ 50 C.F.R. § 402.16.

¹⁰⁵ See, e.g., NMFS Concurrence Letter at 7 ("BOEM anticipates that the maximum most likely spill volume for the Pacific Region in the foreseeable future is 200 bbl (equivalent to -8,400 gallons);" *id.* at 11 ("the likelihood that a small spill up to 200 bbl would make contact with a large whale is extremely low, and therefore discountable."); *id.* at 12 (noting "low likelihood" of a spill); *id.* at 15 ("we assume that a 200 bbl spill, if it were to come in contact with their prey, would not significantly affect the availability of prey resources to leatherbacks").

its conclusions regarding the effects of the action on threatened and endangered species. 106 The recent spill from the pipeline connected to Platform Elly—which was more than 17 times this amount—reveals that these key assumptions and conclusions are very wrong.

Additionally, as explained above, new information also indicates that vessel strikes are having much more harmful impact on endangered whales than NMFS considered in its analysis; and that continued oil drilling only exacerbates the climate emergency. Further, NMFS recently designated critical habitat for endangered Central America distinct population segment ("DPS") and the threatened Mexico DPS of humpback whales, including in areas affected by oil and gas drilling activity off California.¹⁰⁷

By failing to reinitiate consultation, the Bureaus and the Services would be in violation of their procedural and substantive duties to ensure that the Bureaus' actions do not jeopardize the continued existence of threatened and endangered species in California. These species include, but are not limited to, California sea otters, blue whales, fin whales, the endangered Central America DPS and the threatened Mexico DPS of humpback whales, Pacific leatherback sea turtles, western snowy plovers, California least tern, short-tailed albatross, tidewater goby, the Santa Barbara DPS of California tiger salamanders, black and white abalone, Ventura marsh milkvetch, La Graciosa thistle, among others. The agencies' failure to reinitiate consultation would also fail to ensure its actions do not result in the destruction or adverse modification of designated critical habitat for the western snowy plover, tidewater goby, coastal California gnatcatcher, Santa Barbara DPS of California tiger salamanders, black and white abalone, and newly designated critical habitat for humpback whales, among others.

Given the ongoing threat that oil drilling poses to ESA-protected species, the Bureaus must stop issuing new drilling permits during reinitiated consultation.

CONCLUSION

For the foregoing reasons, the Bureaus and Services must reinitiate consultation on the Bureaus' continued authorization and management of oil and gas activities on the Pacific OCS. If the agencies fail to do so, the Center for Biological Diversity intends to file suit under the ESA's citizen suit provision. We urge the agencies to contact us regarding this letter to discuss options for avoiding litigation over this claim or to provide us with any information we may not have that is relevant to the agencies' ESA consultation duties.

Sincerely,

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¹⁰⁶ See id.

¹⁰⁷ 86 Fed. Reg. 21,082, 21,136–37 (Apr. 21, 2021); 50 C.F.R. § 226.227.