Via U.S. Certified and Electronic Mail

May 11, 2023

Deb Haaland, Secretary
U.S. Department of the Interior
1849 C Street, NW
Washington, DC 20240
Email: exsec@ios.doi.gov

Martha Williams, Director
U.S. Fish and Wildlife Service
1849 C Street, NW
Washington, DC 20240
Email: martha_williams@fws.gov

Liz Klein, Director
Bureau of Ocean Energy Management
1849 C Street, NW
Washington, D.C. 20240
Email: elizabeth.klein@boem.gov

Kevin M. Sligh, Sr., Director
Bureau of Safety and Environmental Enforcement
1849 C Street, NW
Washington, D.C. 20240
Email: kevin.m.sligh@bsee.gov

Re: 60-Day Notice of Intent to Sue: Violations of the Endangered Species Act Related to Oil and Gas Drilling in the Gulf of Mexico

Dear Secretary Haaland, Director Williams, Director Klein, and Director Sligh:

Pursuant to 16 U.S.C. § 1540(g), this letter serves as the Center for Biological Diversity's 60-day notice of intent to sue the U.S. Department of the Interior, Secretary of the Interior, U.S. Fish and Wildlife Service (FWS), Bureau of Ocean Energy Management (BOEM), and Bureau of Safety and Environmental Enforcement (BSEE) for violating their procedural and substantive obligations under section 7(a)(2) of the Endangered Species Act (ESA) related to oil and gas activity on the Gulf of Mexico Outer Continental Shelf (OCS).[1] The agencies' actions and inactions not only violate the ESA, but put endangered animals already struggling to survive at greater risk from the numerous harms inherent in offshore oil and gas drilling.

Specifically, BOEM and BSEE are in violation of section 7 of the ESA by failing to ensure that their authorization of oil and gas activity in the Gulf of Mexico is not likely to jeopardize the continued existence of imperiled green, hawksbill, Kemp's ridley, leatherback, or loggerhead sea turtles; the Cape Sable seaside sparrow; the Mississippi sandhill crane; the piping plover; the roseate tern; the rufa red knot; the whooping crane; the wood stork; beach mice; or the West Indian manatee. BOEM and BSEE are also failing to ensure that their authorization of oil and gas activity in the Gulf of Mexico is not likely to destroy or adversely modify loggerhead sea

[1] *See* 16 U.S.C. § 1536(a)(2); FWS, Biological Opinion on Bureau of Ocean Energy Management's and Bureau of Safety and Environmental Enforcement's Proposed Oil and Gas Leasing, Exploration, Development, Production, Decommissioning, and All Related Activities in the Gulf of Mexico Outer Continental Shelf, Apr. 20, 2018.

turtle, Cape Sable seaside sparrow, Mississippi sandhill crane, piping plover, and whooping crane critical habitat.

BOEM's and BSEE's violations stem, in part, from their reliance on a 2018 FWS biological opinion that purports to analyze the impacts of OCS oil and gas activity in the Gulf of Mexico on these species ("Gulf Oil and Gas BiOp" or "BiOp"). That BiOp, however, erroneously omits consideration of a catastrophic oil spill; fails to properly consider the environmental baseline; fails to consider the impacts of greenhouse gas emissions from Gulf oil and gas activity on climate-threatened species; fails to rely on the best available science; and relies on uncertain mitigation measures. The BiOp also fails to include an incidental take statement for take that is reasonably certain to occur, among other errors. Consequently, the Gulf Oil and Gas BiOp is arbitrary, capricious, and not in accordance with the ESA.

Moreover, a slew of new information not only highlights the numerous fundamental flaws in the existing BiOp, but triggers FWS's, BOEM's, and BSEE's obligation to reinitiate consultation on the effects of OCS oil and gas activity in the Gulf of Mexico on species and critical habitats under FWS's jurisdiction. This new information includes, but is not limited to, new information on the risk of oil spills; the dramatic manatee population decline in recent years and their changing habitat areas; new information regarding the imperiled status of sea turtles; and the overwhelming science demonstrating that more oil and gas drilling means more carbon emissions and climate chaos. The recent listing of the eastern black rail also triggers the agencies' duty to reinitiate consultation.

FWS's, BOEM's, and BSEE's failure to reinitiate and complete new consultation on the impacts of OCS oil and gas activity in the Gulf of Mexico on protected sea turtles, birds, beach mice, and manatees violates the agencies' procedural and substantive obligations under section 7 of the ESA. Furthermore, by continuing to rely on the legally flawed Gulf Oil and Gas BiOp to approve new oil and gas activity, BOEM and BSEE are failing to ensure that their actions are not likely to jeopardize the continued existence of these threatened and endangered species or result in the destruction or adverse modification of designated critical habitat.[2]

If FWS, BOEM, and BSEE do not reinitiate consultation within 60 days, the Center may pursue litigation to resolve the matter. However, we urge the agencies to contact us immediately to discuss options for avoiding litigation.

I. LEGAL BACKGROUND: THE ENDANGERED SPECIES ACT

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" and that these species are "of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people."[3] Accordingly, the ESA seeks "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."[4] The ESA defines conservation as "the use of all methods and procedures which are necessary to bring any endangered species or threatened

[2] *See* 16 U.S.C. § 1532(a)(2).
[3] *Id.* § 1531(a)(2), (3).
[4] *Id.* § 1531(b).

species to the point at which the measures provided pursuant to [the ESA] are no longer necessary."[5] The ESA is widely considered "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation," and embodies the "plain intent" of Congress "to halt and reverse the trend toward species extinction, whatever the cost."[6]

To help achieve these goals, section 9 prohibits any person, including any federal agency, from "taking" an endangered species without proper authorization.[7] 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."[8] 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."[9] "Harass" is regulatorily defined as "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering."[10]

Additionally, under section 7(a)(2) of the ESA, all federal agencies must ensure that any action they authorize, fund, or carry out "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [their designated critical] habitat."[11] When an agency determines that its proposed "action may affect listed species or critical habitat" it must engage in formal consultation with the expert federal wildlife agency responsible for the species at issue using "the best scientific and commercial data available."[12]

As relevant here, formal consultation ends with the issuance of a biological opinion by FWS. The biological opinion must explain how the proposed action will affect the ESA-listed species or critical habitat under FWS's jurisdiction and determine whether jeopardy or adverse modification is likely to occur.[13] If jeopardy or adverse modification is found, the biological opinion shall suggest "reasonable and prudent alternatives" to the proposed action that FWS believes would avoid the likelihood of jeopardy or adverse modification.[14]

If FWS concludes that the action may take individual listed members of the population, but the action will not jeopardize the population, the agency must produce an incidental take statement (ITS) that specifies the impact of the action, generally by setting a numeric limit on take, and identifying "reasonable and prudent measures" that will minimize the impact of that take, among other requirements.[15] In addition, when the endangered or threatened species to be taken are

---

[5] *Id.* § 1532(3).
[6] *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180, 184 (1978).
[7] 16 U.S.C. § 1538(a)(1)(B).
[8] *Id.* § 1532(19).
[9] 50 C.F.R. § 17.3; *see also Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or.*, 515 U.S. 687 (1995) (upholding regulatory definition of harm).
[10] 50 C.F.R. § 17.3.
[11] 16 U.S.C. § 1536(a)(2).
[12] *Id.*; 50 C.F.R. § 402.14(a), (d), (g)(8).
[13] 50 C.F.R. § 402.14(g)(3), (4).
[14] 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. §§ 402.14(h)(2), 402.02.
[15] 16 U.S.C. § 1536(b)(4)(C); *Or. Nat. Res. Council v. Allen*, 476 F.3d 1031, 1033 (9th Cir. 2007).

marine mammals, the take must first be authorized pursuant to the Marine Mammal Protection Act, and the ITS must include any additional measures necessary to comply with the Marine Mammal Protection Act take authorization.[16] The take of a listed species in compliance with the terms of a valid ITS is not prohibited under section 9 of the ESA.[17]

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."[18] 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 ("effects of the action"); and the effects of future state and private activities that are reasonably certain to occur ("cumulative effects").[19] FWS must consider all of these factors in context of the current status of the species and its habitat.[20] Only where FWS concludes that all of these elements added together do not threaten a species' survival and recovery can the agency issue a no-jeopardy opinion.[21]

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.[22] 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: (1) the amount or extent of taking specified in the ITS is exceeded; (2) 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; (3) 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 (4) if a new species is listed or critical habitat designated that may be affected by the identified action.[23]

"When reinitiation of consultation is required, the original biological opinion loses its validity, as does its accompanying incidental take statement, which then no longer shields the action agency from penalties for takings."[24] 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

[16] 16 U.S.C. § 1543; 50 C.F.R. § 402.14(i).
[17] 16 U.S.C. §§ 1536(b)(4), (o)(2); 50 C.F.R. § 402.14(i)(5).
[18] 50 C.F.R. § 402.02.
[19] *Id.* §§ 402.14(g), 402.02.
[20] *Id.* § 402.14(g).
[21] *See Pac. Coast Fed'n of Fishermen's Ass'n v. U.S. Bureau of Reclamation*, 426 F.3d 1082, 1093 (9th Cir. 2005) (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").
[22] *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).
[23] 50 C.F.R. § 402.16(a).
[24] *Ctr. for Biological Diversity v. BLM*, 698 F.3d 1101, 1108 (9th Cir. 2012).

irreversible or irretrievable commitment of resources" toward an action that would "foreclose[e] the formulation or implementation of any reasonable and prudent alternative measures."[25]

II. FACTUAL BACKGROUND: OIL AND GAS DRILLING IN THE GULF OF MEXICO AND THE EXISTING FWS BIOLOGICAL OPINION

The Gulf of Mexico is home to a wide variety of wildlife, including numerous species protected under the ESA. It is also home to a vast array of oil and gas activity, including over 2,000 oil and gas leases across more than 11.2 million acres.[26] Pursuant to past leases, thousands of platforms and rigs; more than 25,000 miles of pipeline; and more than 53,000 wells currently litter the Gulf.[27] BOEM has determined that each new oil and gas lease sale results in up to 1,751 new wells; 280 new production structures; 2,144 km of new pipelines in federal waters; and the development of up to 1.118 billion barrels of oil and 4.424 trillion cubic feet of gas.[28]

This causes a host of harms to sea turtles, birds, marine mammals, and other wildlife, through oil spills; habitat destruction; noise and light pollution; fatal collisions with vessels and platforms; and more greenhouse gas pollution, to name just a few.

Because of the numerous impacts to ESA-listed species from offshore oil and gas activity in federal waters of the Gulf of Mexico, BOEM and BSEE are required to consult with FWS regarding the impacts of such activity on ESA-protected species under FWS's jurisdiction. However, the existing Gulf Oil and Gas BiOp is inadequate and outdated.

Gulf OCS Oil and Gas Activity Causes Harmful Oil Spills

Oil and gas activity causes oil spills that can harm threaten and endangered wildlife, including birds, sea turtles, and manatees. For example, oil spills have a wide array of lethal and sublethal impacts on marine species, both immediate and long-term.[29] 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.[30] Oil can also exert indirect effects on wildlife through reduction of key prey species.[31]

---

[25] 16 U.S.C. § 1536(d); 50 C.F.R.§ 402.09.
[26] BOEM, Combined Leasing Report As of May 1, 2023, https://www.boem.gov/sites/default/files/documents/oil-gas-energy/Lease%20stats%205-1-23.pdf.
[27] *See, e.g.,* BSEE, Decommissioning FAQs, https://www.bsee.gov/subject/decommissioning-faqs (last visited May 6, 2023); Oil and Gas Pipelines In Gulf of Mexico Data Atlas [Internet]. Stennis Space Center (MS): National Centers for Environmental Information; 2011, available at https://gulfatlas noaa.gov/; U.S. Department of the Interior, OCS Oil/Gas Development, July 12, 2017, https://www.doi.gov/ocl/ocs-oilgas-development.
[28] *See, e.g.*, BOEM, Gulf of Mexico OCS Oil and Gas Lease Sales 259 and 261 Final Supplemental Environmental Impact Statement, Jan. 2023 at 2-5, 3-5.
[29] Peterson, C. H., et al., Long-term ecosystem response to the Exxon Valdez oil spill, 302 Science 2082-86 (20023); 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).
[30] Holdway, D. A., The acute and chronic effects of wastes associated with offshore oil and gas production on temperate and tropical marine ecological processes, 44 Marine Pollution Bulletin 185-203 (2002).
[31] Peterson et al. 2003.

Oil destroys the water-proofing and insulating properties of feathers and fur of birds and mammals, respectively, thereby compromising their buoyancy and ability to thermoregulate.[32]

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.[33] 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.[34]

Sea turtles are highly susceptible to contaminants because of their long-life spans and lack of effective detoxification methods.[35] Oil harms imperiled sea turtles via myriad avenues of exposure. Effects of exposure include "[i]mpairment of stress responses and adrenal gland function, cardiotoxicity, immune system dysfunction, disruption of blood cells and their function, effects on locomotion, and oxidative damage."[36] High exposure results in multi-organ system failure.[37] These impacts are not limited to turtles directly exposed to contaminants. Maternal transfer of lipophilic components of oil and their associated metabolites to sea turtle eggs can occur, with implications for early life development and survival.[38]

On land, oil spills harm sea turtles in a variety of ways. For example, eggs exposed to oil on nesting beaches or via egg-laying by an oiled female suffer increased mortality from smothering or exposure to toxicants.[39] Clean up activities associated with oil spills also can harm sea turtles by, for example, mechanized beach clean-ups that crush nests or disrupt nesting behavior.[40] Hatchlings appear particularly vulnerable to the effects of oil because of their small size and inability to escape convergence zones that collect small turtles, seaweed, and oil.[41] Among these effects are declining red blood cell counts and increased white blood cell counts, impaired ability

---

[32] Jenssen, B. M., Review Article: Effects of oil pollution, chemically treated oil, and cleaning on the thermal balance of birds, 86 Environmental Pollution 207-215 (1994); Peterson et al. 2003.
[33] Jenssen 1994.
[34] *Id.*
[35] *See* Frasier, Kaitlin E. et al., Ch. 26: Impacts of the Deepwater Horizon Oil Spill on Marine Mammals and Sea Turtles, in Murawski, Steven A. et al. (eds.), Deep Oil Spills: Facts, Fate, and Effects (2020) (summarizing impacts to sea turtles from the Deepwater Horizon spill); Pierro, Jocylin D., In vitro analysis and mathematical modeling of the cytotoxicity of organic contaminants in loggerhead (Caretta caretta) sea turtles, Ph.D. Dissertation, Texas Tech University (Aug. 2020) (describing cytotoxicity of organic chemicals to loggerhead sea turtles); Wallace, Bryan P. et al., Oil spills and sea turtles: documented effects and considerations for response and assessment efforts, 41 Endangered Species Research 17 (2020) (summarizing effects of oil spills on sea turtles); Ruberg, Elizabeth J. et al., Review of petroleum toxicity in marine reptiles, 30 Ecotoxicology 525 (2021) (describing petroleum toxicity in sea turtles).
[36] Takeshita, Ryan et al. 2021.
[37] *Id.*
[38] *See* Shaver, Donna J. et al., Embryo deformities and nesting trends in Kemp's ridley sea turtles Lepidochelys kempii before and after the Deepwater Horizon oil spill, 44 Endangered Species Research 277 (2021).
[39] NMFS, Oil and Sea Turtles: Biology, Planning and Response, NOAA's National Ocean Service/Office of Response and Restoration/ Hazardous Materials Response Division (2003).
[40] Lauritsen, Ann Marie et al., Impact of the Deepwater Horizon oil spill on loggerhead turtle Caretta nest densities in northwest Florida, 33 Endangered Species Research 83 (2017).
[41] NMFS, Oil and Sea Turtles 2003; McDonald, Trent L. et al., Density and exposure of surface-pelagic juvenile sea turtles to Deepwater Horizon oil, 33 Endangered Species Research 69 (2017).

to regulate the internal balance of salt and water, and sloughing of the skin that can lead to infection.[42]

Manatees are also threatened by oil spills through harm to both seagrass beds and individual animals. Manatees may be exposed to contaminants directly through dermal contact, inhalation, aspiration, or ingestion.[43] Impacts may include severe and possibly fatal lung, liver, and kidney disorders.[44]

Gulf OCS Oil and Gas Activity Causes Harmful Habitat Destruction, Noise and Light Pollution, and Collision-Related Mortality from Vessels and Platforms

Oil and gas activity in the Gulf also causes habitat destruction. Studies have determined, for example, "that anthropogenic noise and light can substantially affect breeding bird phenology and fitness."[45] Artificial light attracts birds at night and disrupts their normal foraging and breeding activities in several ways.[46] In a phenomenon called light entrapment, the birds continually circle lights and flares on vessels and energy platforms, instead of foraging or visiting their nests, which can lead to exhaustion and mortality.[47] Seabirds also frequently collide with lights or structures around lights causing injury or mortality, or on lighted platforms where they are vulnerable to injury, oiling or other feather contamination, and exhaustion.[48]

One study estimated that platforms in the Gulf of Mexico kill roughly 200,000 birds each year via collisions, equating to approximately 50 birds per platform.[49] The study noted that these estimates should be considered conservative given they do not account for issues related to detection bias.[50] As such, even more birds may be killed each year by collisions with Gulf of Mexico platforms than these numbers reflect.

Additionally, onshore OCS-related infrastructure (such as roads, pipeline landfalls, and terminals) can destroy, fragment, or otherwise permanently alter coastal and estuarine bird

---

[42] NMFS, Oil and Sea Turtles 2003; Mitchelmore, C.L., C.A. Bishop & T.K. Collier, Toxicological estimation of mortality of oceanic sea turtles oiled during the Deepwater Horizon oil spill, 33 Endangered Species Research 39 (2017).
[43] Kuppusamy, Saranya et al., Total Petroleum Hydrocarbons: Environmental Fate, Toxicity, and Remediation (2020), Springer International Publishing.
[44] *Id*.
[45] Senzaki, Masayuki et al., Sensory pollutants alter bird phenology and fitness across a continent. 587 Nature 605 (2020).
[46] Montevecchi, W., Influences of artificial light on marine birds. In C. Rich and T. Longcore, editors. Ecological Consequences of Artificial Night Lighting. Washington, D.C: Island Press,. 94-113 (2005).
[47] Wiese, F. K., et al., Seabirds at risk around offshore oil platforms in the North-west Atlantic, 42 Marine Pollution Bulletin 1285–1290 (2001).
[48] Wiese et al. 2001; Black, A. 2005. Light induced seabird mortality on vessels operating in the Southern Ocean: incidents and mitigation measures. *Antarctic Science* 17:67-68.; Le Corre, M., A. Ollivier, S. Ribes, and P. Jouventin. 2002. Light-induced mortality of petrels: a 4-year study from Réunion Island (Indian Ocean). *Biological Conservation* 105:93-102.
[49] Russell, R.W. 2005. Interactions between migrating birds and offshore oil and gas platforms in the northern Gulf of Mexico: Final Report. U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2005-009. 348 pp.
[50] *Id.*

habitat (like wetlands) and lead to permanent displacement from preferred habitat.[51] This habitat destruction can also compromise birds' ability to locate prey and degrade the quality of their prey.[52]

The noise produced by vessels and other oil and gas activity harms manatees as well. For example, noise from vessels can reduce the time manatees spend feeding.[53] Manatees also spend less time milling and socializing with one another when there are high levels of noise.[54] Such impacts result in reduced reproductive success and physical separation of potential breeding individuals, ultimately precluding opportunities to mate and affecting the genetic fitness in the population.[55] Heavy vessel traffic also obstructs manatees' use of certain warm-water refugia and results in mother-calf separation.[56]

In addition to harmful noise pollution, vessel strikes also pose a significant threat to West Indian manatees. Manatees hit by vessels can suffer fatal injuries from sharp, penetrating trauma from propeller blades, or blunt, crushing trauma from hull collisions.[57] Both types of injury can result in death from extensive hemorrhage and tissue damage.[58] Vessel strikes are the leading cause of anthropogenic manatee mortality in Florida where the cause of death could be determined.[59] Furthermore, most vessel strike-related manatees mortality are adults, which is especially concerning for the recovery of the population as life history modeling shows that adult manatee survival is the most important parameter in maintaining positive population growth rates for this species.[60]

Gulf OCS Oil and Gas Activity Exacerbates Climate Change Already Threatening Species

Oil and gas activity in the Gulf also exacerbates climate change that is already threatening numerous species with extinction. Climate change already is impacting bird species worldwide, leading to changes in migratory timing and distance; phenological mismatch; alteration of prey; behavioral and morphological changes; erosion and inundation of nesting habitat; seasonal range loss; increased exposure to parasites, pathogens, predation, harmful algal blooms, and extreme

[51] BOEM, Biological Environmental Background Report for the Gulf of Mexico OCS Region, Feb. 2021 at 4-68; BOEM and BSEE, U. S. Fish and Wildlife Service Biological Assessment, Aug. 2015 at 103.
[52] Biological Environmental Background Report for the Gulf of Mexico OCS Region at 4-68.
[53] Owen, H., Flint, J., & Flint, M., Impacts of Marine Debris and Fisheries on Sirenians. In A. Butterworth (Ed.), Marine Mammal Welfare, Vol. 17, pp. 315–331 (2017). Springer International Publishing; Marsh, H., O'Shea, T. J., & Reynolds, J. E., Ecology and Conservation of the Sirenia: Dugongs and Manatees (2011). Cambridge University Press.
[54] Owen et al. 2017.
[55] Bonde, R. K., & Flint, M., Human Interactions with Sirenians (Manatees and Dugongs). In A. Butterworth (Ed.), Marine Mammal Welfare, Vol. 17, pp. 299–314 (2017). Springer International Publishing.
[56] Owen et al. 2017; Marsh et al. 2011.
[57] Owen et al. 2017; Marsh et al. 2011.
[58] Owen et al. 2017.
[59] Reinert, T., Spellman, A., & Bassett, B., Entanglement in and ingestion of fishing gear and other marine debris by Florida manatees, 1993 to 2012, 32 Endangered Species Research 415–427 (2017); Fl. Fish and Wildlife Conservation Comm'n, 2021 Preliminary Manatee Mortality Report, https://myfwc.com/research/manatee/rescue-mortality-response/statistics/mortality/2021/ (last visited May 6, 2023).
[60] Marsh et al. 2011.

weather events.[61] Species with long generation times and narrow thermal ranges appear to be particularly vulnerable to climate change effects.[62] For certain species, increasing sea surface temperatures appear to drive mortality risk as much as historical fishing mortality.[63] Recent research suggests that climate change may have substantial impacts on coastal bird communities in the Gulf of Mexico. One study concluded, for example, that "climate-mediated shifts in foundation species are likely impacting biodiversity of higher trophic level species and may exacerbate biodiversity change driven by the direct impacts of altered temperature and precipitation regimes."[64] And the 2022 "State of the Birds Report" calls climate change a "major stressor" on seabird populations.[65]

Additionally, hawksbill sea turtles are threatened by the loss of coral reefs. As corals decline, so too does hawksbill sea turtle habitat.[66] Climate change also negatively affects nesting sea turtles in a variety of ways, including loss of nesting beaches[67] (due to sea level rise and construction of protective structures like sea walls), changes to nesting timing and interval, loss of nests from extreme weather events, and changes to incubation temperatures and hatchling sex ratio.[68] Climate change impacts sargassum habitat, which is critical for juvenile sea turtles. As the climate continues to warm, sargassum zone boundary and nearshore currents may shift; water conditions may change, shifting sargassum abundance and distribution; and prey availability may

---

[61] See Gibble, Corienne M. & Brian A. Hoover, Ch. 6: Interactions between seabirds and harmful algal blooms, *in* Shumway, Sandra E., JoAnn M. Burkholder & Steve L. Morten (eds.), Harmful Algal Blooms: A Compendium Desk Reference (2018); Howard, Christine et al., Flight range, fuel load and the impact of climate change on the journeys of migrant birds, 285 Proc. Royal Soc'y B 201772329 (2018); Zurell, Damaris et al., Long-distance migratory birds threatened by multiple independent risks from global change, 8 Nature Climate Change 992 (2018); Provencher, Jennifer E. et al., Ch. 7 – Seabirds, *in* World Seas: An Environmental Evaluation (2d ed., Vol. III: Ecological Issues and Environmental Impacts (2019); Visser, Marcel E. & Phillip Gienapp, Evolutionary and demographic consequences of phenological mismatches, 3 Nature Ecology & Evolution 879 (2019); Weeks, Brian C. et al., Shared morphological consequences of global warming in North American migratory birds, 23 Ecology Letters 316 (2019); Bateman, Brooke L. et al., North American birds require mitigation and adaptation to reduce vulnerability to climate change, 2 Conservation Sci. & Practice e242 (2020); Horton, Kyle G. et al., Phenology of nocturnal avian migration has shifted at the continental scale, 10 Nature Climate Change 63 (2020); Shipley, J. Ryan et al., Birds advancing lay dates with warming springs face greater risk of chick mortality, 117 Proc. Nat'l Acad. Sci. 25590 (2020); Cunningham, Susan J., Janet J. Gardner & Rowan O. Martin, Opportunity costs and the response of birds and mammals to climate warming, 19 Frontiers Ecology & Env't 300 (2021); Lawrence, Kieran B. et al., Phenological trends in the pre- and post-breeding migration of long-distance migratory birds, 28 Global Change Biology 375 (2021); Kubelka, Vojtěch et al., Animal migration to northern latitudes: environmental changes and increasing threats, 37 Trends Ecology & Evolution 30 (2022); Pistorius, Pierre A. et al., Chapter 8 – Climate change: the ecological backdrop of seabird conservation, Conservation of Marine Birds 245 (2023).

[62] Orgeret, Florian et al., Climate change impacts on seabirds and marine mammals: the importance of study duration, thermal tolerance and generation time, 25 Ecology Letters 218 (2021).

[63] Gibson, Daniel et al., Climate change and commercial fishing practices codetermine survival of a long-lived seabird, Global Change Biology (2022), https://doi.org/10.1111/gcb.16482.

[64] Keyser, Spencer Ryan, Impacts of climate-mediated vegetation shifts and regional climate change on coastal avian community dynamics across the Gulf of Mexico, Masters Thesis, Univ. Texas, Austin (Dec. 2019).

[65] North American Bird Conservation Initiative, State of the Birds Report, United States of America 15 (2022); *see also* Dias et al. 2019 (discussing threat of climate change to seabirds).

[66] *See* Becker, Sarah L. et al., Densities and drivers of sea turtles populations across Pacific coral reef ecosystems, 14 PLoS ONE e0214972 (2019).

[67] Outright loss of habitat can be particularly problematic given female sea turtles' strong nest site fidelity.

[68] *See* Seminoff, Jeffrey A. et al., Status Review of the Green Turtle (Chelonia mydas) under the Endangered Species Act, NOAA Tech. Memo. NMFS-SWFSC-539 (Mar. 2015); Von Holle, Betsy et al., Effects of future sea level rise on coastal habitat, 83 J. Wildlife Mgmt. 694 (2019).

change alongside ocean warming and acidification.[69] Climate change-induced sargassum blooms exert sublethal stresses on nesting sea turtles by requiring them to expend additional energy searching for alternative, accessible nesting sites.[70]

Climate change also poses a threat to West Indian manatees by increasing extreme weather events (e.g., tropical storms and hurricanes) that can lead to increased mortality from standings, loss of food resources, mother-calf separations, and habitat loss and alterations.[71] Climate change will also lead to increased harmful algae blooms that will have increasingly toxic impacts on manatees and disease.[72]

FWS's 2018 Gulf Oil and Gas BiOp

Following the Deepwater Horizon oil spill, FWS, BOEM, and BSEE reinitiated consultation to reexamine the impacts of Gulf OCS oil and gas activity on threatened and endangered species and designated critical habitat under FWS's jurisdiction.[73] BOEM and BSEE sent FWS a biological assessment in 2015 and FWS issued the Gulf Oil and Gas BiOp in 2018.[74]

The BiOp takes "a programmatic approach for oil and gas activities in the [Gulf of Mexico]" and covers all oil and gas leases held during the next 10-years following issuance of the BiOp, including all associated exploration, development, and decommissioning activities authorized by BOEM or BSEE under those leases; all exploration, development, and decommissioning activities authorized on existing leases; and geological and geophysical permits issued by BOEM during the 10-year period.[75] Because the lifespan of activities under an oil and gas lease sale is generally up to 40 years, the BiOp covers 50 years of activities.[76]

In the BiOp, FWS purported to consider the impacts of these activities on nesting green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles; the Cape Sable seaside sparrow; the Mississippi sandhill crane; the piping plover; the roseate tern; the rufa red knot; the whopping crane; the wood stork; the Alabama beach mouse; the Perdido Key beach mouse; the St. Andrew beach mouse; and the West Indian manatee.[77] It also purported to consider the

---

[69] *See, e.g.*, Komatsu, Teruhisa et al., Possible changes in distribution of seaweed, Sargassum horneri, in northeast Asia under A2 scenario of global warming and consequent effect on some fish, 85 Marine Pollution Bull. 317 (2014).
[70] Maurer, Andrew S. et al., The Atlantic *Sargassum* invasion impedes beach access for nesting sea turtles, 2 Climate Change Ecology 100034 (2021).
[71] Marsh, H., Arraut, E. M., Diagne, L. K., Edwards, H., & Marmontel, M. (2017). Impact of Climate Change and Loss of Habitat on Sirenians. In A. Butterworth (Ed.), Marine Mammal Welfare, Vol. 17, pp. 333-357; Edwards, H. H. (2013). Potential impacts of climate change on warmwater megafauna: The Florida manatee example (Trichechus manatus latirostris). Climatic Change, 121(4), 727-738.
[72] *See, e.g.*, Fl. Fish & Wildlife Conservation Comm'n, Red Tide Manatee Mortalities, https://myfwc.com/research/manatee/rescue-mortality-response/statistics/mortality/red-tide/ (last visited May 5, 2023); Waymer, J., Coronavirus clouds causes of manatee deaths in 2020, Florida Today, Dec. 4, 2020, https://www.floridatoday.com/story/news/local/environment/lagoon/2020/12/04/coronavi rus-clouds-causes-manatee-deaths/3808350001/.
[73] Gulf Oil and Gas BiOp at 6–7.
[74] *Id*.
[75] *Id.*
[76] *Id.* at 7.
[77] *Id.* at 2–3.

impacts of Gulf OCS oil and gas drilling activities on loggerhead sea turtle, Cape Sable seaside sparrow, Mississippi sandhill crane, piping plover, and whopping crane critical habitat.

FWS concurred with BOEM and BSEE's determination that Gulf OCS oil and gas activities are "not likely to adversely affect nesting leatherback, green, and hawksbill sea turtles and their nests;" are not likely to adversely affect the roseate tern; and are not likely to adversely affect the wood stork. It considered the impacts on the endangered wintering population of whooping cranes only; FWS did not consider the impacts on four non-essential experimental populations.[78] For all other species, FWS concluded that Gulf of Mexico OCS oil and gas activities "are not likely to jeopardize the[ir] continued existence . . . and are not likely to destroy or adversely modify their designated critical habitat, if any."[79]

FWS's BiOp, including its no jeopardy and no adverse modification conclusions, is unlawful as written for numerous reasons. First, FWS's evaluation of the environmental baseline is inadequate and not based on the best available science. For example, despite recognizing that "[n]umerous studies have documented accelerating rise in sea levels,"[80] the BiOp does not consider the threat that sea level rise poses to nesting Kemp's ridley or loggerhead sea turtles. Nor does it consider the other impacts of climate change on these sea turtle populations, such as altered sex ratios and hatchling mortality from warming temperatures.[81] Such failures are particularly glaring considering FWS's recognition that "activities that continue to affect the survivability of turtles on their remaining nesting beaches . . . will seriously reduce the Service's ability to conserve sea turtles."[82]

Second, the BiOp fails to properly consider the impacts of oil spills. For example, it arbitrarily omits consider of a large or catastrophic oil spill. Instead, the BiOp discounts such an event as unlikely.[83] This is arbitrary. For example, the probabilities are calculated based only on the number of wells,[84] when the risks of spills also exist from pipelines, tankers, and barges. Nor does FWS's analysis consider that oil companies are drilling in deeper waters, which increases the risk of spills.[85] Studies have shown, for example, that the probability of a serious accident, fatality, injury, explosion, or fire being reported increases by 8.5 percent with each additional 100 feet of depth at which an offshore platform operates.[86] This is true regardless of the platforms age or the quantity of oil or gas produced—the increased risk comes from working under greater pressure, both from the weight of water and the greater pressure within the oil and

[78] *Id.* at 3–5.
[79] Gulf Oil and Gas BiOp at 117.
[80] *Id.* at 57.
[81] *See, e.g.*, Bevan, Elizabeth M., et al., Comparison of beach temperatures in the nesting range of Kemp's ridley sea turtles in the Gulf of Mexico, Mexico and USA, 40 Endang. Species Res. 31–40 (2019).
[82] Gulf Oil and Gas BiOp at 27–28.
[83] *E.g.*, *id.* at 12.
[84] *Id.* at 17.
[85] BSEE, Deepwater Production Summary by Year, https://www.data.bsee.gov/Production/ProductionData/Summary.aspx (last visited May 9, 2023); *see also* S. Murawski, et al., Deepwater Oil and Gas Production in the Gulf of Mexico and Related Global Trends in Scenarios and Responses to Future Deep Oil Spills: Fighting the Next War, Springer International Publishing, 542 p. (2020) (describing increase in deepwater production, and noting that in 2017, 52 percent of US oil production was from ultra-deep wells)..
[86] Muehlenbachs, L., et al., The impact of water depth on safety and environmental performance in offshore oil and gas production¸ 55 Energy Policy 699–705 (2013).

gas pockets.[87] Additionally, the National Marine Fisheries Service (NMFS)—FWS's sister agency with jurisdiction over most marine species—found that "a reasonable estimate of the largest spill size possible" for the proposed action is a "1.1 million bbl (Mbbl) in the Gulf of Mexico (between 900,000–1.3 Mbbl)."[88] It based this determination on an examination of what it labeled as the "Best Available Information on the Largest Potential Spill" which included studies "calculate[ing] an approximate return frequency (i.e., occurrence) of an event the size of [Deepwater Horizon] as of once every 17 years."[89] FWS should have considered the impacts of a catastrophic spill, particularly considering the extent to which such an event would significantly affect its jeopardy analysis.[90]

Third, the BiOp also employs an unlawful jeopardy analysis. In evaluating whether the actions under consultation will jeopardize species, FWS cannot simply compare the effects of the agency action on the species to other threats—it must consider the status of the species, the impacts of the proposed action **added to** the environmental baseline **added to** cumulative effects and whether these effects **in the aggregate** are likely to jeopardize a species' survival and recovery.[91] In other words, "[t]he 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."[92] Were it otherwise, "a listed species could be gradually destroyed, so long as each step on the path to destruction is sufficiently modest."[93] But "[t]his type of slow slide into oblivion is one of the very ills the ESA seeks to prevent."[94] The BiOp fails to conduct this required aggregate analysis. For example, the BiOp simply lists some of the cumulative effects ESA-listed species are forced to endure, it does not consider those effects when added to the baseline and effects of the action.[95]

The BiOp also improperly relies on uncertain and non-binding mitigation measures in reaching its no jeopardy and no take determinations. For example, FWS relies on a notice to lessees that the agency claims will reduce the risk of vessel strikes.[96] But that notice contains only voluntary measures, it does not mandate any particular action; and does not even apply to manatees. The BiOp also discounts the risk to nesting sea turtles from an oil spill by pointing to the fact that "BOEM/BSEE, USEPA, and USCG have regulations, requirements, and recommendations that

---

[87] *See id.*
[88] NMFS, Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico, Mar. 13, 2020, Consultation No. FPR-2017-9234, at Appx. G, available at https://repository.library.noaa.gov/view/noaa/23738.
[89] *Id.*
[90] *See* Gulf Oil and Gas BiOp at 28 ("Oil spills impacting the nesting beaches of Kemp's ridley and loggerhead sea turtles are of concern and could have a significant impact"); *id.* at 113 (noting that "even a localized incident" of an oil spill "could be significant" for manatees).
[91] *See* 50 C.F.R. § 402.14(g)(3), (4), (h)(1); 16 U.S.C. § 1536(b)(3), (4).
[92] *Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Recl.*, 426 F.3d 1082, 1093 (9th Cir. 2005) (citations omitted).
[93] *Nat'l Wildlife Fed'n*, 524 F.3d at 930.
[94] *Id.*; *see also Pac. Coast Fed'n of Fishermen's Ass'ns v. Nat'l Marine Fisheries Serv.*, 265 F.3d 1028, 1036–37 (9th Cir. 2001) (holding that if "individual projects are diluted to insignificance and not aggregated," then NMFS's "assessment . . . is tantamount to assuming that no project will ever lead to jeopardy of a listed species.").
[95] *See* Gulf Oil and Gas BiOp at 115–17.
[96] Gulf Oil and Gas BiOp at 112.

should prevent or reduce the likelihood of a spill occurring and prevent or reduce impacts to sea turtles if a spill occurs."[97] But, with the exception of a brief list of some BSEE regulations, the BiOp nowhere specifies what any of those measures are. Similarly, the BiOp states that onshore impacts from development related to offshore oil and gas activity will be minimal because of requirements that projects "with a federal nexus [are required] to avoid or minimize impacts to listed species and their critical habitats," but nowhere specifies what measures are required.[98] Specifying all the applicable measures FWS believes will mitigate impacts to listed species is particularly important considering the length of the actions analyzed in the BiOp and that FWS cannot say with any confidence what "regulations, requirements, and recommendations" will or will not be in place 50 years from now.

Indeed, as courts have made clear, an agency cannot rely on "unapproved and undefined mitigation measures" in reaching a no jeopardy conclusion.[99] Rather, "mitigation measures supporting a [biological opinion's] no jeopardy or no adverse modification conclusion must be 'reasonably specific, certain to occur, and capable of implementation; they must be subject to deadlines or otherwise-enforceable obligations; and most important, they must address the threats to the species in a way that satisfies the jeopardy and adverse modification standards.'"[100] The measures on which FWS's no jeopardy and no take conclusions are based do not satisfy these requirements.

Fourth, the Gulf Oil and Gas BiOp also unlawfully fails to include an incidental take statement for take reasonably certain to occur from Gulf OCS oil and gas activities. Rather, the BiOp states that FWS "does not anticipate the proposed action will incidentally take any listed species under [its] jurisdiction."[101] This conclusion conflicts with the best available science indicating that ESA-listed species under FWS's jurisdiction will be taken.

For example, BOEM and BSEE have recognized that "[m]anatees could be killed or injured by a collision with a service vessel" and that "[s]ervice and support vessels traveling through coastal areas to and from oil and gas structures have the potential to impact manatees by vessel collisions."[102] FWS's BiOp discounts the probability of such events occurring by pointing to Notice to Lessees 2016-G01 "Vessel Strike Avoidance and Injured/Dead Protected Species Reporting."[103] But the measures contained in such notice are voluntary and only apply to cetaceans and whales, not manatees. And even if they were both mandatory and applied to manatees, they would still be insufficient as they require vessels to slow to 10 knots or less, when the science demonstrates that manatees are susceptible to strikes from vessels operating at speeds as low as 2.2 knots.[104] The NTL therefore cannot be relied on to reduce risk to manatees. Similarly, the best available science indicates that ESA-listed bird species will be taken via collisions with OCS oil and gas infrastructure; changes in habitat use, foraging, and nesting

[97] *Id.* at 90.
[98] *Id.* at 15.
[99] *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 744 (9th Cir. 2020).
[100] *Ctr. for Biological Diversity v. Salazar*, 804 F. Supp. 2d 987, 1001 (D. Ariz. 2011) (quoting *Ctr. for Biological Diversity v. Rumsfeld*, 198 F. Supp. 2d 1139, 1152 (D. Ariz. 2002)).
[101] Gulf Oil and Gas BiOp at 118.
[102] BOEM and BSEE, U. S. Fish and Wildlife Service Biological Assessment, Aug. 2015 at 142, 144.
[103] Gulf Oil and Gas BiOp at 112.
[104] Calleson C.S. and R.K. Frohlich, Slower Boat Speeds Reduce Risks to Manatees, 3 Endangered Species Research 295–304 (2007).

behavior from the noise and light pollution caused by OCS oil and gas activities; acute sublethal stress from nocturnal circulation around offshore oil and gas platforms; and exposure to pollution.[105]

Finally, even though the best available science demonstrates that approving new oil and gas activity increases greenhouse gas emissions, the Gulf Oil and Gas BiOp does not consider the impacts or harm from increased greenhouse gas emissions on climate-threatened species or their critical habitat. Such failure is particularly blatant considering the BiOp covers 50 years of oil and gas activity.

BOEM and BSEE are relying on this BiOp to approve new oil and gas activity in the Gulf of Mexico, including lease sales, exploration plans, development and coordination documents, and drilling permits.[106]

New Information Regarding the Harms Posed by Gulf Oil and Gas Drilling

New information reveals that oil and gas activity in the Gulf is affecting ESA-protected species to an extent not considered in the Gulf Oil and Gas BiOp. This includes new information regarding the risk of oil spills, the imperiled status of the West Indian manatee and their shifting habitat, the imperiled status of sea turtles, and new information regarding the extent of the climate crisis and the role that continued oil and gas drilling plays in fueling the climate emergency.

New Information on Oil Spills from Gulf OCS Oil and Gas Drilling

BOEM and BSEE have stated that they have reinitiated consultation with NMFS in light of new information regarding oil spill risk from Gulf of Mexico OCS oil and gas activity.[107] The agencies have stated that reinitiated consultation will include, *inter alia*, a "reevaluation of the oil spill analysis presented in the 2020 [NMFS] BiOp" and BOEM's "new oil-spill risk analysis . . . that will consider updated information on oil production, oil transport, and spill rates."[108] Such information is also relevant to the analysis of impacts to species under FWS's jurisdiction. As such, the agencies must reinitiate consultation on the FWS BiOp as well.

New Information Regarding the Threat Gulf OCS Oil and Gas Activity Has on Manatees

New information shows that Gulf OCS oil and gas drilling is having a negative impact on the West Indian manatee to an extent not previously considered. This information includes both new information on the population's imperiled status and the scope of its habitat.

---

[105] *See, e.g.*, BOEM and BSEE, U. S. Fish and Wildlife Service Biological Assessment, Aug. 2015 at 111–12.
[106] *See, e.g.*, BOEM, Gulf of Mexico OCS Oil and Gas Lease Sales 259 and 261 Final Supplemental Environmental Impact Statement, Jan. 2023 at 5-4 (stating BOEM is relying on the BiOp for Lease Sales 259 and 261); BOEM, Exploration and Development Plans Online Query, https://www.data.boem.gov/Plans/Plans/Default.aspx (last visited May 5, 2023); BSEE, Status of Gulf of Mexico Well Permits, https://www.bsee.gov/stats-facts/offshore-information/status-of-gulf-of-mexico-well-permits (listing new drilling permits approved from 2018 through 2023) (last visited May 5, 2023).
[107] *See, e.g.*, BOEM, Gulf of Mexico OCS Oil and Gas Lease Sales 259 and 261 Final Supplemental Environmental Impact Statement, Jan. 2023 at 5-6.
[108] *Sierra Club, et al. v. NMFS, et al.*, Case No. 8:20-cv-03060-DLB (D. Md), ECF No. 108-2 at 4.

New information demonstrates that the population is suffering from an unusual mortality event, unprecedented in modern times. The unusual mortality event for West Indian manatees on Florida's Atlantic coast began in December 2020.[109] Manatees are starving to death due to declines in preferred food sources, specifically seagrass and macroalgae in the Indian River lagoon.[110] Starvation has been the leading cause of death during the winter, as cold exposure exacerbates the stress of malnutrition.[111]

This mortality event has coincided with a significant population decline. For example, based on the years in which observations have been recorded since 2017, the Florida subspecies has suffered a population loss of nearly 7 percent per year.[112] Pollution-fueled algae blooms sparked an ongoing mortality event that killed nearly 2,000 manatees in 2021 and 2022 combined. This two-year mortality record represents more than 20 percent of all manatees in Florida.

New information also demonstrates that the West Indian manatee is suffering from cumulative stressors in the Gulf. Specific threats include releases and spills, habitat loss, vessel strikes, harmful algal blooms, extreme weather events, and disease.[113] Climate change may also cause droughts in some areas where manatees already suffer from freshwater scarcity, and it will worsen extreme precipitation events in others, causing even more contaminants to flow into manatees' waterways.[114] Cumulative stressors are highly problematic considering ongoing elevated manatee mortality in this manatee population.[115]

New information also shows that manatees use more waters in the Gulf of Mexico and thus overlap with more oil and gas activity than considered in the BiOp. One study compiled more than 1700 documented manatee sightings in Alabama and Mississippi since the early 1900s and increasing mortalities since the mid-1980s.[116] It concluded that "[d]ecadal-scale trends in

---

[109] Fl. Fish & Wildlife Conservation Comm'n, Manatee Mortality Event Along the East Coast: 2020-ongoing, Frequently Asked Questions, at https://myfwc.com/research/manatee/rescue-mortality-response/ume/faq/ (last visited May 10, 2023).

[110] *Id.*; Fl. Fish & Wildlife Conservation Comm'n Marine Mammal Pathology Laboratory, 2020 Final Manatee Mortality Table by County From: 01/01/2020 To: 12/31/2020, at https://myfwc.com/media/27784/2020yearsummary.pdf; Fl. Fish & Wildlife Conservation Comm'n Marine Mammal Pathology Laboratory, 2021 Preliminary Manatee Mortality Table with 5-Year Summary From: 01/01/2021 To: 12/31/2021, at https://myfwc.com/media/25428/preliminary.pdf ; Fl. Fish & Wildlife Conservation Comm'n Marine Mammal Pathology Laboratory, Preliminary 2022 manatee mortality table by county From: 01/01/2022 To: 11/04/2022, at https://myfwc.com/media/28361/preliminary.pdf.

[111] Fl. Fish & Wildlife Conservation Comm'n, Carcass examinations in the Atlantic unusual mortality event (Nov. 10, 2022), at https://myfwc.com/research/manatee/rescue-mortality-response/statistics/mortality/ume-carcass/.

[112] Fl. Fish and Wildlife Conservation Comm'n., Manatee Population Monitoring, https://myfwc.com/research/manatee/research/population-monitoring/ (last visited May 6, 2023).

[113] *See, e.g.*, Marsh, H., Arraut, E. M., Diagne, L. K., Edwards, H., & Marmontel, M., Impact of Climate Change and Loss of Habitat on Sirenians. In A. Butterworth (Ed.), Marine Mammal Welfare, Vol. 17, pp. 333–357 (2017). Springer International Publishing.

[114] *See, e.g.*, Favero, I. T., et al., Effects of freshwater limitation on distribution patterns and habitat use of the West Indian manatee, Trichechus manatus, in the northern Brazilian coast, 30(8) Aquatic Conservation: Marine and Freshwater Ecosystems 1665–1673 (2020).

[115] Fl. Fish & Wildlife Conservation Commission, Manatee Mortality Event Along the East Coast 2020-2021 (2021); Fl. Fish & Wildlife Conservation Commission, Marine Mammal Pathobiology Laboratory, 2021 Preliminary Manatee Mortality Table with 5-Year Summary, From: 01/01/2021 To: 12/03/2021 (2021).

[116] *See generally* Hieb, Elizabeth E., Sighting demographics of the West Indian manatee Trichechus manatus in the north-central Gulf of Mexico supported by citizen-sourced data, 32 Endangered Species Research 321 (2017).

opportunistic sighting records demonstrate persistent spatial and temporal patterns of manatee occurrence in the north-central Gulf of Mexico and suggest greater use and importance of the region as seasonal manage habitat than previously documented."[117] Another recently study found partial migration contributing to the range expansion of West Indian manatees into the northern Gulf of Mexico.[118] Many of the tracked individuals spent increasing amounts of time in the northern Gulf and exhibited high site fidelity among years.[119] Some manatees may even overwinter in the Gulf.[120] The authors believe this range shift may become increasingly important to manatees as the climate continues to change.[121] This new information undermines FWS's conclusion in the BiOp that impacts to manatees would be minimal because they only rarely occur in the Western and Central Gulf.[122]

New Information Regarding the Threat Oil and Gas Activity Has on Sea Turtles

New information also shows that oil and gas drilling is having a negative impact on sea turtles to an extent not previously considered. For example, new information indicates that the Kemp's ridley sea turtle population is in decline.[123]

In addition to a declining population trend, recent studies have also found significant reductions in the growth rates of juvenile Kemp's ridley sea turtles beginning in 2012; they hypothesize this is related in part to long-term harmful effects flowing from the Deepwater Horizon oil spill on oceanic and neritic food web in the Gulf of Mexico.[124] Further, new studies have also determined that in the wake of the Deepwater Horizon oil spill, Kemp's ridley sea turtle embryos were one and a half times more likely to exhibit deformities including craniofacial and carapace deformities.[125]

Other sea turtle populations are suffering from similar effects. One study found, for example, that loggerhead sea turtles were nesting at smaller sizes than expected in the Gulf of Mexico.[126] Small turtle size may limit the turtles' ability to recover from oil spills.[127]

---

[117] *Id*. at 321.
[118] *See generally* Cloyed, Carl S. et al., West Indian manatees use partial migration to expand their geographic range into the Northern Gulf of Mexico, 8 Frontiers Marine Sci. 725837 (2021).
[119] *Id*. at 1.
[120] *Id*. at 9.
[121] *Id*. at 1, 9.
[122] *See, e.g.*, Gulf Oil and Gas BiOp at 112.
[123] *See* Shaver, Donna J. et al., Threats to Kemp's ridley sea turtle (Lepidochelys kempii Garman, 1880) nests incubating in situ on the Texas coast, 13 Herpetology Notes 907 (2020).
[124] Ramirez, Matthew D. et al., Regional environmental drivers of Kemp's ridley sea turtle somatic growth variation, 167 Marine Biology 146 (2020).
[125] Shaver, Donna J. et al., Embryo deformities and nesting trends in Kemp's ridley sea turtles Lepidochelys kempii before and after the Deepwater Horizon oil spill, 44 Endangered Species Research 277 (2021).
[126] Benscoter, Allison M. et al., Loggerhead marine turtles (Caretta caretta) nesting at smaller sizes than expected in the Gulf of Mexico: implications for turtle behavior, population dynamics, and conservation, Conservation Sci. & Practice e581 (2021).
[127] *Id*.

Additionally, recent research suggests that conventional methodologies used to estimate sea turtle abundance may greatly overestimate the abundance of sea turtle populations.[128] Each of these studies undermine FWS's conclusion in the BiOp that sea turtle populations "appear to be in the early stages of recovery."[129]

New Information Regarding the Threat Oil and Gas Activity Has on the Climate and Climate-Threatened Species

Fossil fuels are driving a global climate emergency that presents a "code red for humanity."[130] As the United Nations Secretary-General stated upon the release of the IPCC's 2022 report:

> Climate scientists warn that we are already perilously close to tipping points that could lead to cascading and irreversible climate impacts. But, high-emitting Governments and corporations are not just turning a blind eye, they are adding fuel to the flames. They are choking our planet, based on their vested interests and historic investments in fossil fuels, when cheaper, renewable solutions provide green jobs, energy security and greater price stability…. Climate activists are sometimes depicted as dangerous radicals. But, the truly dangerous radicals are the countries that are increasing the production of fossil fuels. **Investing in new fossil fuels infrastructure is moral and economic madness**…. [131]

The climate emergency is here, and it is killing people, causing ecosystem collapse, costing the U.S. economy billions in damages every year, and creating escalating suffering across the nation and around the world.[132] Without deep and rapid reductions in fossil fuel production and emissions, global temperature rise will exceed 1.5°C and result in catastrophic damages in the U.S. and around the world.[133]

The scientific literature documenting these findings has been set forth in a series of authoritative reports from the IPCC, U.S. Global Change Research Program, and other institutions, which make clear that fossil-fuel driven climate change is an existential "threat to human well-being

---

[128] Casale, Paolo & Simona A. Ceriani, Sea turtle populations are overestimated worldwide from remigration intervals: correction for bias, 41 Endangered Species Research 141 (2020).
[129] Gulf Oil and Gas BiOp at 28.
[130] 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-generals-statement-the-ipcc-working-group-1-report-the-physical-science-basis-of-the-sixth-assessment.
[131] United Nations Secretary-General, António Guterres (UN Secretary-General) to the press conference launch of IPCC report (February 28, 2022) (emphasis added), https://media.un.org/en/asset/k1x/k1xcijxjhp.
[132] IPCC, Climate Change 2022, Impacts, Adaptation and Vulnerability (2022), https://www.ipcc.ch/report/ar6/wg2/; NOAA, National Centers for Environmental Information, Billion-Dollar Weather and Climate Disasters, https://www.ncdc noaa.gov/billions/ (reporting that in 2021 alone in the U.S. , there were 20 weather and climate disaster events with losses exceeding $1 billion each and 688 deaths).
[133] IPCC, Summary for Policymakers, In: 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 context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (2018) [Masson-Delmotte, V. et al. (eds.)], https://www.ipcc.ch/sr15/; IPCC, 2022*:* Climate Change 2022: Mitigation of Climate Change, Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla et al. (eds.)].

and planetary health"[134] and that every increase in fossil fuel pollution pushes us further toward a dangerous and increasingly unlivable planet.[135]

The IPCC's reports 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.[136] For instance, the 2021 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.[137]

Species extinction risk will accelerate with continued greenhouse gas pollution. One million animal and plant species are now threatened with extinction, with climate change as a primary driver.[138] At 2°C compared with 1.5°C of temperature rise, species' extinction risk will increase dramatically, leading to a doubling of the number of vertebrate and plant species losing more than half their range, and a tripling for invertebrate species.[139] Numerous studies have projected catastrophic species losses during this century if climate change continues unabated; including the loss of a third or more of animals and plant species in the next 50 years.[140]

Methane emissions are particularly alarming. Immediate, deep reductions in methane emissions are critical for lowering the rate of global warming in the near-term, preventing the crossing of irreversible planetary tipping points, and avoiding harms to species and ecosystems from methane's intensive near-term heating effects and ground-level ozone production.[141] Methane is a super-pollutant 87 times more powerful than CO_2 at warming the atmosphere over a 20-year period,[142] and is second only to CO_2 in driving climate change during the industrial era.[143] Properly examining the climate impacts of methane emissions from Gulf oil and gas drilling is particularly important considering a new scientific study indicating that methane emissions are

---

[134] IPCC, Climate Change 2022, Impacts, Adaptation and Vulnerability (2022) at SPM-35, https://www.ipcc.ch/report/ar6/wg2/.
[135] U.S. Global Change Research Program, Climate Science Special Report: Fourth National Climate Assessment, Vol. I (2017), https://science2017.globalchange.gov/; U.S. Global Change Research Program, Impacts, Risks, and Adaptation in the United States, Fourth National Climate Assessment, Vol. II (2018), https://nca2018.globalchange.gov/; IPCC, Summary for Policymakers. In: Global Warming of 1.5°C, Masson-Delmotte, V. et al. (eds.) (2018), https://www.ipcc.ch/sr15; IPCC, Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (2021), https://www.ipcc.ch/report/sixth-assessment-report-working-group-i; IPCC, Climate Change 2022, Impacts, Adaptation and Vulnerability (2022), https://www.ipcc.ch/report/ar6/wg2/; IPCC, 2022*:* Climate Change 2022: Mitigation of Climate Change.
[136] *Id*. at SPM-32.
[137] *Id*. at SPM-33.
[138] Brondizio, E.S. et al. (eds.), IPBES, Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, IPBES secretariat, Bonn, Germany (2019), *available at* https://ipbes.net/global-assessment.
[139] IPCC Climate Change 2021, Summary for Policymakers.
[140] Román-Palacios, Cristian & John J. Wiens, Recent responses to climate change reveal the drivers of species extinction and survival, 117 PNAS 4211 (2020).
[141] United Nations Environment Programme and Climate and Clean Air Coalition, Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions, Nairobi: United Nations Environment Programme (2021), https://www.unep.org/resources/report/global-methane-assessment-benefits-and-costs-mitigating-methane-emissions, at 11.
[142] Myhre, G. et al., Anthropogenic and Natural Radiative Forcing. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F. et al. (eds.)] (2013), *available at* https://www.ipcc.ch/report/ar5/wg1/ at Table 8.7.
[143] Global Methane Assessment at 11.

significantly higher than previously thought from Gulf of Mexico oil and gas drilling, indicating that the climate impacts from such activity **is double** what government agencies estimate.[144]

The vast majority of all CO_2 pollution—86 percent—in the U.S. and globally comes from oil, gas, and coal.[145] The science is clear that limiting global temperature rise to 1.5°C under the Paris Agreement requires governments to immediately halt approval of all new fossil fuel production and infrastructure and rapidly phase out existing fossil fuel production and infrastructure in many developed fields and mines.[146] The committed carbon emissions from **existing** fossil fuel infrastructure in the energy and industrial sectors exceed the carbon budget for limiting warming to 1.5°C, meaning that no new fossil infrastructure can be built and much existing infrastructure must be **retired early** to avoid catastrophic climate harms.[147] Other research shows that the fossil fuels already in development globally, in existing and under-construction oil and gas fields and coal mines, contain enough carbon to substantially exceed the 1.5°C limit, meaning that extraction in existing fields and mines must also be shut down before their reserves are fully depleted.[148]

Yet, as detailed in the landmark United Nations Production Gap Reports, fossil fuel producers are planning to extract more than double the amount of oil, gas, and coal by 2030 than is consistent with limiting warming to 1.5°C.[149] Rather than increasing fossil fuel production and use, the world's fossil fuel production must decrease by roughly six percent per year on average between 2020 and 2030.[150]

Numerous new studies also highlighted the importance of immediately halting all new fossil fuel infrastructure projects to preserve a livable planet.[151] One 2019 study found that every year of

---

[144] Gorchov Negron, A. M., et al., Excess methane emissions from shallow water platforms elevate the carbon intensity of US Gulf of Mexico oil and gas production, Proceedings of the National Academy of Sciences, Vol. 120, No. 15 (2023).

[145] Fourth National Climate Assessment, Vol. II at 60 (2018); IPCC, Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (2021) at 5-19, https://www.ipcc.ch/report/sixth-assessment-report-working-group-i.

[146] IPCC, Summary for Policymakers, In: Global Warming of 1.5°C, Masson-Delmotte, V. et al. (eds.) (2018), https://www.ipcc.ch/sr15/; Oil Change International, Drilling Toward Disaster: Why U.S. Oil and Gas Expansion Is Incompatible with Climate Limits (2019), http://priceofoil.org/drilling-towards-disaster; Tong, Dan et al., Committed emissions from existing energy infrastructure jeopardize 1.5°C climate target, 572 Nature 373 (2019), https://www.nature.com/articles/s41586-019-1364-3; SEI, IISD, ODI, E3G, and UNEP, 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 (2020), http://productiongap.org/; Teske, Sven & Sarah Niklas, Fossil Fuel Exit Strategy: An orderly wind down of coal, oil and gas to meet the Paris Agreement (June 2021), https://fossilfueltreaty.org/exit-strategy; Welsby, Dan et al., Unextractable fossil fuels in a 1.5 °C world, 597 Nature 230 (2021); Trout, Kelly et al., Existing fossil fuel extraction would warm the world beyond 1.5°C, 17 Environmental Research Letters 064010 (2022), https://iopscience.iop.org/article/10.1088/1748-9326/ac6228#references.

[147] Tong, Dan et al., 2019; Pfeiffer, Alexander et al., Committed emissions from existing and planned power plants and asset stranding required to meet the Paris Agreement, 13 Environmental Research Letters 054019 (2018).

[148] Oil Change International, Drilling Toward Disaster, 2019; Trout, Kelly et al. 2022.

[149] The Production Gap 2020 http://productiongap.org/; SEI, IISD, ODI, E3G, and UNEP, The Production Gap Report 2021 (2021), http://productiongap.org/2021report.

[150] *Id.*

[151] 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,

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."[152] 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.[153]

Drilling in the Gulf of Mexico contributes to the climate emergency, and harm to climate-threatened species. One study estimated, for example, that for each unit (QBtu) 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 QBtu).[154] 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 the expansion of fossil fuel supplies."[155]

Other studies have reached similar conclusions.[156] For example, one analysis concluded that increased oil production would significantly increase global oil consumption as the result of greater supplies and lower global oil prices.[157] 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.[158]Another study estimated that, for each barrel of California oil left in the ground, an added 0.4 to 0.8 barrels would be produced elsewhere.[159] 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."[160]

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).

[152] Smith 2019.

[153] 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.

[154] 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).

[155] *Id*. at 1.

[156] 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/.

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

[158] *Id*.

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

[160] *Id.*

What is more, scientists can now predict specific harms to individual species from the incremental emissions increases directly attributable to the federal agency actions, and can also assess the consequences of emissions for listed species' conservation and recovery. Highlighting the importance of reducing greenhouse gas emissions to protect sea ice and sea-ice dependent species, one recent study estimated that each metric ton of CO2 emission results in a sustained loss of 3 ± 0.3 m^2 of September Arctic sea ice area based on the robust linear relationship between monthly-mean September sea ice area and cumulative CO2 emissions.[161] Thus as a scientific matter, there is no basis for any federal agency to assert that climate change does not harm endangered and threatened species or that it is scientifically impossible to ascertain the particular harm caused by an agency's contribution to greenhouse gas emissions.

A Newly Listed Species Is Threatened by Gulf OCS Oil and Gas Activity

The listing of the eastern black rail also requires FWS, BOEM, and BSEE to reinitiate consultation on the effects of Gulf OCS oil and gas drilling. Once occurring commonly across much of the eastern half of the United States, the species has declined by over 90 percent in less than 25 years.[162] Most of that decline has happened recently- reports indicate that populations have declined by 75 percent or greater over the past 10 to 20 years.[163]

In listing the species, the FWS determined that the entire species will likely be extirpated from the United States by 2068.[164] FWS concluded that the eastern black rail's drastic decline was and continues to be driven by habitat loss from wetland draining and development.[165]

Like other bird species, the eastern black rail is threated by oil and gas activity in the Gulf via additional habitat destruction from onshore development to support offshore oil and gas development, oil spills, light pollution, collisions with oil and gas-related infrastructure, and oil and gas related air and vessel traffic.[166]

The species is also threatened by climate change. In listing the species, for example, FWS determined that "[s]ea level rise will reduce suitable habitat availability for the eastern black rail and overwhelm habitat persistence."[167] Additionally, "[i]ncreased flooding and inundation, saltwater intrusion, and other effects from sea level rise may affect the persistence of coastal or wetland plants that are vital habitat" for the species and "increased high tide flooding will directly impact the eastern black rail through nest destruction
and egg loss at their nesting habitats."[168]

[161] Dirk Notz & Julienne Stroeve, Observed Arctic sea ice loss directly follows anthropogenic CO2 emission, 354 Science 747 (2016).
[162] FWS Species Status Assessment Report for the eastern black rail (Laterallus jamaicensis jamaicensis), 2019.
[163] 85 Fed. Reg. 63,764, 63,793 (Oct. 8, 2020).
[164] *Id.* at 63,773.
[165] *Id.*
[166] *See, e.g.*, BOEM and BSEE, U. S. Fish and Wildlife Service Biological Assessment, Aug. 2015.
[167] 85 Fed. Reg. at 63,769.
[168] *Id.*

III. LEGAL VIOLATIONS

FWS, BOEM, and BSEE are in violation of Section 7(a)(2) of the ESA. Pursuant to section 7(a)(2), all federal agencies are required to "insure" that any of their actions or approvals are "not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat."[169] This substantive duty applies to BOEM's and BSEE's permitting, management, and authorization of oil and gas activity in the Gulf of Mexico.

The Gulf Oil and Gas BiOp is legally flawed and does not ensure against the likelihood of jeopardy of green, hawksbill, Kemp's ridley, leatherback, or loggerhead sea turtles; the Cape Sable seaside sparrow; the Mississippi sandhill crane; the piping plover; the roseate tern; the rufa red knot; the whooping crane; the wood stork; beach mice; or the West Indian manatee from OCS oil and gas activities. Nor does it ensure against the destruction or adverse modification of loggerhead sea turtle, Cape Sable seaside sparrow, Mississippi sandhill crane, piping plover, or whooping crane critical habitat. By relying on the Gulf Oil and Gas BiOp to support the continued permitting, authorization, and management of these activities, BOEM is failing to ensure its actions will avoid the likelihood of jeopardy to these species or adverse modification of critical habitat.[170] Therefore, BOEM and BSEE have violated, and continue to violate, section 7(a)(2) of the ESA.[171]

Moreover, new information both underscores the fundamental flaws in the Gulf Oil and Gas BiOp and triggers the requirement for both FWS, BOEM, and BSEE to reinitiate consultation on the impacts of Gulf OCS oil and gas activities on ESA-listed species and their habitats.[172]

This new information includes, as described more fully above: (1) new information regarding the risk of oil spills; (2) new information regarding the imperiled status and distribution of the West Indian manatee; (3) new information regarding the imperiled status of sea turtles; (4) new information regarding how new oil and gas activity on the Gulf of Mexico OCS contributes to the climate crisis.

In addition, a newly listed species—the eastern black rail—may be affected by OCS oil and gas activity in the Gulf of Mexico through oil spills, light pollution, vessel traffic, and increased greenhouse gas emissions, among other stressors. Indeed, as with other ESA-listed birds in the Gulf of Mexico region, offshore oil and gas activity may not only adversely affect the eastern black rail, but can result in the harassment, harm, and mortality of these birds. Thus, FWS, BOEM, and BSEE must engage in formal consultation on the impacts of Gulf OCS oil and gas activity on the species.

Yet FWS, BOEM, and BSEE have failed to timely reinitiate and complete formal section 7 consultation regarding the impacts of Gulf OCS oil and gas activity on ESA-listed nesting sea

---

[169] 16 U.S.C. § 1536(a)(2).
[170] 16 U.S.C. § 1536(a)(2); *see also, e.g., Defenders of Wildlife v. EPA,* 420 F.3d 946, 976 (9th Cir.2005), *rev'd on other grounds, Nat'l Ass'n of Home Builders v. Defenders of Wildlife,* 551 U.S. 644 (2007); *Wild Fish Conservancy v. Salazar*, 628 F.3d 513, 532 (9th Cir. 2010); *Pyramid Lake Tribe of Indians*, 898 F.2d at 1415.
[171] 16 U.S.C. § 1536(a)(2).
[172] 50 C.F.R. § 402.16(b).

turtles, birds, mice, and manatees or designated critical habitat in violation of the ESA.[173] Their failure to do so violates the agencies' procedural and substantive duties under section 7(a)(2) of the ESA.

IV. CONCLUSION

For the foregoing reasons, if FWS, BOEM, and BSEE do not correct these violations of the ESA within 60 days, the Center for Biological Diversity intends to file suit. 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 duties. Thank you for your prompt attention to this matter.

Sincerely,

/s/ *Kristen Monsell*
Kristen Monsell
Oceans Legal Director & Senior Attorney
Center for Biological Diversity
1212 Broadway, Ste. 800
Oakland, CA 94612
kmonsell@bioloigcaldiversity.org
510-844-7137

[173] *See* 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.16.