

**HEALTHY GULF, FRIENDS OF THE EARTH, SIERRA CLUB, BAYOU CITY
WATERKEEPER, EARTHJUSTICE**

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VIA REGULATIONS.GOV
Docket ID: BOEM-2022-0048

Amanda Lefton, Director
Bureau of Ocean Energy Management
1849 C Street, N.W.
Washington, DC 20240

Re: Gulf of Mexico Lease Sale 259 and 261 Draft Supplemental Environmental Impact Statement

Dear Ms. Lefton:

On behalf of the undersigned groups, please accept these comments on the Gulf of Mexico Lease Sale 259 and 261 Draft Supplemental Environmental Impact Statement (SEIS). Our organizations and members believe it is imperative to minimize further oil and gas leasing and development in the Gulf of Mexico to protect the wellbeing of Gulf Coast communities and abide by our nation's climate commitments. Gulf communities in particular have been burdened with immense environmental, health, and social harms from Outer Continental Shelf (OCS) development for decades. Expansive federal OCS leasing is also wholly incompatible with any reasonable attempt to address the climate crisis and would be directly counter to meeting our climate goals. This SEIS process provides the Bureau of Ocean Energy Management (BOEM) an opportunity to take a hard look at those impacts and give them appropriate consideration when exercising its discretion in holding Lease Sales 259 and 261.

While the Inflation Reduction Act (IRA) directs BOEM to conduct Lease Sales 259 and 261, it does not tell BOEM how to conduct those sales, or which or how much area to offer for lease. This National Environmental Policy Act (NEPA) process still provides guidance for BOEM's decisionmaking process for those sales. A new SEIS will allow BOEM to correct the flaws in its prior environmental impacts statements (EIS), incorporate new information, and apply a better understanding of how offshore oil and gas leasing harms the environment and coastal communities. BOEM must conduct an accurate environmental analysis and consider a reasonable range of alternatives that includes leasing options that minimize environmental impacts.

Unfortunately, the draft SEIS fails to do so. It contains several flawed assumptions and analyses, including: 1) misunderstanding the degree to which the IRA constrains BOEM's discretion; 2) improperly downplaying the significance of the cumulative effects from leasing; 3) incorrectly assuming leasing effects will be equal regardless of the size or location of leasing; 4) reaching contradictory conclusions about oil spill impacts to similarly situated resources; 5) ignoring new information on Rice's whale distributions and habitat use; 6) failing to conduct an assessment of environmental justice impacts; 7) conducting an erroneous assessment of oil spill risk; 8)

ignoring impacts from abandoned, orphaned, and decommissioned wells and infrastructure; 9) relying on an unlawful biological opinion; and 10) failing to use an updated essential fish habitat consultation. BOEM must correct these deficiencies in the final SEIS. It also needs to consider alternatives that would reduce harms to the environment and coastal communities. A reasonable NEPA assessment will demonstrate that BOEM must conduct Lease Sales 259 and 261 in a manner that minimizes further harm to the Gulf's communities and environment.

I. THE IRA DOES NOT LIMIT BOEM'S DISCRETION AS TO THE SIZE, LOCATION, OR TERMS OF LEASE SALES 259 AND 261.

BOEM states several times in the SEIS that the Inflation Reduction Act (IRA) limits its discretion with regard to Lease Sales 259 and 261.¹ While that is true to a certain extent, BOEM improperly overstates the degree to which its discretion is limited. The IRA constrains BOEM's discretion only on whether and when to hold Lease Sales 259 and 261, not *how* to hold them. The legislation does not dictate the size, location, or terms of the sales, nor does it excuse the sales from compliance with NEPA or other environmental laws. BOEM's misinterpretation of the IRA has apparently caused BOEM to arbitrarily disregard reasonable mitigation measures and alternatives that would offer smaller areas for lease to minimize impacts to Gulf communities and the environment.

Section 50264 of the IRA states, "not later than March 31, 2023, the Secretary shall conduct Lease Sale 259 in accordance with the Record of Decision" for the 2017–2022 Leasing Program.² It includes identical language to conduct Lease Sale 261 no later than September 30, 2023.³ The IRA defines Lease Sales 259 and 261 as those "described in the 2017–2022 Outer Continental Shelf Oil and Gas Leasing Proposed Final Program" and "approved" in the Record of Decision for the Program.⁴ The IRA therefore simply requires BOEM to conduct Lease Sales 259 and 261 in accordance with the 2017–2022 Program and accompanying Record of Decision.

Neither the 2017–2022 Program nor its Record of Decision commits Interior to offering all unleased acreage in the Western Planning Area, Central Planning Area, or both for lease. And neither document commits Interior to considering only those options in this SEIS. It is well established that a five-year program does not commit Interior to holding the sales at the size proposed in the program or even holding them at all.⁵ Following the program stage, "[a]dditional study and consideration is required before each succeeding step is taken."⁶ "Congress calls on Interior to strike an appropriate balance *at each stage* between local and

¹ *E.g.*, SEIS iii, v, vii, 1-3 to -5, 2-13.

² HR 5376 § 50264(d).

³ *Id.* § 50264(e).

⁴ *Id.* § 50264(a)(3), (4).

⁵ *E.g.*, *Ctr. for Biological Diversity v. U.S. Dep't of Interior*, 563 F.3d 466, 480 (D.C. Cir. 2009); *California ex rel. Brown v. Watt* ("Watt I"), 712 F.2d 584, 588 (D.C. Cir. 1983); *see also Ctr. for Sustainable Econ. v. Jewell*, 779 F.3d 588, 599 (D.C. Cir. 2015).

⁶ *Watt II*, 712 F.2d at 588.

national environmental, economic, and social needs.”⁷ The five-year program stage involves one set of decisions that creates the universe of potential lease sales Interior has the option to offer.⁸ The lease sale stage involves a separate set of decisions and steps to determine how much, if any, of the leasing proposed in a five-year program to offer for sale.⁹ Interior’s ultimate decisions about leasing at this stage are not required to match the leasing proposed in a five-year program: “while an area excluded from the leasing program cannot be leased . . . or developed, an area included in the program may be excluded at a latter stage.”¹⁰ That framework enables Interior to scale back proposed lease sales based on new information and other considerations that develop after the program is approved; for example, new information on environmental impacts, wildlife populations, climate concerns, or decreased need for new leasing.

The 2017–2022 Program reflects this legal framework and explicitly provides that the proposed lease sales may be “scaled back,” “reduce[d],” “limit[ed],” or “cancelled.”¹¹ Conducting Lease Sales 259 and 261 as “described” by the Program therefore would mean scaling back, reducing, or limiting the area offered for lease when appropriate. Although, the Record of Decision does not contain similar language, it states that it “select[s] the 2017–2022 Program *as described in the PFP*”; in other words, it adopts the Program, including the Program’s discretion to cancel or scale back proposed sales at the lease sale stage.¹² The Record of Decision also expressly states that “site- or resource-specific mitigation measures [in Appendix I of the Final Programmatic EIS] should be considered” at the lease sale stage, and that “[a]dditional specific mitigation measures may also be developed and applied, as appropriate.”¹³ So conducting Lease Sales 259 and 261 “in accordance with” the Record of Decision simply means implementing the Program, including exercising the lease sale stage discretion that the Program provides, and potentially developing additional mitigation. Indeed, Interior recently argued in briefing defending

⁷ *Ctr. for Sustainable Econ.*, 779 F.3d at 594 (emphasis added); *see e.g.*, 43 U.S.C. §§ 1332, 1344(a)(1).

⁸ *See* 43 U.S.C. § 1344(d)(3) (“no lease shall be issued unless it is for an area included in the approved leasing program”); *see also Ctr. for Biological Diversity*, 563 F.3d at 480 (describing program stage as one that “involve[s] only ‘the identification and mapping of areas that *might* be suitable for leasing” (emphasis added) (quoting *Wyo. Outdoor Council v. U.S. Forest Serv.*, 165 F.3d 43, 45 (D.C. Cir. 1999)).

⁹ *See* 43 U.S.C. § 1337(a); 30 C.F.R. §§ 556.301, .302(a), (b).

¹⁰ *Watt II*, 712 F.2d at 588; *see* 30 C.F.R. § 556.302(c) (stating that there may be “changes from the area(s) proposed for leasing”).

¹¹ *E.g.*, BOEM, *2017–2022 Outer Continental Shelf Oil and Gas Leasing Proposed Final Program S-5*, 4-10, 6-7, 6-9, 6-19 (2016).

¹² Mem. from Walter D. Cruikshank to Sec’y Sally Jewell, Record of Decision and Approval of the 2017–2022 Outer Continental Shelf Oil and Gas Leasing Program 2 (Jan. 17, 2017) (emphasis added). The Record of Decision cannot be interpreted to implicitly negate the Secretary’s discretion at the lease sale stage, given the clear indications of such discretion in OCSLA and the Program itself.

¹³ *Id.*

President Biden’s leasing pause that the agency has significant discretion under both OCSLA and the 2017–2022 Program to cancel a proposed sale or change its size at the lease sale stage.¹⁴

Even if the IRA arguably constrains BOEM’s discretion as to “whether” to hold Lease Sales 259 and 261, it in no way limits the discretion to reduce the size of the sales as proposed in the Program or to develop and impose additional mitigation measures that minimize harm to species and the environment. Yet in the SEIS, BOEM declined to consider an alternative that scaled back acreage offered for leasing because it apparently believes the IRA bars the agency from holding a sale that is smaller than “regionwide.”¹⁵ That position is inconsistent with the IRA’s plain text. It is also inconsistent with OCSLA and with Interior’s litigation position that implementing the 2017–2022 Program allows the agency to scale back lease sale areas as appropriate. It is arbitrary and capricious for BOEM to interpret the IRA to bar it from considering or holding lease sales that are smaller than regionwide.

We explain in the next section that BOEM must consider offering much smaller areas for lease to reduce harms to the environment and coastal communities. The IRA poses no barrier to doing so.

Finally, the SEIS contains some statements suggesting that BOEM does not believe NEPA compliance is required for Lease Sales 259 and 261 under the IRA. But the IRA did nothing to eliminate the requirements that BOEM must comply with NEPA, the Endangered Species Act, and other relevant statutes before holding a lease sale.¹⁶ As just discussed, BOEM retains discretion under the IRA to decide which Gulf planning areas and how much acreage to offer for lease and which mitigation measures to require. NEPA compliance is required whenever an agency has discretion over how to carry out an action. That is clearly the case here: the IRA in no way exempts Lease Sales 259 or 261 from compliance with NEPA or other environmental laws.

II. BOEM MUST CONSIDER ALTERNATIVES THAT WOULD REDUCE HARMS TO THE ENVIRONMENT AND COASTAL COMMUNITIES.

The draft SEIS contains a limited range of alternatives that allow only for essentially an all-or-nothing leasing approach in the Gulf’s planning areas. BOEM can and must develop and consider alternatives that would have lower environmental impacts than areawide lease sales.

Alternatives A–C each would lease all unleased acreage in at least one planning area. Alternative D would allow exclusion of a modest number of unleased blocks that are currently subject to certain limited stipulations. BOEM apparently developed another alternative for this SEIS “to analyze a potential reduction in impacts to the environment,” but eliminated it from

¹⁴ Defs.’ Opp’n to Pls.’ Mot. Summ. J., *Louisiana v. Biden*, No. 2:21-cv-00778-TAD-KK, at 18–20 (June 13, 2022), ECF No. 208.

¹⁵ SEIS 2-12 to -13.

¹⁶ *See Sec’y of the Interior v. California*, 464 U.S. 312, 338 (1984).

consideration based on the faulty assumption that the IRA bars its consideration.¹⁷ Because the IRA does not present such a bar, BOEM should analyze and consider that alternative in the final SEIS.

BOEM must consider an alternative that would exclude blocks from leasing in Rice's whale habitat in De Soto Canyon and the 100–400m isobath in the western and central Gulf. The agency previously rejected an alternative to exclude blocks within the De Soto Canyon area to protect Rice's whales, on the basis that the species' "biologically important area" is further to the east and BOEM believed vessel mitigation would sufficiently reduce threats.¹⁸ BOEM states that it "reexamined" previously rejected alternatives during preparation of this SEIS, and found no new information to change its previous conclusions.¹⁹ As explained in Section VI below, however, there is now new information indicating the importance of De Soto Canyon and other habitat in the 100–400m isobath throughout the Gulf for the Rice's whale, undermining BOEM's previous rationale for rejecting this alternative. In addition, the current mitigation measures to reduce vessel strikes to Rice's whales are inadequate.²⁰ Excluding blocks from leasing in Rice's whale habitat in not only De Soto Canyon but also in the 100–400m isobath across the Gulf would result in a significant benefit for the critically endangered species. BOEM should consider that alternative in the final SEIS. This would be consistent with BOEM's recent decision to eliminate blocks in Rice's whale habitat in the western and central Gulf from wind leasing.²¹ It would be irrational and a double standard for BOEM to conclude in the SEIS that oil and gas leasing in Rice's whale habitat is not harmful when it has decided wind leasing in the same areas would be too harmful.

BOEM should also consider an alternative that reflects the same conflict avoidance considerations BOEM employed when identifying potential wind energy areas (WEAs) in the Gulf. BOEM opted to exclude from wind leasing those blocks that overlapped with data layers including areas of moderate-high shrimp fishing, Rice's whale habitat, significant sediment resources, menhaden fishing, unexploded ordinances, and others, and created a buffer around other features such as artificial reefs.²² BOEM should consider a lease sale alternative here that excludes blocks with the same resources. Again, if BOEM is excluding certain areas from wind leasing due to unacceptable effects or conflicts, it should do the same for oil and gas leasing and

¹⁷ SEIS 2-11 to -13.

¹⁸ See BOEM, *Gulf of Mexico OCS, Oil and Gas Lease Sales: 2017-2022, Final Multisale Environmental Impact Statement*, at 2-21 (2017) (Multisale EIS).

¹⁹ SEIS 2-3.

²⁰ See Section XI, *infra*.

²¹ Mem. from Michael Celata, Reg'l Dir., GOM Reg'l Office, to Amanda Lefton, Dir., BOEM, Request for Concurrence on Preliminary Wind Energy Areas for the Gulf of Mexico Area Identification Process Pursuant to 30 C.F.R. § 585.211(b), at 13 tbl.2, 34 (July 20, 2022) (assigning Rice's whale 100m to 400m habitat a suitability value of 0),

<https://www.boem.gov/sites/default/files/documents/Draft%20Area%20ID%20Memo%20GOM%20508.pdf>.

²² *Id.* at 13 tbl.2.

not apply a double standard. BOEM should also develop and consider alternatives based on other resource values that reduced lease block suitability for wind leasing. For example, BOEM should develop and consider an alternative that eliminates lease blocks based on a single particularly important resource, like protected resource considerations, and exclude blocks with a “PRD combined score” less than 0.03 or less than 0.09.²³ Or BOEM could develop and consider an alternative that eliminates lease blocks based on a composite suitability model incorporating several resources, such as anything with a “low” or “constrained” suitability value similar to figure 9 in the WEA memo.²⁴

These alternatives would reduce the harms from oil and gas leasing to the Gulf’s environment and coastal communities.

BOEM also should consider alternatives that reduce the scale of impacts from leasing. For example, insofar as BOEM is trying to meet the IRA’s 60-million-acre threshold for wind leasing, it should consider alternatives that offer only 60 million acres for sale in either Lease Sale 259 or 261; it is unnecessary to offer 80 million acres or more in either of those sales to meet a wind leasing goal. Similarly, BOEM should consider an alternative that would offer 30-million acres in each sale, because that still meets the IRA’s threshold of offering 60 million acres over a one-year period to allow wind leasing.

Finally, if BOEM is serious about offshore wind development in the Gulf of Mexico, it should consider an oil and gas leasing alternative that excludes all areas where offshore wind might be developed. This is necessary because BOEM has taken the position that wind leasing cannot occur where oil and gas leases have already been issued.

III. BOEM IMPROPERLY DOWNPLAYS THE SIGNIFICANCE OF THE ACTION’S EFFECTS BY COMPARING THEM TO CUMULATIVE EFFECTS.

The SEIS fundamentally misapprehends NEPA’s requirement for assessing cumulative effects. NEPA’s regulations broadly define cumulative effects as those

that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.²⁵

Critically, cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.²⁶ This requirement to assess cumulative effects is to

²³ *Id.* at 34–36 & fig.24.

²⁴ *Id.* at 18 fig.9.

²⁵ 40 C.F.R. §1508.7. Consistent with the Draft SEIS, these comments cite to and rely on the 2014 CEQ regulations. *See* SEIS xii (citing the 2014 version of 40 C.F.R. § 1508.8(b) and 40 C.F.R. § 1502.23).

²⁶ 40 C.F.R. §1508.7.

ensure that agencies consider their decisions within the larger context: while a particular action “may seem unimportant in isolation,” that small action “may have dire consequences when combined with other actions.”²⁷

BOEM, however, has instead repeatedly turned NEPA’s cumulative effects obligation on its head by focusing only on the incremental portion of a single Gulf of Mexico lease as *compared to* the existing baseline and potential future harms. This tactic avoids directly confronting the accumulated burden of industrial activity on the Gulf’s residents and its natural environment.²⁸

For example, BOEM’s analysis of effects to marine mammals in the SEIS concludes that the reasonably foreseeable routine activities associated with leasing could result in somewhere between “negligible to moderate” impacts.²⁹ These routine activities “include geological and geophysical activities, transportation, operational discharges, decommissioning, and noise.”³⁰ BOEM also recognized in the Multisale EIS that other OCS oil and gas activities could result in additional “negligible to moderate impacts” to marine mammals.³¹ These activities include all “routine activities projected to occur and accidental events that could occur” from past, proposed, and future lease sales.³² That same EIS also established that harms from non-OCS oil and gas activities, such as from pollution, ingestion of and entanglement in marine debris, and vessel strikes, raise the possibility of “major” effects to marine mammals.³³

The key inquiry then is to assess the total accumulated harm from all of the various ecological insults catalogued by BOEM. Instead, the SEIS limits its attention to the subset of effects associated only with a lease sale, as measured against the full universe of adverse impacts:

[T]he incremental contribution of a proposed action to cumulative impacts to marine mammal populations, depending upon the affected species and their respective population stock estimate, even when taking into consideration potential impacts (Deepwater Horizon explosion, oil spill, and response; non-OCS oil- and gas-related activities; and the minimization of the OCS oil- and gas-related impacts through lease stipulations and regulations), is expected to be **negligible**.³⁴

²⁷ *ONRC v. Goodman*, 505 F.3d 884, 893 (9th Cir. 2007).

²⁸ *See, e.g.*, SEIS 4-12 (stating that the incremental contribution to ozone from a single lease sale “would be very small” and “would not on [its] own cause an exceedance” of ozone levels in nonattainment areas); 4-26 (stating that “proposed action would also *contribute incrementally* to the overall OCS oil- and gas-related and non-OCS oil- and gas-related cumulative effects experienced by deepwater benthic communities, but only by a **negligible** amount” (emphasis in original)).

²⁹ SEIS 4-51.

³⁰ Multisale EIS 4-279.

³¹ *Id.* at 4-263 tbl.4-18.

³² *Id.*, *see also id.* at 4-264 n.6.

³³ Multisale EIS 4-298; *id.* at 4-263 tbl.4-18, 4-264.

³⁴ SEIS 4-51 (emphasis in original).

Yet, as the D.C. Circuit has recognized, “a realistic evaluation of the total impacts . . . cannot isolate a proposed project[.]”³⁵ A NEPA analysis must aggregate effects, considering the “accumulated, or total, incremental impacts.”³⁶

BOEM’s segmentation risks precisely the outcome that NEPA seeks to avoid; a series of actions that escape attention because of the belief that each is a relatively small contribution to a larger problem. But “[s]ometimes the total impact from a set of actions may be greater than the sum of the parts.”³⁷ BOEM’s “negligible” findings speak only to its assessment that the threat from another lease sale is comparatively smaller than the larger forces at work in the Gulf. It failed, however, in the straightforward task of taking a holistic look at the entirety of the potential harm.³⁸

Moreover, in considering cumulative impacts, BOEM must provide “some quantified or detailed information; . . . [g]eneral statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided.”³⁹ As such, BOEM must detail the total, accumulated harm: effects from the leasing proposed here added to the potentially moderate effects from other OCS leasing along with the potentially major effects from other activities in the Gulf. This assessment “must be more than perfunctory; it must provide a useful analysis of the cumulative impacts of past, present, and future projects.”⁴⁰ Without this information, BOEM cannot claim to have taken the “hard look” at the potential effects of leasing required to satisfy the requirements of NEPA.

IV. BOEM FAILS TO MEANINGFULLY ASSESS THE SIGNIFICANCE OF GREENHOUSE GAS EMISSIONS IN THE CONTEXT OF MEETING U.S. CLIMATE COMMITMENTS.

The Draft SEIS recognizes the hundreds of millions of tons of greenhouse gas that will be added to the atmosphere as a result of Gulf leasing, but at various points, describes the total as only departing “slightly” from the no action alternative.⁴¹ Simply stating the emissions are “slight”

³⁵ *Grand Canyon Trust v. FAA*, 290 F.3d 339, 342 (D.C. Cir. 2002).

³⁶ *Id.* at 346.

³⁷ *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 994 (9th Cir. 2004).

³⁸ BOEM’s approach is akin to the assumption that adding more straw to the camel’s back cannot possibly do any real harm given the enormous burden it already carries. In so doing, BOEM has transformed “cumulative” effects into “comparative” effects.

³⁹ *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 402 F.3d 846, 868 (9th Cir. 2005) (cleaned up).

⁴⁰ *Id.* at 993–94; see also *Friends of the Earth v. Army Corps*, 109 F. Supp. 2d 30, 42 (D.D.C. 2000) (noting that the Corps “dedicated nine or ten pages of each EA to cumulative impacts” but that “[t]here is no actual analysis” as the EAs “merely recite the history of development along the Mississippi coast and then conclude that the cumulative direct impacts ‘have been minimal’”).

⁴¹ See, e.g., SEIS 4-6 to -8 (also finding a “marginal difference”).

fails to acknowledge that they are incompatible with national climate policies and meeting the country's GHG reduction goals. BOEM must assess the degree to which additional emissions resulting from a lease sale—including foreign oil consumption GHG emissions—will make it harder to meet the carbon budget when added to the emissions from fossil fuels produced on already leased federal lands and waters.⁴²

The comparison of GHG emissions to U.S. emissions targets in the Greenhouse Gas Emissions Addendum is insufficient.⁴³ It does not provide information on the degree to which emissions from leasing would impact the *remaining* carbon budget—that is, the target net emissions minus the emissions that are essentially already locked in from existing federal fossil fuel leases.

There is evidence that the U.S. climate budget is already full.⁴⁴ For example, a 2020 report concluded:

- “Federal crude oil already leased will continue producing for 34 years beyond the 1.5°C threshold and 19 years beyond the 2°C;” and
- “Federal natural gas already leased will continue producing 23 years beyond the 1.5°C threshold and 8 years beyond the 2°C.”⁴⁵

A meaningful analysis of an offshore lease sale's GHG emissions would require BOEM to assess how adding these emissions to other contributors of GHGs in the coming years affects the country's ability to meet emissions targets. Given the minimal room left in the carbon budget, if any, the additional GHG emissions from a lease sale are unlikely to be “slight” in that context.

⁴² See *350 Montana v. Haaland*, 50 F.4th 1254 (9th Cir. 2022). BOEM cannot use metrics that reduce a project's emissions to insignificance only because their relative contribution to the greater whole appears comparatively small nor can it exclude downstream foreign consumption associated with leasing while drawing a comparison with nationwide greenhouse gas emissions in the U.S. *Id.*

⁴³ Greenhouse Gas Supp. 12–13 (tbl.7).

⁴⁴ E.g., Oil Change International, *The Sky's Limit: Why the Paris Climate Goals Require a Managed Decline of Fossil Fuel Production* (September 2016), <http://priceofoil.org/2016/09/22/the-skys-limit-report/>; Oil Change International, *The Sky's Limit California: Why the Paris Climate Goals Demand That California Lead in a Managed Decline of Oil Extraction* (2018), <http://priceofoil.org/ca-skys-limit>; Sven Teske & Sarah Niklas, *Fossil Fuel Exit Strategy: An orderly wind down of coal, oil and gas to meet the Paris Agreement* (June 2021), <https://fossilfuel treaty.org/exit-strategy>; Ecoshift Consulting et al., *The Potential Greenhouse Gas Emissions of U.S. Federal Fossil Fuels*, Prepared for Center for Biological Diversity & Friends of the Earth (2015); Van den Berg et al., *Implications of various effort-sharing approaches for national carbon budgets and emission pathways*, 162 CLIMATIC CHANGE 1805–1822 (2020); Dustin Mulvaney et al., *Over-Leased: How Production Horizons of Already Leased Federal Fossil Fuels Outlast Global Carbon Budgets 5*, Prepared for Center of Biological Diversity & Friends of the Earth (2016).

⁴⁵ Ecoshift Consulting, *supra* note 44.

V. BOEM INCORRECTLY ASSUMES THAT DIFFERENT SIZE LEASE SALES UNDER THE ACTION ALTERNATIVES WILL HAVE APPROXIMATELY THE SAME EFFECTS ON RESOURCES.

For several resources, the SEIS anticipates the different action alternatives will have the same levels of effects despite having very different levels of exploration, development, and production activities. If one alternative will result in a higher level of activity than another alternative, the effects of that activity also will be higher. It is arbitrary and capricious for BOEM to assume the effect levels are the same across alternatives. This error skews the decisionmaking process by implying that the amount of acreage leased—whether one planning area, two planning areas, or even a subset of a planning area—makes no difference for environmental effects. It prevents BOEM from making a rational comparison of alternatives, in violation of NEPA.⁴⁶

The SEIS provides BOEM's estimates of the levels of different activities expected under Alternatives A, B, and C from 2020 through 2069.⁴⁷ For each activity type, BOEM estimates Alternative A will produce the highest level of activity, with Alternative B levels slightly lower, and Alternative C levels much lower.⁴⁸ These differences are largely a result of the size of lease sales offered under each alternative: Alternative B would offer essentially all unleased acreage in the Central Planning Area, Alternative C would offer essentially all unleased acreage in the Western Planning Area, and Alternative A would offer the combined acreage from Alternatives B and C.

Despite the disparate activity levels between alternatives, BOEM irrationally assumes the effect levels will be approximately equal between alternatives for several resources, including: air quality, water quality, fish and invertebrate resources, birds, marine mammals, sea turtles, commercial fisheries, recreational fishing, recreational resources, archaeological resources, land use and coastal infrastructure, and social factors (including environmental justice).⁴⁹ For most of those resources, BOEM offers no explanation for its assumption that effect levels will be the same for each of the action alternatives, leaving an unexplained inconsistency between the activity levels and effect levels.

Relatedly, BOEM generally makes no effort to recognize that effects will be different depending on *where* leasing is offered. It assumes effects would be the same whether leasing occurs in the western Gulf, central Gulf, or both, despite the fundamental fact that biota, habitats, human uses, and other resources are not spread in a uniform distribution across the entire Gulf of Mexico. Resources will be affected differently depending on the degree to which the lease area spatially overlaps with the resources.

⁴⁶ See 42 U.S.C. § 4332(C)(iii); 40 C.F.R. § 1502.14.

⁴⁷ SEIS 3-5 tbl.3-1. BOEM assumes Alternative D “could reduce activity values” of Alternative A, B, or C, but expects it would “have the same production and related activities.” *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.* at 4-12, -16 to -17, -20, -23, -40 to -41, -46 to -47, -50 to -51, -57 to -58, -73 to -74, -76 to -77, -79 to -80, -84, -89 to -90, -98.

BOEM does not explain its effects equivalency assumption for most resources, but at least attempts to do so for fish and invertebrate resources, marine mammals, birds, and sea turtles. However, BOEM's explanations make no logical or scientific sense.

As to fish and invertebrate resources, BOEM claims the effects “would be considered equal because of the diversity and widespread distribution of fish and invertebrate species throughout the potential area of interest.”⁵⁰ It goes on to acknowledge that leasing in the Western Planning Area (WPA) would be smaller and bring less activity than leasing in the Central/Eastern Planning Area (CPA/EPA), but then concludes “the potential for impacts to populations is independent of the planning area(s) analyzed” because it assumes “the distribution of species may generally be considered even throughout their range of habitat within the planning area.”⁵¹ None of this means that the effects would be equal among alternatives. These statements refer only to spatial distribution vis a vis planning area boundaries. They do not explain why leasing over a larger area will have the same effects as leasing over a smaller area. This paragraph does not even consider how a regionwide lease sale encompassing both the WPA and CPA/EPA (Alternative A) compares with just one planning area (Alternative B or C), only how the WPA alone compares with the CPA/EPA alone (Alternative B vs. C). And even then, it does not explain why the different size and location of the planning areas is irrelevant or “independent.” Different fish and invertebrate populations inhabit different areas of the Gulf. A population inhabiting mainly areas off the Florida, Alabama, and Mississippi coasts will be affected much more by leasing in the CPA/EPA than by leasing in the WPA—the potential for impacts to that population will not be independent of the planning area analyzed. And a population spanning the Gulf will experience more widespread impacts under Alternative A than leasing in only the WPA or the CPA/EPA. Finally, this paragraph in the SEIS makes no effort to address the differential activity levels between the alternatives. To restate the obvious, a higher level of activity necessarily results in a higher level of effects from those activities. Even if fish and invertebrate species are diverse and have a widespread distribution, they will experience higher effect levels when activity levels are higher. BOEM offers no rational basis to conclude that the effect levels to fish and invertebrates will be the same across alternatives.

The SEIS also concludes the “effects associated with the selection of any of the alternatives would be equivalent because of the diversity and distribution of marine mammal species throughout the potential Area of Interest.”⁵² The SEIS reasons that even if the different alternatives offer different size areas for lease with different activity levels, they would have the same effects because “marine mammal species are widely distributed and may travel great distances.”⁵³ But all that means is a marine mammal traveling great distance will encounter harmful effects more often and at a higher level when there is more leasing. Similarly, widely distributed species would encounter a higher level of impacts across their range rather than, say,

⁵⁰ *Id.* at 4-41.

⁵¹ *Id.*

⁵² *Id.* at xviii.

⁵³ *Id.*

in just one of the planning areas under Alternative B or C. Oddly, the SEIS then admits that “a smaller leased area . . . could decrease the likelihood of OCS oil- and gas-related activities impacting marine mammal populations, such as the Rice’s whale and coastal bottlenose dolphin,” but disregards that possibility because BOEM claims it lacks enough data on population densities, distributions, and migratory behaviors—this despite concluding earlier that the effects would be equivalent because of how populations are distributed and migrate. BOEM cannot state it knows populations are distributed widely enough to reach one conclusion but then claim it does not know how populations are distributed to avoid considering that its conclusion is incorrect. In any event, BOEM does not need precise data on population densities, distributions, and migratory patterns to make the basic assessment that higher and more widespread activity levels will have greater impacts to those populations than lower and more geographically constrained activity levels. BOEM also does not need precise data to reach basic conclusions about the spatial overlap of leasing in either the WPA or the CPA/EPA with marine mammal populations. For instance, BOEM states that the Rice’s whale population is centered just to the east of the CPA.⁵⁴ It follows that Alternatives A and B would have much greater impacts on Rice’s whales from vessel traffic and oil spill risk than leasing under Alternative C, which would occur further from the core habitat.⁵⁵ If BOEM properly assessed the relative impacts of the alternatives on marine mammals, it might conclude that leasing in only one planning area is the preferred option to reduce impacts to one or more protected marine mammal species.

For birds, the SEIS states Alternative A “would have more OCS oil- and gas-related activities than the other alternatives, and thus more potential for impacts,” and that “[i]mpacts from the other alternatives would follow in graded fashion.”⁵⁶ BOEM then inexplicably disregards that common sense proposition to conclude that “the level of impacts would be the same for Alternatives A–D” “because of the diversity and distribution of offshore pelagic bird species.”⁵⁷ Again, the fact that bird species may be diverse or widely distributed does not negate the fact that higher and more widespread activity levels result in more potential for impacts to those diverse bird species.

The SEIS contains a similarly flawed explanation for sea turtles, stating, “The effects associated with Alternative A, B, C, or D would be equivalent because of the diversity and distribution of sea turtles throughout the GOM.”⁵⁸ The SEIS acknowledges there would be less activity and in a smaller area under Alternative C than under Alternatives A or B (it makes no comparison between A and B), but concludes the “level of impacts” under those alternatives “would be the

⁵⁴ BOEM’s claim that it lacks information on species distributions conflicts with its assertion that “the primary core habitat of Rice’s whale is . . . centered in De Soto Canyon in water depths between 150 and 410 m.” *Id.* at 4-54.

⁵⁵ Recent information showing the Rice’s whale is distributed across the northern CPA and WPA does not change this fact, as the previously identified core area is still understood to contain a higher density of Rice’s whales.

⁵⁶ *Id.* at xvii.

⁵⁷ *Id.*

⁵⁸ *Id.* at 4-58.

same” “because of the free-swimming ability and wide distribution of species.”⁵⁹ Even if impact *types* may be similar among alternatives, impact *levels* and *locations* are different. And none of those factors negates the fact that more widespread and higher magnitude activity levels have greater effects. In fact, the free-swimming ability of sea turtles makes them more susceptible to the more widespread activity levels under Alternative A (and B, given the larger area of the CPA/EPA) because they will encounter impacts throughout their ranges. It is nonsensical to conclude that oil and gas leasing and development in just one planning area will have the same level of impact as regionwide leasing and development simply because sea turtles occur in more than one planning area. That assessment also fails to acknowledge that different sea turtle species and life stages inhabit different habitats and geographic areas of the Gulf, so the impacts will be different depending on the area leased and developed.⁶⁰ BOEM offers no rational explanation to conclude that impact levels to sea turtles will be the same, regardless of the area leased or subsequent level of development that will occur.

Marine species do not indiscriminately distribute themselves throughout the ocean. They use different habitats in different areas for different purposes. This is precisely why the Endangered Species Act (ESA) provides for designation of critical habitat and the Magnuson-Stevens Act (MSA) provides for designation of essential fish habitat (EFH). They reflect the reality that species depend on specific areas for essential functions like feeding, breeding, raising young, taking shelter, and migrating. The SEIS’s effects assessment disregards that reality.

The Gulf of Mexico is home to many of these crucial habitats.⁶¹ Information on these habitats—their location, which species and functions they support, how they may be harmed by oil and gas development—is not only readily but bountifully available. Indeed, BOEM launched a cooperative program in 2017 to collect:

[i]mproved information . . . on living marine resource abundance, distribution, habitat use, and behavior in the Gulf of Mexico to properly mitigate and monitor for potential impacts of human activities, including related to offshore energy development. Understanding of cumulative impacts on protected species in the Gulf from both natural and anthropogenic forcing is required to inform NEPA documents and consultations and rulemaking related to Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), and Migratory Bird Treaty Act (MBTA), as well as other statutes that govern bureau activities. The results of this

⁵⁹ *Id.*

⁶⁰ *See, e.g., id.* at 4-60 (describing recent study predicting higher densities of Kemp’s ridleys in the western and central Gulf, green turtles in the northern Gulf, and loggerheads in the eastern Gulf). BOEM arbitrarily concludes this and other sea turtle studies do not affect its choice among alternatives, even though they show that Alternatives B and C would affect sea turtle species differently because of the species’ different distributions.

⁶¹ *See, e.g.,* Matthew S. Love et al., *The Gulf of Mexico Ecosystem: A Coastal and Marine Atlas*, Ocean Conservancy (June 2013), <https://oceanconservancy.org/wp-content/uploads/2017/05/gulf-atlas.pdf>.

study will provide important information to inform both BOEM and BSEE regulatory needs, as well as other agencies and stakeholders involved in effective management and conservation of Gulf protected species.⁶²

Why would BOEM need to launch such an ambitious effort if all impacts, regardless of location, extent, or species, were the same? BOEM's statements in the SEIS to this effect conflict with its own evidence and display a gross disregard for reasoned, science-based decision-making and good government.

In addition to information BOEM itself has gathered, other readily available information shows that where oil and gas activity occurs and which species it affects matter a great deal when assessing the severity of each alternative's impacts. For example, the Gulf of Mexico Fishery Management Council's most recent review of EFH designations contains species descriptions, maps of EFH, and discussions of the underlying importance of different habitat types and different locations.⁶³ See also 79 Fed. Reg. 39855, 39880-83 (loggerhead critical habitat designation discussing different habitat types critical to continued existence of loggerheads, including *Sargassum* habitat in the Gulf).

Furthermore, BOEM's apparent assumption that it does not need to examine impacts on a species-specific basis is contrary to NEPA, the best available science, and common sense.⁶⁴ For instance, an oil spill that kills 40 individual animals may have negligible impacts if the species it kills is extremely abundant, but would have devastating impacts on a species like the Rice's whale with a population of approximately just 50 whales. Likewise, an action that kills 10,000 sea turtles a year would have very different population-level effects depending on whether the species is the critically endangered Kemp's ridley or a more abundant species like green sea turtles.

To say that all impacts are equivalent—regardless of geographic location or extent, regardless of the type of habitat affected, regardless of species—is patently absurd.

Not only are the equal effect level assumptions irrational and without support, but they conflict with BOEM's assessments of certain other resources where it expressly acknowledges that

⁶² <https://www.boem.gov/gommapps>.

⁶³ See Gulf of Mexico Fishery Management Council, NOAA, *Final Report 5-Year Review of Essential Fish Habitat Requirements*, Sec. 3.1 (Dec. 2016), https://gulfcouncil.org/wp-content/uploads/EFH-5-Year-Review-plus-App-A-and-B_Final_12-2016.pdf (overview of species and habitat designations); see also NOAA, *Final Amendment 10 to the 2006 Consolidated Atlantic Highly Migratory Species Fishery Management Plan: Essential Fish Habitat and Environmental Assessment* App. G (Sept. 1, 2017), https://www.habitat.noaa.gov/application/efhinventory/docs/a10_hms_efh.pdf.

⁶⁴ See, e.g., *Pub. Emps. for Env't Resp. v. U.S. Fish & Wildlife Serv.*, 177 F. Supp. 3d 146, 153, 156–157 (D.D.C. 2016) (“it is hard to imagine a ‘softer’ look” than not evaluating impacts on the species' current population).

different activity levels and locations between alternatives will translate to different effect levels. For example, the SEIS finds there would be greater impacts to coastal habitats under Alternatives A and B than C or D because the former will result in higher activity levels.⁶⁵ And BOEM's analysis of impacts to protected birds explains how Alternatives A, B, and C each would have different impacts due to the overlap of the respective lease areas with affected species.⁶⁶ BOEM offers no rational explanation for its inconsistency in finding that different activity levels and areas result in different impacts for some resources but identical impacts for others. The agency should conduct a similar analysis for all resources that takes into account both the alternatives' differing impact levels and the spatial overlap between the alternatives and resources or species at issue.

This flawed analysis prevents BOEM from making a reasoned choice between alternatives. BOEM wrongly assumes environmental impacts are the same regardless of whether a lease sale offers just one planning area (Alternatives B or C), both planning areas (Alternative A), or reduced acreage in the two planning areas to mitigate impacts (Alternative D). But an alternative that will result in higher levels of activity will result in higher levels of impacts. Likewise, leasing across a broader area will have impacts on resources across a broader area than if leasing were limited to a smaller area: if BOEM does not lease in an area, then resources in that area will not be directly affected by activities on those leases. Without acknowledging that there *are* differences in the impacts between these alternatives, BOEM cannot make an informed choice considering the environmental impacts. This can result in regionwide leasing rather than an alternative that would have significantly lower environmental impacts by limiting the area leased.

VI. BOEM REACHES CONTRADICTORY EFFECTS CONCLUSIONS FOR SIMILARLY SITUATED RESOURCES.

BOEM reaches contradictory conclusions regarding effects from oil spills to similarly situated resources. BOEM does not provide any rational explanation for why these effects determinations differ.

In its assessment of effects to coastal habitats, BOEM concludes impacts to estuarine habitats and coastal barrier beaches and associated dunes “would be major . . . due to cumulative OCS oil- and gas-related spills resulting from all past and present leasing activities.”⁶⁷ And it concludes impacts from such accidental events would be “moderate” for seabirds and other waterbirds further inshore.⁶⁸ But it concludes the same spills would have only “negligible”

⁶⁵ See SEIS 4-9 tbl.4-3; see also Multisale EIS 4-94 to -96, 4-113 to -114.

⁶⁶ SEIS xix; see also *id.* (similar for beach mice); *id.* at xx (similar for corals); *id.* at 4-38 (similar for pinnacles and low-relief features).

⁶⁷ SEIS xviii–xiv.

⁶⁸ *Id.* at 4-46 to -47, see also *id.* at xviii (finding “moderate” impacts to water quality from spills).

impacts to fishes and invertebrate resources,⁶⁹ no impact to marine mammals or sea turtles,⁷⁰ and “negligible to minor” impacts on commercial and recreational fisheries.⁷¹ BOEM offers no rational explanation for these contradictory conclusions. They are illogical on their face given that fish and invertebrates inhabit the estuarine habitats that would be majorly impacted. And marine mammals, sea turtles, fish, and invertebrates would experience essentially the same exposure to oil spills as moderately impacted birds. The Natural Resource Damage Assessment from the Deepwater Horizon spill demonstrates just that. The SEIS therefore appears to arbitrarily understate the impact of oil spills to several species and resources.

VII. BOEM MUST ADDRESS NEW INFORMATION ABOUT RICE’S WHALES SHOWING THAT EFFECTS ARE LIKELY SIGNIFICANT.

We incorporate by reference the discussion in comments by the Natural Resources Defense Council et al. on this draft SEIS that BOEM must account for new information on the distribution and habitat use of Rice’s whales in the Gulf of Mexico. Specifically, BOEM must account for new data and analysis showing that the species persistently occurs in the Western and Central Planning Areas.⁷² Given the devastating impacts of previous spills on the perilous population, BOEM cannot simply ignore this information in its decision to lease the very same regions of the OCS the species is known to occur to oil and gas activities for the next 30+ years.

Even before new information on the Rice’s whale’s distribution came to light, the National Marine Fisheries Service NMFS had determined that existing oil and gas drilling activity on the OCS was jeopardizing the species’ continued existence.⁷³ The new information on Western Gulf sightings illustrates that Rice’s whale occurrence overlaps much more significantly with oil and gas leasing and development than previously thought. These sightings, combined with information about the significant time the Rice’s whale spends near the surface, demonstrate the elevated risk and likelihood of significant adverse effects to the species that could result from more leasing in the Gulf. In addition, BOEM has generally dismissed the noise pollution impacts

⁶⁹ *Id.* at 4-41.

⁷⁰ *Id.* at 4-51, 4-57.

⁷¹ *Id.* at 4-73, 4-76.

⁷² NOAA RESTORE Science Program, *Trophic Interactions and Habitat Requirements of Gulf of Mexico Rice’s Whales*, restoreactscienceprogram.noaa.gov/projects/rices-whales; NOAA Fisheries, *Trophic Interactions and Habitat Requirements of Gulf of Mexico Rice’s Whales*, <https://www.fisheries.noaa.gov/southeast/endangered-species-conservation/trophic-interactions-and-habitat-requirements-gulf-mexico>; Comments of A.J. Strelcheck, NMFS Reg’l Adm’r Southeast Reg’l Off., to Tershara Matthews, Chief of Emerging Programs, BOEM, at 6 (Feb. 9, 2022) (scoping comments on Draft Environmental Assessment for commercial leasing wind power development on the Outer Continental Shelf in the Gulf of Mexico); Melissa S. Soldevilla et al., *Rice’s whales in the northwestern Gulf of Mexico: call variation and occurrence beyond the known core habitat*, 48 *Endang. Species Res.* 155, 156 (July 2022), <https://www.int-res.com/articles/esr2022/48/n048p155.pdf>;

⁷³ See Section XI, *infra*.

to the species from oil and gas activities. Numerous scientific studies demonstrate that human-caused noise, including shipping noise, can cause a host of problems for the whales, including “the potential to degrade their habitat, reduce their listening space, mask biologically important sounds, and potentially cause injury.”⁷⁴ BOEM must consider the new information on species occurrence when analyzing the effects of a lease sale and when considering impact minimization and mitigation of harms to the species.

VIII. BOEM HAS FAILED TO CONDUCT ANY ASSESSMENT OF ENVIRONMENTAL JUSTICE EFFECTS.

BOEM has ignored the effects of offshore drilling on the onshore communities that live near the associated midstream (or downstream) oil and gas infrastructure, including refineries, gas processors, and petrochemical facilities. Nearly half of the country’s petroleum refining capacity and over half of its natural gas processing capacity can be found along the Gulf Coast.⁷⁵ Most of the U.S.’s basic chemical production naturally takes place there as well, making use of the raw materials, such as ethylene, propylene, and benzene, that are developed by the area’s refiners and processors.⁷⁶ Of the “top 10 production complexes in the world, 5 are located in Texas and 1 is located in Louisiana.”⁷⁷

This concentration of fossil fuel-related industrial activity has resulted in long-standing health and quality of life impacts for local residents, with the effects often falling disproportionately on communities of color already burdened by high rates of poverty and inadequate access to health care.⁷⁸

An EIS must include not only the direct effects of a proposed action but indirect and cumulative effects as well. Indirect effects are those “caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.”⁷⁹ Cumulative impacts “result from the

⁷⁴ Soldevilla, *supra* note 72; see also Rosel et al., *Status review of Bryde’s whales (Balaenoptera edeni) in the Gulf of Mexico under the Endangered Species Act*, NOAA Tech Memo NMFS-SEFSC-692 (2016).

⁷⁵ *Gulf of Mexico Fact Sheet*, U.S. ENERGY INFORMATION ADMINISTRATION, https://www.eia.gov/special/gulf_of_mexico/.

⁷⁶ *Chemicals Industry Profile, Advanced Manufacturing*, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, <https://www.energy.gov/eere/amo/chemicals-industry-profile>; *How a Petrochemical is Produced*, AMERICAN FUEL AND PETROCHEMICAL MANU., <https://www.afpm.org/industries/operations/how-petrochemical-produced>.

⁷⁷ Multisale EIS 4-423.

⁷⁸ See Comments submitted by Healthy Gulf et al., 2023–2028 National OCS Oil and Gas Leasing Proposed Program and Draft Programmatic Environmental Impact Statement, at Section III.B (Oct. 6, 2022). We also incorporate by reference the comments on this draft SEIS filed by NRDC et al., discussing BOEM’s failure to adequately assess potential environmental justice impacts.

⁷⁹ 40 C.F.R. § 1508.8(b).

incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.”⁸⁰

In the Multisale EIS, BOEM concedes the fact that “[i]ndirect impacts to minority and low-income populations would occur onshore and would result from the operations of the extensive infrastructure system that supports all onshore and offshore oil and gas activities.”⁸¹ Yet it also attempts to evade the obvious consequences of this finding, hiding behind the claim that the “proportion of Federal OCS contribution to downstream infrastructure use has not yet and, most likely, may never be possible to determine as it is dependent on highly unpredictable market demands and prices.”⁸² That may or may not be the case, but it is irrelevant to the threshold inquiry here. OCS leasing clearly supplies a significant amount of the oil and gas used by the region’s onshore refineries, gas processors, and petrochemical facilities, as has been repeatedly recognized by BOEM itself.⁸³

Oil is characterized on two indices, density (heavy to light) and sulfur content (sour to sweet).⁸⁴ Refineries are correspondingly built to handle a particular blend of each. Production from the Gulf of Mexico OCS is composed of medium-to-heavy, sour crudes.⁸⁵ These are “mainly processed in Gulf of Mexico refineries, which are primarily equipped for those types of crudes rather than the light, sweet crude being produced onshore.”⁸⁶ In fact, BOEM recently found that continued production from the OCS is “critically important to U.S. energy markets to fulfill the demand at the Gulf Coast refineries for medium/heavy and sour crudes.”⁸⁷ As BOEM has observed, even a single proposed lease sale would mostly “help to maintain what decades of economic development have built, the complex Gulf of Mexico region that exists today.”⁸⁸

Consequently, the pollution emitted by onshore infrastructure must be captured in any assessment of proposed leasing, as both an indirect and a cumulative effect. Refining,

⁸⁰ *Id.* § 1508.7.

⁸¹ Multisale EIS 4-485.

⁸² *Id.* at 4-486.

⁸³ Furthermore, if information is incomplete or unavailable and relevant to reasonably foreseeable significant adverse impacts, BOEM must explain either why the costs are exorbitant or the means of gathering the information are unknown, along with providing a summary of existing credible scientific evidence and attempting to use existing tools to estimate impacts. 40 C.F.R. § 1502.22.

⁸⁴ *Changing quality mix is affecting crude oil price differentials and refining decisions*, EIA (Sept. 21, 2017), <https://www.eia.gov/todayinenergy/detail.php?id=33012>.

⁸⁵ See, e.g., BOEM, *2023–2028 National Outer Continental Shelf Oil and Gas Leasing Proposed Program 6-7* (July 2022) (Proposed Program).

⁸⁶ *Id.*

⁸⁷ *Id.* at 6-18; see also Stand.earth Research Group, *U.S. crude oil exploration and production in the Gulf of Mexico* (2022) (estimating the amounts of Gulf oil refined along the coast).

⁸⁸ Multisale EIS 4-465.

processing, and consumption are certainly “reasonably foreseeable” results of offshore drilling that are “sufficiently likely” such that “a person of ordinary prudence would take [them] into account in reaching a decision.”⁸⁹ The entire purpose of this leasing is the exploitation of offshore oil and gas resources, which—as noted—are for the most part destined for users along the Gulf Coast. BOEM has (at best) shown only “that the *extent* of the effect is speculative. The *nature* of the effect, however, is far from speculative.”⁹⁰ Uncertainty as to how much to attribute to the Gulf of Mexico OCS does not justify ignoring the problem altogether, as BOEM has done here.⁹¹

In the SEIS, BOEM dismisses onshore environmental justice effects by disclaiming any legal responsibility to consider them at all:

[S]ince these vulnerable populations are located within the larger context of onshore and State-regulated nearshore oil and gas activities that are connected to downstream infrastructure over which BOEM has no regulatory authority, BOEM has determined that a proposed action would not produce environmental justice impacts in the GOM region.⁹²

This is flatly incorrect. Indeed, CEQ has long-standing guidance that directly addresses this scenario:

For example, data may suggest there are disproportionately high and adverse human health or environmental effects on a minority population, low-income population, or Indian tribe from the agency action. Agencies should consider these multiple, or cumulative effects, *even if certain effects are not within the control or subject to the discretion of the agency proposing the action.*⁹³

Moreover, courts have made clear that an agency must include effects that extend beyond its direct control. The key question is not “What activities does the agency regulate?” but instead

⁸⁹ *Sierra Club v. FERC*, 827 F.3d 36, 47 (D.C. Cir. 2016) (cleaned up).

⁹⁰ *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549 (8th Cir. 2003) (emphasis in original). The interplay between indirect and cumulative impacts also answers BOEM’s claim that it cannot determine exactly what percentage of the Gulf’s oil and gas is used in the region. Once it is established that fossil fuels from the Gulf OCS are measurably contributing to the refineries, gas processors, and petrochemical plants further downstream (indirect effects), the EIS should consider all of the emissions causing harm to the area’s environmental justice communities (cumulative effects).

⁹¹ *See id.* (finding that when the nature of the effect is known, an agency “may not simply ignore the effect”).

⁹² SEIS 4-98 to -99.

⁹³ CEQ, *Environmental Justice, Guidance Under the National Environmental Policy Act* 9 (Dec. 10, 1997) (emphasis added), https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf. In the Multisale EIS, to which the SEIS tiers, BOEM purports to rely on CEQ’s guidance as one of its primary sources. Multisale EIS 4-485.

“What factors can the agency consider when regulating in its proper sphere?”⁹⁴ Here, multiple sections of OCSLA call for BOEM to consider the environment (including the marine, coastal, and human environments) when conducting OCS leasing.⁹⁵

The SEIS also attempts to limit the purview of its environmental justice determination to “0-1 new gas processing plant and 0-1 new pipeline landfall” over the next half century.⁹⁶ But, as noted, BOEM elsewhere has acknowledged, the oil produced offshore is “critical[]” to the *existing* demand of the Gulf’s fossil fuel infrastructure.⁹⁷ BOEM concluded that a “single proposed lease sale’s main impact on communities would be to contribute to the maintenance of current employment levels.”⁹⁸ Not only does this statement make clear the ties between onshore and offshore activity in the Gulf, but it also demonstrates the potential for a distorted assessment of the costs and benefits of drilling if BOEM consistently embraces job stability while distancing itself from the associated environmental degradation faced by disadvantaged communities.⁹⁹ Those outcomes cannot simply be ignored while the EIS nods toward the economic benefits of oil and gas employment that includes the very industries that are causing the ongoing harm.

BOEM’s failure to specifically document the effects happening onshore is especially egregious in light of the fact that BOEM has conducted modeling to assess some pollutants, including greenhouse gasses, that result from midstream and downstream activities.¹⁰⁰ And yet other pollutants, such as benzene and formaldehyde, that have long plagued local residents were not considered, although they too result from same industrial activity. As one court noted, in response to the claim that an agency could not determine the indirect impacts of transporting coal (including from diesel emissions and coal dust), that “argument is undercut by the . . . analysis of

⁹⁴ *Sierra Club v. FERC*, 867 F.3d 1357, 1373 (D.C. Cir. 2017).

⁹⁵ For example, OCSLA directs the Secretary of the Interior to manage the OCS “in a manner which considers economic, social, and environmental values” of OCS resources and the “potential impact of oil and gas exploration on . . . the marine, coastal, and human environments.” 43 U.S.C. § 1344(a)(1).

⁹⁶ SEIS 4-98.

⁹⁷ Proposed Program 6-18. BOEM’s leasing scenarios are projected to result in the extraction of 1,133.6 million barrels of oil equivalent. BOEM, *Gulf of Mexico OCS Oil and Gas Leasing Greenhouse Gas Emissions and Social Cost Analysis* 6 (Oct. 2022) (Greenhouse Gas Supp.).

⁹⁸ Multisale EIS 4-465.

⁹⁹ *Id.* at 4-466 (“Most of the impacts to people are positive, *e.g.*, in the form of direct employment in the industry, indirect employment in the extensive support sectors, and employees’ spent wages and tax revenues that support the community businesses and services.”); *id.* at 4-473 (“Routine activities related to a single lease sale would be incremental in nature, not expected to change existing conditions, and positive in their contribution to the sustainability of current industry, related support services, and associated employment.”).

¹⁰⁰ Greenhouse Gas Supp. 8–9; Multisale EIS 4-13 – 4-53.

greenhouse gas emissions from [that] transportation.”¹⁰¹ The same is true here: BOEM cannot blind itself to the toxic pollutants that local residents will be forced to breathe as a result of its proposed leasing while at the same time assessing other emissions related to the use of fossil fuels and its byproducts.¹⁰²

As a result of BOEM’s cramped view of NEPA, it has failed to provide any real specificity around environmental justice concerns, such as the type and volume of pollutants that residents will be exposed to or an explanation of the harm to health and welfare that can be expected to result. Nowhere in the collection of NEPA documents that BOEM relies upon—not in the Multisale EIS, not in the EIS for Lease Sales 250 and 251, and not in the present EIS for Lease Sales 259 and 261—does the agency provide any detail as to the effects of the onshore pollution associated with oil and gas infrastructure on the Gulf Coast’s most vulnerable inhabitants.¹⁰³ Without adequate information that considers the precise impacts on environmental justice communities, both government decisionmakers and the public are deprived of the transparency needed to achieve better outcomes.

The SEIS’s treatment of onshore effects is inexcusable, and its inadequacy highlights another instance in which harms to environmental justice communities have been neglected in favor of fossil fuels development. If BOEM is to give environmental justice impacts meaningful attention, considerably more analysis in the final SEIS is required.

IX. BOEM’S OIL SPILL ANALYSIS ARBITRARILY UNDERESTIMATES OIL SPILL RISK AND UNREASONABLY DISCOUNTS THEIR ENVIRONMENTAL HARMS.

¹⁰¹ *Mont. Env’t Info. Ctr. v. U.S. Office of Surface Mining*, 274 F. Supp. 3d 1074, 1092 (D. Mont. 2017); *see also W. Org. of Res. Councils v. U.S. Bureau of Land Mgmt.*, 4:20-cv-00076-GF-BMM, 2022 WL 3082475, at *8 (D. Mont. Aug. 3, 2022) (requiring agency to “disclose the public health impacts, both climate and non-climate, of burning fossil fuels from the planning areas”).

¹⁰² Further, BOEM’s prior discussions of onshore pollution generally cannot stand in for an environmental justice analysis. Those air quality discussions are both too narrow (primarily focused on Clean Air Act “criteria” pollutants) and too broad (focused on larger-scale effects rather than those specific to fence-line residents.) Multisale EIS 4-33 (noting the scope of the air quality monitoring) & *id.*, Appx H.

¹⁰³ The closest BOEM comes to any direct acknowledgement of environmental justice health impacts are the thumbnail descriptions of studies in the “New Information” section of the SEIS that address pollution exposure in these communities. SEIS 4-101; 4-103. But BOEM does not provide any additional context, nor does it attempt to incorporate the results into a larger analysis. *See Friends of the Earth*, 109 F. Supp. 2d at 42 (noting that the Corps “dedicated nine or ten pages” to cumulative impacts but that “[t]here is no actual analysis” and that the Corps “merely recite[s] the history of development . . . and then conclude[s] that the cumulative direct impacts ‘have been minimal’”).

BOEM's oil spill analysis is missing critical information needed to satisfy NEPA's hard look requirement and adequately evaluate oil spill risk. Most glaringly, 1) BOEM arbitrarily excludes all spills greater than 10,000 bbl from its source data in estimating future large-scale oil spills; 2) BOEM irrationally uses an incomplete and static data set to determine future spill rate; and 3) BOEM fails to evaluate the impacts of the largest reasonably foreseeable oil spill that could occur as a result of the proposed action. We also incorporate by reference the discussion of BOEM's oil spill analysis in comments on this draft SEIS filed by NRDC et al., which raise flaws including BOEM's reliance on outdated spill data, failure to account for the transition into deepwater drilling, flawed assumptions that future oil spills will follow past patterns, and failure to consider catastrophic discharge events.

A. The SEIS arbitrarily excludes all historic spills $\geq 10,000$ bbl from its calculations to estimate the probability and number of future large-scale oil spills.

BOEM claims that the *only* platform- or pipeline-related spill more than 10,000 bbl in the last fifteen years was *Deepwater Horizon*, and then excludes *Deepwater Horizon* from its spill calculations because it allegedly was not "reasonably foreseeable."¹⁰⁴ BOEM's assumptions and conclusions are flawed for several reasons.

First, BOEM provides zero support or reasoning for its arbitrary choice to limit historical data to the "last fifteen years." It is also not apparent what 15-year span BOEM is using, as the word "last" suggests BOEM looked at spills between the years 2007 and 2022, but the SDEIS claims the spill data it used to derive its spill estimates were between the years 1996 and 2010.

Second, the claim that there has only been one spill—*Deepwater Horizon*—that has spilled more than 10,000 bbl is fundamentally false. BOEM's own reports have said that in 2017, there was a 16,152 bbl spill in the OCS caused by damage to a pipeline segment.¹⁰⁵ That same historical data showed that, in addition to *Deepwater Horizon*, there have been three "very large drilling-related blowouts" that have resulted in spills greater than or equal to 10,000 bbl.¹⁰⁶ Those spills released 53,000 bbl, 65,000 bbl, and 80,000 bbl into the Gulf of Mexico.¹⁰⁷ Additionally, there are two other historic catastrophic spills in the Gulf that must be accounted for: *Ixtoc*, which spilled more than 3.4 million barrels of crude oil into the Gulf and was the world's first massive offshore oil spill,¹⁰⁸ and Taylor Energy, which is the longest-running spill in U.S. history and has spilled

¹⁰⁴ SEIS 3-14.

¹⁰⁵ NMFS, *Appendices to the Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico* 46 (Mar. 13, 2020), https://repository.library.noaa.gov/view/noaa/23738/noaa_23738_DS2.pdf.

¹⁰⁶ *Id.* at 48.

¹⁰⁷ *Id.*

¹⁰⁸ See Luis A. Soto et al., *The environmental legacy of the Ixtoc-I oil spill in Campeche Sound, southwestern Gulf of Mexico*, *Frontiers in Marine Sci.* (2014), <https://www.frontiersin.org/articles/10.3389/fmars.2014.00057/full>.

crude oil into the Gulf for the past 18 years; it is still ongoing.¹⁰⁹ Clean up efforts from the Taylor Energy well site captured more than 1 million gallons of oil (equivalent to 23,000 bbls) over the span of three years, and more than 5 million gallons (119,000 bbls) may have released into Gulf waters over the past nearly two decades.¹¹⁰

Third, the exclusion of *Deepwater Horizon* from the spill calculations is unfounded. As just discussed, the Ixtoc and Taylor Energy oil spills demonstrate that several catastrophic oil spills in the Gulf have happened in the past, so such large-scale spills as not unforeseeable. They are likely to happen again in the future.

It is unreasonable and arbitrary for BOEM to ignore the full historic spill data set it has in its possession and calculate oil spill risk under an arbitrary assumption that zero spills greater than 10,000 bbl have occurred in the past.¹¹¹ Even under its flawed assumption, BOEM concludes in the SEIS that there is a 29% chance of a spill greater than 10,000 bbl under Alternative A.¹¹² Had BOEM included the seven large-scale oil spills described herein in its oil spill calculations, its conclusions of the number and probability of large-scale oil spills expected from each alternative would likely be far greater and higher and influence its environmental impacts assessment.

B. BOEM relies on outdated spill data to determine future spill rate and fails to account for factors that influence current spill risk.

BOEM also uses an incomplete historical data set to determine future spill risk and fails to factor in changed circumstances that have increased the potential frequency and magnitude of large-scale oil spills occurring today and into the future. Both errors are significant and must be remedied with supplemental analyses so that the agency and the public can make an informed decision regarding the approval of these lease sales.

To begin, BOEM arbitrarily relies on spill data only up to the year 2010 to calculate the rate of future spills, failing to incorporate over a decade of more recent data to determine spill risk.¹¹³ At a minimum, BOEM should use its 2016 Update of Occurrence Rates for Offshore Oil Spills as a

¹⁰⁹ See *Private, public effort contains 1 million gallons of oil at longest U.S. spill*, NOAA (Jul. 12, 2022), <https://www.noaa.gov/news-release/private-public-effort-contains-1-million-gallons-of-oil-at-longest-us-spill>.

¹¹⁰ See Mike Smith, *More than 1 million gallons of oil – so far – collected from longest-running spill in U.S. history*, NOLA (Jul. 12, 2022, 1:19 PM), https://www.nola.com/news/environment/article_3e92bef4-0208-11ed-b9a7-7fe673f3fa28.html.

¹¹¹ See *Dist. Hosp. Partners, L.P. v. Burwell*, 786 F.3d 46, 56–57 (D.C. Cir. 2015) (“[A]gencies do not have free rein to use inaccurate data.”).

¹¹² SEIS 3-15.

¹¹³ See SEIS 3-14 (“The number of spills estimated is derived by application of the historical rate of spills (1996-2010) per volume of crude oil handled.”).

baseline for its spill risk assessment.¹¹⁴ As stated in the accompanying report by Susan Lubetkin, Ph.D., although the 2016 report is imperfect at best, it does use “offshore spill data from several components of oil and gas infrastructure—platforms, pipelines, tankers, and barges—through 2015 to calculate several spill rates.”¹¹⁵ BOEM should then incorporate spill data since the 2016 report and draw from databases it has readily available for use. For instance, the Bureau of Safety and Environmental Enforcement’s (BSEE’s) Offshore Incident Statistics site shows summary statistics of offshore incidents from 2007 through 2020.¹¹⁶ And BSEE’s calendar year oil and gas production page includes oil and gas production by year from 2012 through 2021.¹¹⁷ Incorporation of these updated data is necessary to accurately assess current spill risk.

Additionally, BOEM must evaluate what factors influence current spill risk, identify trends to contextualize increasing risk in the Gulf, and adjust the SDEIS’s spill estimates accordingly. The agency has the ability to compare data trends,¹¹⁸ it simply needs to do the work. In the SDEIS, “[s]pill rates were calculated based on the assumption that spills occur in *direct proportion* to the volume of oil handled and are expressed as the number of spills per billion barrels of oil handled (spills/BBO).”¹¹⁹ BOEM thus assumes an equivalence between volume of oil handled and spill occurrence, ignoring mounting evidence that shows this is an erroneous assumption. Factors such as increased hurricane severity and frequency due to climate change,¹²⁰ increased deepwater and

¹¹⁴ See ABS Consulting, Inc., *2016 Update of Occurrence Rates for Offshore Oil Spills* (2016), <https://www.bsee.gov/sites/bsee.gov/files/osrr-oil-spill-response-research/1086aa.pdf>.

¹¹⁵ Susan C. Lubetkin, *Technical Review of Section 4.6: Environmental Consequences: Potential Impacts of Oil Spills and Appendix G: Oil Spill Estimates from the 2023-2028 National OCS Oil and Gas Leasing Program Draft Programmatic Environmental Impact Statement* (BOEM, July 2022) and *OECS Oil Spill Model (Section 1.2.4.2) and Statistical Frequency of Catastrophic Oil Spill (Section 3.3.3) from the Draft Economic Analysis Methodology for the 2023–2028 National Outer Continental Shelf Oil and Gas Leasing Program* (BOEM, July 2022), at 12 (Oct. 6, 2022). The report analyzes the oil spill modeling in BOEM’s national OCS program and discusses the same methodology for calculating oil spill risk used in the SEIS.

¹¹⁶ *Offshore Incident Statistics*, BSEE, <https://www.bsee.gov/stats-facts/offshore-incident-statistics>.

¹¹⁷ *Outer Continental Shelf Oil and Gas Production*, BSEE, <https://www.data.bsee.gov/Production/OCSProduction/Default.aspx>.

¹¹⁸ See Lubetkin, *supra* note 115, at 12 (noting that the 2016 Update of Occurrence Rates for Offshore Oil Spills “checked for trends over time, compared the rates based on the then most recent data, and stated which rates they felt were most representative and should be used in further calculations.”).

¹¹⁹ SEIS 3-13 (emphasis added).

¹²⁰ See Julia Jacobo, *Risk of oil spills may rise as climate change creates more monster storms*, ABC NEWS (Sept. 29, 2021), <https://abcnews.go.com/US/risk-oil-spills-rise-climate-change-creates-monster/story?id=80038873>.

ultra-deepwater drilling,¹²¹ and aging oil and gas infrastructure¹²² all increase the probability of future oil spills and, importantly, the likelihood that these spills could be catastrophic.¹²³

The SEIS's conclusions on oil spill risk are not meaningful or accurate because BOEM relies on an incomplete set of historical data and fails to account for changed circumstances. BOEM needs to reevaluate its oil spill analysis and conduct a new assessment that reflects the true risk of oil spills under each alternative.

C. BOEM fails to identify the largest reasonably foreseeable oil spill that could occur under each alternative or evaluate the impacts from such spills.

The SEIS fails to identify what is the largest reasonably foreseeable spill that could occur under each alternative, and in turn, falls short of NEPA's requirements to assess the reasonably foreseeable impacts of approving these lease sales.¹²⁴ The SEIS summarizes the "mean number" of $\geq 1,000$ bbl spills and $\geq 10,000$ bbl spills, but places no upper bounds on the spill sizes and makes no effort to evaluate the impacts of any discrete spill in its impacts analysis.¹²⁵ Instead, BOEM excludes "catastrophic oil spills" entirely from its analysis because they are "not reasonably foreseeable,"¹²⁶ and then for all other spills, makes dismissive and broad conclusory statements such as: "Accidental spills have been historically low-probability events and are typically small in size. Therefore, the expected impact to fishes and invertebrate resources from accidental oil spills is **negligible**."¹²⁷ BOEM makes no attempt to identify what size spill could reasonably occur between $\geq 1,000$ bbl and its undefined "catastrophic" spill size. At most, BOEM makes a brief note that the impacts of "a large oil spill ($\geq 1,000$ bbl)" would cause "*moderate*" cumulative impacts to birds in the Gulf of Mexico OCS under Alternatives A–D. The agency provides zero indication of the actual spill size of this "large oil spill" and no further analysis of

¹²¹ See Steven A. Murawski et al., *Chapter 2. 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* 19, tbl. 2.1 & fig. 2.2 (2020); Lucija Muehlenbachs et al., *The impact of water depth on safety and environmental performance in offshore oil and gas production*, 55 Energy Policy (2013),

<https://www.sciencedirect.com/science/article/abs/pii/S030142151201141X> (noting probability of an accident increases by 8.5% for every 100 feet of increasing depth).

¹²² See Ella Nilsen & Liz Stark, *America's offshore oil infrastructure is aging. 'We don't know there's a problem until there's a problem.'*, CNN (Oct. 5, 2021),

<https://www.cnn.com/2021/10/05/us/oil-spill-aging-fossil-fuel-infrastructure-climate/index.html>.

¹²³ See Murawski, *supra* note 121, at 17 ("The inherent risks of catastrophic well blowouts at extreme depths will increase as the productivity of oil facilities increases exponentially with water depth.").

¹²⁴ See *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 71 (D.D.C. 2019) (agency must sufficiently consider all reasonably foreseeable effects of leasing).

¹²⁵ SEIS 3-15, tbls.3-6 & 3-7.

¹²⁶ See, e.g., *id.* at 4-51.

¹²⁷ *Id.* at 4-41 (emphasis in original).

the spill.¹²⁸ Confoundingly, BOEM at one point states that “*most* of the OSRA modeled oil spills are of a size and number that population-level impacts are unlikely,” but provides no information in the SEIS about OSRA’s modeled outputs or which modeled spills *likely could* have population-level impacts.¹²⁹

BOEM has the data and modeling capabilities to evaluate the largest reasonably foreseeable spills anticipated to occur under the alternatives and the duty to engage in that analyses under NEPA. BOEM’s failure to evaluate the expected environmental harms from the largest oil spill anticipated to occur as a result of the proposed action is arbitrary and capricious and violates NEPA.

X. BOEM MUST ACCURATELY EVALUATE THE EFFECTS FROM ORPHANED, ABANDONED, AND DECOMMISSIONED WELLS AND INFRASTRUCTURE.

Abandoned and orphaned wells, pipelines, and other infrastructure can have substantial impacts on the Gulf environment. So can decommissioned infrastructure, despite best efforts to prevent future harms. The SEIS acknowledges that leasing will result in wellbores and infrastructure that will have to be decommissioned, and it contains some assessment of decommissioning *activities*. But it lacks any assessment of the effects following decommissioning or, importantly, from abandoned and orphaned infrastructure that is not decommissioned.

As an initial matter, BOEM must provide an honest assessment of the proportion of wells, pipelines, and platforms resulting from a lease sale that will be decommissioned, abandoned, or orphaned. It would be irrational to assume 100% of infrastructure will be successfully and promptly decommissioned. There is already a well-known shortfall of financial assurances necessary to cover just the existing decommissioning liabilities.¹³⁰

In 2015, the Government Accountability Office (GAO) found that BOEM’s and the Bureau of Safety and Environmental Enforcement’s (BSEE) existing financial assurance regulations and procedures for decommissioning liability posed significant financial risks to the federal government and taxpayers, and identified several important actions to improve the system.¹³¹ The GAO found that the federal government did not have sufficient assurances to cover the costs of outstanding decommissioning liabilities.¹³² In the Gulf of Mexico alone, \$2.3 billion in decommissioning liabilities may not be covered by adequate financial assurances, and less than 8% of an estimated \$38.2 billion in decommissioning liabilities were covered by financial

¹²⁸ *Id.* at 4-47 (emphasis in original).

¹²⁹ *Id.* at 4-51 (emphasis added).

¹³⁰ GAO, *Offshore Oil and Gas Resources: Information on Infrastructure Decommissioning and Federal Financial Risk*, GAO-17-642, at 2 (2017).

¹³¹ GAO, *Offshore Oil and Gas Resources: Actions Needed to Better Protect Against Billions of Dollars in Federal Exposure to Decommissioning Liabilities*, GAO-16-40, at 2 (2015).

¹³² *Id.* at 33.

assurance mechanisms such as bonds.¹³³ As a result, the federal government could be forced to cover billions of dollars in decommissioning costs using taxpayer dollars.

According to the GAO, BOEM and BSEE face data limitations that prevent them from being able to effectively track decommissioning liabilities.¹³⁴ Specifically, BSEE was unable to collect accurate information on decommissioning costs from operators, it was relying on an outdated system to estimate decommissioning costs, and it lacked documented procedures for identifying and tracking lease infrastructure in need of decommissioning.¹³⁵

This problem has not gone away. Just last year, the GAO found that “BSEE does not have a robust process to address the environmental and safety risks posed by leaving decommissioned pipelines in place on the seafloor due to the cumulative effects of oversight gaps before, during, and after the decommissioning process.”¹³⁶ And in its 2022 Fiscal Year Budget Justification request, BSEE describes orphaned liabilities as a growing area of oversight and obligation.¹³⁷ This all adds up to establish that inadequate decommissioning is likely to result from a lease sale. Wells and infrastructure will be abandoned, orphaned, or decommissioned in a substandard manner.

BOEM must assess how this foreseeable result will affect the environment. For instance, ineffectively decommissioned wells can result in long-term leaks of oil and methane and can create use conflicts for future development of offshore wind or other infrastructure in the region.¹³⁸ BOEM has embarked on a research effort to better understand the impact of abandoned oil and gas wells on air and water quality in the Gulf.¹³⁹ It states, “The GOM has thousands of abandoned oil and gas wells with some dating back to the 1960s.”¹⁴⁰ And it acknowledges that there are concerns about the potential for oil leaks from abandoned wells to contaminate regional areas. The use of abandoned wells for carbon storage will create another environmental risk, as pressurizing those formations could increase the likelihood and magnitude

¹³³ *Id.* at 24.

¹³⁴ *Id.* at 16–22, 28–31.

¹³⁵ *Id.*

¹³⁶ GAO, *Offshore Oil and Gas Updated Regulations Needed to Improve Pipeline Oversight and Decommissioning* GAO-21-293 (2021).

¹³⁷ BSEE, *Budget Justifications and Performance Information: Fiscal Year 2022* (2022), <https://www.doi.gov/sites/doi.gov/files/fy2022-bsee-budget-justification.pdf>.

¹³⁸ Hannah Seo, *Unplugged: Abandoned oil and gas wells leave the ocean floor spewing methane*, ENVIRONMENTAL HEALTH NEWS (Dec. 8, 2020), <https://www.ehn.org/oil-and-gas-wells-methane-oceans-2649126354.html>.

¹³⁹ BOEM, *Environmental Studies Program: Studies Development Plan - Impact of Abandoned Oil and Gas Wells on Air and Water Quality in the Gulf of Mexico (GOM) (GM-22-01)* (2021), <https://www.boem.gov/sites/default/files/documents/environment/environmental-studies/GM-22-01.pdf>.

¹⁴⁰ *Id.*

of pollutants escaping from inadequately plugged wellbores.¹⁴¹ By not assessing these issues, the SEIS effectively assumes wells do not leak once they are decommissioned. That assumption is plainly false and must be addressed. BOEM cannot rationally choose an alternative that would result in thousands of additional abandoned, orphaned, or inadequately decommissioned wells, without considering that those wells are likely to cause water pollution.

BOEM similarly must consider evidence that decommissioned, abandoned, and orphaned pipelines leak hydrocarbons and cause other environmental harms.¹⁴² It cannot assume there will be no effects because all pipelines are decommissioned.

Finally, BOEM must account for the likelihood that energy market trends, including those spurred by the IRA's climate policies, are likely to lead to stranded assets on the OCS. As oil demand declines, OCS production would also decline and lead to more idle iron that must be decommissioned. At the same time, companies operating in the OCS would be earning less revenue from oil and gas as demand declines, increasing the likelihood that lessees will not be financially able to cover their decommissioning responsibilities. These issues together are likely to increase the proportion of leases with unaddressed decommissioning, so would increase the effects to the environment that occur when OCS operations are not decommissioned promptly or adequately.

XI. BOEM MAY NOT RELY ON THE UNLAWFUL PROGRAMMATIC GULF OIL AND GAS BIOLOGICAL OPINION.

The SEIS indicates that BOEM is relying on the biological opinion (BiOp) and incidental take statement (ITS) issued by NMFS on March 13, 2020, to meet its obligation to ensure against jeopardy under section 7 of the ESA. However, an action agency is in violation of section 7 when it relies on an unlawful biological opinion.¹⁴³ NMFS's 2020 biological opinion is unlawful for several reasons, so BOEM would violate ESA section 7 if it were to hold a lease sale in reliance on that BiOp.

Section 7 of the ESA imposes an affirmative duty on federal agencies to, in consultation with the relevant wildlife agency/ies, "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" its critical habitat.¹⁴⁴ "Formal" consultation with NMFS is required whenever an action "may affect" a listed species, unless NMFS concludes the effects are "not likely to [be] adverse[]." ¹⁴⁵ Formal consultation

¹⁴¹ *Id.*

¹⁴² GAO, *Pipeline Oversight*, *supra* note 136.

¹⁴³ *Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 698 F.3d 1101, 1127–28 (9th Cir. 2012).

¹⁴⁴ 16 U.S.C. § 1536(a)(2).

¹⁴⁵ 50 C.F.R. § 402.14(a), (b)(1).

requires NMFS to formulate a “biological opinion” on whether that action is likely to jeopardize species.¹⁴⁶

Both the action agency and the consulting agency must “use the best scientific and commercial data available” in evaluating the action’s effects.¹⁴⁷ If NMFS concludes that the proposed action is likely to jeopardize the species, it must specify reasonable and prudent alternatives that would avoid the likelihood of jeopardy.¹⁴⁸ The ESA also requires NMFS to provide an incidental take statement when the agency anticipates that incidental taking of a threatened or endangered species will occur.¹⁴⁹ The statement must specify the permissible level of taking, the reasonable and prudent measures that NMFS considers necessary or appropriate to minimize the effects of take, and the reporting requirements and other terms and conditions with which the action agency must comply in order to implement the reasonable and prudent measures.¹⁵⁰

Congress established the section 7 consultation process explicitly “to ensure compliance with the [ESA’s] substantive provisions.”¹⁵¹ Therefore, without a valid biological opinion, Interior would be out of compliance with both its procedural and substantive section 7(a)(2) obligations.

The 2020 NMFS BiOp on which Interior relies is unlawful under the ESA and Administrative Procedure Act in several ways, currently the subject of ongoing litigation in the U.S. District Court for the District of Maryland.¹⁵² Specifically, the BiOp unlawfully: (1) underestimates the effects of the action from oil spills by arbitrarily disregarding the likelihood of a catastrophic oil spill and underestimating the amount and effects of the spills it anticipates will occur; (2) reaches arbitrary determinations that the action will not jeopardize the continued existence of species by a) failing to account for post-Deepwater Horizon population changes when assessing the effects of the action to threatened and endangered species, b) failing to incorporate anticipated changes to species’ baselines from climate change when assessing the action’s effects on species, and c) unlawfully ignoring effects to species’ recovery; (3) fails to show that a proposed mitigation measure is sufficient to avoid jeopardizing the survival and recovery of the critically endangered Rice’s whale; and (4) includes an incidental take statement that violates the ESA’s requirements

¹⁴⁶ 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g).

¹⁴⁷ 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(d), (g)(8).

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

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

¹⁵⁰ 16 U.S.C. § 1536(b)(4)(B); 50 C.F.R. § 402.14(i)(1).

¹⁵¹ *Thomas v. Peterson*, 753 F.2d 754, 764 (9th Cir. 1985) (“The ESA’s procedural requirements call for a systematic determination of the effects of a federal project on endangered species. If a project is allowed to proceed without substantial compliance with those procedural requirements, there can be no assurance that a violation of the ESA’s substantive provisions will not result.”); *see also Wash. Toxics Coal. v. EPA*, 413 F.3d 1024, 1034 (9th Cir. 2005) (“The purpose of the consultation process . . . is to prevent later substantive violations of the ESA.”); *Pac. Rivers Council v. Thomas*, 30 F.3d 1050, 1056–57 (9th Cir. 1994) (“Only after the [agency] complies with § 7(a)(2) can any activity that may affect the protected [species] go forward.”).

¹⁵² *Sierra Club v. NMFS*, No. 8:20-cv-03060-DLB (D. Md. filed Oct. 21, 2020).

for certain expected take of whales and, for all species, from oil spills and vessel strikes.¹⁵³ These errors are arbitrary and capricious, fail to use the best available science, and are contrary to the ESA. Because the BiOp is unlawful, Interior may not rely on it to comply with its section 7 obligations for the proposed lease sales.

Separately, section 9 of the ESA prohibits “take” of endangered species by any person, which includes federal agencies.¹⁵⁴ “Take” means to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect.”¹⁵⁵ Take that is authorized by a valid ITS is not prohibited under section 9.¹⁵⁶ Without a valid ITS, however, any take resulting from an agency action is unlawful.

The BiOp finds that activities caused by OCS leasing take threatened and endangered species. The 2020 BiOp lacks a valid ITS for the reasons described above. Accordingly, the proposed lease sales will cause unauthorized take, in violation of section 9.

XII. BOEM MUST COMPLETE ITS UPDATED ESSENTIAL FISH HABITAT CONSULTATION AND INCORPORATE THAT INFORMATION INTO NEPA REVIEW BEFORE AUTHORIZING THE LEASE SALE.

The Magnuson-Stevens Fishery Conservation and Management Act requires federal agencies to consult with NMFS whenever they propose to authorize, fund, or undertake any action that may adversely affect essential fish habitat.¹⁵⁷ As part of the consultation process, the Act also provides for the relevant fishery management council to comment on and make recommendations to NMFS and the action agency concerning that activity.¹⁵⁸ If NMFS determines the activity would affect EFH, it must recommend measures the agency can take to conserve the habitat.¹⁵⁹ MSA regulations direct NMFS and Councils to work closely to provide EFH information to action agencies and develop EFH conservation recommendations.¹⁶⁰ The action agency must respond in writing to any recommendations it receives from the Council or NMFS. Its response must include a description of the measures it proposes to take to avoid, mitigate, or offset the activity’s impacts or, if the agency chooses not to follow NMFS’s or the Council’s recommendations, an explanation of that choice.¹⁶¹ MSA regulations encourage action agencies like BOEM to coordinate EFH consultations with NEPA and other required review processes, and to provide an assessment of impacts to EFH in time for it to be available for the

¹⁵³ See Mem. Supp. Mot. Summ. J., *Sierra Club v. NMFS*, No. 8:20-cv-03060-DLB (D. Md. May 27, 2022), ECF No. 93-3.

¹⁵⁴ 16 U.S.C. § 1538(a)(1).

¹⁵⁵ *Id.* § 1532(19).

¹⁵⁶ *Id.* § 1536(o)(2).

¹⁵⁷ 16 U.S.C. § 1855(b)(2).

¹⁵⁸ *Id.* § 1855(b)(3)(A).

¹⁵⁹ *Id.* § 1855(b)(4)(A).

¹⁶⁰ 50 C.F.R. § 600.905(c).

¹⁶¹ 16 U.S.C. § 1855(b)(4)(B).

NEPA public comment period.¹⁶² This is consistent with the shared purpose of NEPA and the MSA to ensure informed decision-making and public involvement in decisions that affect the environment.

In this case, BOEM appears to be relying on a programmatic EFH consultation completed in 2017, even though BOEM and NMFS are actively working on an updated programmatic consultation that it expects will be complete by December 2022.¹⁶³ NMFS has designated EFH for numerous species in the Gulf, including numerous tuna and billfish species,¹⁶⁴ as well as numerous coastal pelagic, reef fish, coral, and other species.¹⁶⁵ Given the dearth of analysis the SEIS presents on fish habitat and the fact that updated information and mitigation measures will be available very shortly, it is arbitrary and capricious and inconsistent with legal provisions requiring informed, transparent decision-making for BOEM to finalize any decision on this lease sale (or any other) without first completing the EFH consultation process and making that information available for comment by the Gulf of Mexico Fishery Management Council and the public as a whole. BOEM admits that decommissioning activities alone could decimate up to 45% of the greater amberjack population—a population that has been overfished and struggling to rebuild for at least 20 years.¹⁶⁶ Additional impacts on the natural habitat of these species—much of which has already been degraded by oil- and gas-related activities—must be fully examined based on the best available science and disclosed to NMFS, the Council, and the public *before* BOEM speeds ahead with lease sales.

* * *

We appreciate this opportunity to comment on BOEM’s draft SEIS and urge the agency to adopt a minimal-leasing option that adequately considers and accounts for the significant harm that OCS leasing has on the Gulf’s communities and environment, as well as perform the necessary analyses to correct the omissions and deficiencies described above.

Sincerely,

Chris Eaton
Earthjustice

¹⁶² 50 C.F.R. § 600.920(e)–(f); *see also* 50 C.F.R. § 600.920(a)(3) (“The Federal agency should notify NMFS in writing as early as practicable regarding actions that may adversely affect EFH. . . . Such early coordination should occur during pre-application planning for projects subject to a Federal permit or license and during preliminary planning for projects to be funded or undertaken directly by a Federal agency.”).

¹⁶³ SEIS 5-6.

¹⁶⁴ *See* Amendment 10, App. G, *supra* note 63.

¹⁶⁵ *See, e.g.*, 2016 Gulf of Mexico 5-Year EFH Review, *supra* note 63, at Sec. 3.1 (overview of species and habitat designations).

¹⁶⁶ SEIS 4-43.

November 21, 2022

Page 32

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