UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT
GULF OF AMERICA OCS REGION
NEW ORLEANS, LOUISIANA

SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT

OF
DEVELOPMENT OPERATIONS COORDINATION DOCUMENT
NO. N-10256

FOR

BP EXPLORATION & PRODUCTION INC.

MARCH 13, 2026

RELATED ENVIRONMENTAL DOCUMENTS

Biological Opinion Oil and Gas Leasing, Exploration, Development, Production, Decommissioning, and All Related Activities in the Gulf of Mexico Outer Continental Shelf
(FWS, April 20, 2018)

Gulf of Mexico Catastrophic Spill Event Analysis: High-Volume, Extended-Duration Oil Spill Resulting from Loss of Well Control on the Gulf of Mexico Outer Continental Shelf; 2nd Revision
(OCS Report BOEM 2021-007)

Biological Environmental Background Report for the Gulf of Mexico OCS Region
(OCS Report BOEM 2021-015)

Programmatic Description of the Potential Effects from Gulf of Mexico OCS Oil- and Gas-Related Activities: A Supporting Information Document (OCS Report BOEM 2023-053)

Biological and Conference Opinion on Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement's Oil and Gas Program Activities in the Gulf of America
(NMFS, May 20, 2025)

Gulf of America Regional OCS Oil and Gas Lease Sales and Post-Lease Activities: Final Programmatic Environmental Impact Statement
(OCS EIS/EA BOEM 2025-042)

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

The Bureau of Ocean Energy Management (BOEM) has prepared a Site-Specific Environmental Assessment (SEA) (No. N-10256) complying with the National Environmental Policy Act (NEPA) at 42 United States Code (U.S.C.) §§ 4321 et seq. The United States Department of the Interior (DOI) NEPA implementing regulations at 43 Code of Federal Regulations (CFR) Part 46 (dated February 24, 2026; 91 FR 8738), the DOI NEPA Handbook and BOEM policy require an evaluation of proposed major Federal actions, which under BOEM jurisdiction includes approving a plan for oil and gas exploration or development activity on the Outer Continental Shelf (OCS).

Secretarial Order 3423 directed the renaming of the Gulf of Mexico to the Gulf of America (GOA). As a result, BOEM updated new and existing content, while legacy content such as previously published reports, studies, and NEPA documents remain unchanged.

Impacts caused by similar actions to that proposed were examined at a basin-wide scale in the GOA in the following NEPA and relevant documents:

- *Biological Opinion Oil and Gas Leasing, Exploration, Development, Production, Decommissioning, and All Related Activities in the Gulf of Mexico Outer Continental Shelf (FWS 2018 BiOp) (Issued by United States Fish and Wildlife Service [FWS] on April 20, 2018)*
- *Gulf of Mexico Catastrophic Spill Event Analysis: High-Volume, Extended-Duration Oil Spill Resulting from Loss of Well Control on the Gulf of Mexico Outer Continental Shelf; 2nd Revision (Gulf of Mexico Catastrophic Spill Event Analysis) (OCS Report BOEM 2021-007)*
- *Biological Environmental Background Report for the Gulf of Mexico OCS Region (BEBR) (OCS Report BOEM 2021-015)*
- *Programmatic Description of the Potential Effects from Gulf of Mexico OCS Oil- and Gas-Related Activities: A Supporting Information Document (Oil and Gas SID)(OCS Report BOEM 2023-053)*
- *Biological and Conference Opinion on Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement's Oil and Gas Program Activities in the Gulf of America* (NMFS 2025 BiOp) (Issued by National Marine Fisheries Service [NMFS] on May 20, 2025)
- *Gulf of America Regional OCS Oil and Gas Lease Sales and Post-Lease Activities: Final Programmatic Environmental Impact Statement* (2025 GOA PEIS) (OCS EIS/EA BOEM 2025-042)

Proposed Activities: BP Exploration & Production Inc.'s (BP) Initial Development Operations Coordination Document (DOCD) for drilling operations on the

OCS proposes to drill, complete and produce six wells with four associated back up locations (Proposed Action). Wells DC1-A, DC1-B, DC1-C, DC2-A, DC2-B, DC2-C, and backup wells DC1-D, DC1-E, DC2-D and DC2-E are located in Keathley Canyon (KC) Block 292, Lease Number OCS-G 25792 in the Central Planning Area (CPA) of the GOA OCS. In addition, a Floating Production Unit (FPU) will be installed in KC Block 293 with 12 mooring lines located in KC Blocks 292, 293, 336, and 337. The Proposed Action is located southwest of Port Fourchon, Louisiana, approximately 190 miles (mi) (306 kilometers [km]) from the nearest shoreline in Terrebonne Parish, Louisiana. The water depth of the project area ranges from 5,561 – 6,085 feet (ft) (1,695 – 1,855 meters [m]). BP proposes using a dynamically positioned drillship, a mobile offshore drilling unit (MODU), to drill these wells.

Resources and Impacts Considered: The impact analysis focused on the exploration activities and the resources that may be potentially impacted. The impact-producing factors (IPF) include (1) bottom disturbances, (2) waste and discharges, (3) noise, (4) vessel traffic, (5) air emissions, (6) spills, (7) spill response, and (8) marine trash and debris.

In the Initial DOCD, as amended, BP has included all required mitigation measures (e.g., lease stipulations and NMFS 2025 BiOp terms and conditions and reasonable and prudent measures) and regulatory guidance as part of its Proposed Action. BOEM has assessed the impacts of the Proposed Action on the following resources:

- marine mammals;
- sea turtles;
- air quality;
- archaeological resources;
- benthic communities;
- marine and coastal birds;
- fish resources and essential fish habitat (EFH);
- human/socioeconomic resources;
- other marine uses; and
- water quality;

Based on the site-specific analysis, the Proposed Action would result in negligible to minor impacts to marine mammals and sea turtles because those resources might be present at times or located near proposed activities and could potentially be impacted. Based on this site-specific analysis, BOEM's other

environmental reviews under OCSLA and NEPA, and adherence to all required mitigation measures and regulatory guidance incorporated into the Proposed Action, no additional mitigation measures are required at this stage.

Section 2.1 of the DOCD provides information on the filing or approval status of the individual and/or site-specific Federal, State and local application approvals or permits that must be obtained prior to conducting the proposed activities. BOEM has a well-established suite of commonly applied mitigation measures (see Chapters 5 and 6 of the Oil and Gas SID) that can be applied to any of the required subsequent BOEM/BSEE permits or approvals to ensure compliance with BOEM and BSEE's regulations and other Federal laws. BOEM is also able to revise applicable mitigations as needed to adaptively manage mitigation compliance and effectiveness at each approval or permitting stage. Therefore, this SEA considers two alternatives: (1) No Action and (2) Proposed Action. Appendix C provides reasoning for why BOEM determined separate alternatives were not warranted to address the following topics of concern:

- Rice's Whale (see responses to BOEM-2025-0022-0004 and BOEM-2025-0022-0030)
- Deepwater and high-pressure/high-temperature (HP/HT) drilling (see responses to BOEM-2025-0022-0002, BOEM-2025-0022-0004, and BOEM-2025-0022-0051)
- Environmental justice concerns including community benefit agreements (see responses to BOEM-2025-0022-0013 and BOEM-2025-0022-0014)

In the N-10256 DOCD, and in accordance with lease terms and applicable regulations and guidance, BP has committed to employ required mitigation measures to address potential impacts to air quality, water quality, benthic communities, marine mammals, sea turtles, fish resources and EFH, and archaeological resources from the Proposed Action. Any remaining impacts would be negligible. Therefore, BOEM has selected Alternative 2, the Proposed Action, and will not require additional mitigation measures as conditions of approval (COAs) at the DOCD stage. Below are the required mitigation measures:

- **COMPLIANCE WITH BIOLOGICAL OPINION TERMS AND CONDITIONS AND REASONABLE AND PRUDENT MEASURES:** This approval is conditioned upon compliance with the Reasonable and Prudent Measures and implementing Terms and Conditions of the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. This includes mitigation, particularly any Terms and Conditions applicable to the plan, as well as record-keeping and

reporting sufficient to allow BOEM and BSEE to comply with reporting and monitoring requirements under the BiOp; and any additional reporting required by BOEM or BSEE developed as a result of BiOp implementation. The NMFS Biological Opinion may be found here: https://www.fisheries.noaa.gov/resource/document/biological-and-conference-opinion-bureau-ocean-energy-management-and-bureau. The BiOp Attachments and Appendices may be found here: https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.

- **MARINE DEBRIS PROTOCOL**: The applicant will follow the protocols provided under Attachment 2 (A.2): Marine Debris Protocol found in the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.
- **VESSEL-STRIKE AVOIDANCE AND INJURED AND/OR DEAD AQUATIC PROTECTED SPECIES REPORTING PROTOCOLS:** The applicant will follow the protocols provided under Attachment 3 (A.3): Vessel Strike Avoidance and Injured and/or Dead Aquatic Protected Species Reporting Protocols found in the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.
- **IN-WATER LINE PRECAUTION PROTOCOL:** The applicant will follow the protocols provided under Attachment 5 (A.4): In-water Line Precaution Protocol found in the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.
- **MOON POOL MONITORING PROTOCOL:** The applicant will follow the protocols provided under Attachment 6 (A.5): Moon Pool Monitoring Protocol found in the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.

- **VESSEL TRANSIT WITHIN THE RICE'S WHALE AREA AS IDENTIFIED IN THE 2020 BIOLOGICAL OPINION'S REASONABLE AND PRUDENT ALTERNATIVE (2020 RWA):** The applicant will follow the protocols provided under Attachment 4 (A.6): Vessel Transit within the Rice's Whale Area as identified in the 2020 Biological Opinion's Reasonable and Prudent Alternative (2020 RWA) found in the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.
- **SEA TURTLE RESUSCITATION GUIDELINES PROTOCOL:** The applicant will follow the protocols provided under Attachment 10 (A.7): Sea Turtle Resuscitation Guidelines Protocol found in the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.

Conclusion: BOEM has evaluated the potential environmental impacts of the Proposed Action and, based on our evaluation in this SEA, BOEM has selected Alternative 2. The Proposed Action would have no new significant impacts on the human environment not already disclosed in the 2025 GOA PEIS, from which the SEA tiers. Therefore, preparation of an environmental impact statement is not required. Any new information relevant to resources was updated and analyzed in the attached SEA and the other documents listed above that were reviewed and considered by BOEM.

PERRY BOUDREAUX

Digitally signed by PERRY BOUDREAUX
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March 13, 2026

Supervisor, Environmental Assessment Unit 2
Office of Environment
Gulf of America OCS Region
Bureau of Ocean Energy Management

Date

Certification of Environmental Assessment Compliance

This letter certifies the attached site-specific environmental assessment (SEA) for Development Operations Coordination Document (DOCD) No. N-10256 submitted by BP Exploration & Production Inc. complies with the requirements outlined in Section 1.5 of the DOI Handbook of National Environmental Policy Act Implementing Procedures (516 DM 1).

Page Limit Certification

The SEA, not including citations and appendices, does not exceed the 75-page limit. This document has been prepared in accordance with the specified formatting criteria outlined in Section 1.5(e) of 516 DM 1. As the responsible official, I certify that the breadth and depth of the analysis have been tailored to meet this page limit. This SEA represents BOEM's good-faith effort to prioritize the most important considerations required by NEPA within the mandated page limits. Our prioritization reflects the bureau's expert judgment, and any considerations addressed briefly or left unaddressed were, in our judgment, not of a substantive nature that would have meaningfully informed the environmental effects or the resulting decision.

Deadline Certification

This SEA has been completed within the required statutory deadline described in Section 1.5(f) of 516 DM 1. The completion date of this document is within one year of November 13, 2025, which is when the amended DOCD was deemed submitted as per 30 CFR § 550.231 (i.e., 'the date the applicant was notified their application was complete'). I certify that this document represents the bureau's good-faith effort to fulfill NEPA's requirements within the congressional timeline. In our expert opinion, the analysis is thorough and adequate to inform and reasonably explain the bureau's decision regarding the Proposed Action.

PERRY BOUDREAUX

Digitally signed by PERRY BOUDREAUX
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March 13, 2026

Supervisor, Environmental Assessment Unit 2
Office of Environment
Gulf of America OCS Region
Bureau of Ocean Energy Management

Date

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Site-Specific Environmental Assessment (SEA)

BP Exploration & Production Inc.

Initial Development Operations

Coordination Document: N-10256

1 INTRODUCTION

This Site-Specific Environmental Assessment (SEA) has been prepared to determine whether the proposed activities outlined in the Initial Development Operations Coordination Document (DOCD), N-10256, initially submitted by BP Exploration & Production Inc. (BP) on February 18, 2025, and amended on November 13, 2025, will significantly affect the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act (NEPA) and, if so, require an environmental impact statement (EIS) to be prepared. BP's Initial DOCD, as amended, proposes to develop hydrocarbons by drilling, completing, and producing six wells with four associated back up locations (Proposed Action). Wells DC1-A, DC1-B, DC1-C, DC2-A, DC2-B, DC2-C, and backup wells DC1-D, DC1-E, DC2-D and DC2-E are located in Keathley Canyon (KC) Block 292, Lease Number OCS-G 25792 in the Central Planning Area (CPA) of the Outer Continental Shelf (OCS). In addition, a Floating Production Unit (FPU) will be installed in KC Block 293 with 12 mooring lines located in KC Blocks 292, 293, 336, and 337.

The DOI Handbook of NEPA Implementing Procedures (516 DM 1), dated February 2026, is designed to allow for the preparation of an SEA for an individual proposed action as long as any previously unanalyzed effects are not significant. As such, this SEA is tiered to, or incorporates by reference, the following Bureau of Ocean Energy Management (BOEM) NEPA and supporting documents, which evaluated the potential impacts resulting from exploration and development activities across the OCS.

- *Biological Opinion Oil and Gas Leasing, Exploration, Development, Production, Decommissioning, and All Related Activities in the Gulf of Mexico Outer Continental Shelf* (FWS 2018 BiOp) (Issued by United States Fish and Wildlife Service [FWS] on April 20, 2018) (FWS 2018)
- *Gulf of Mexico Catastrophic Spill Event Analysis: High-Volume, Extended-Duration Oil Spill Resulting from Loss of Well Control on the Gulf of Mexico Outer Continental Shelf; 2nd Revision* (Gulf of Mexico Catastrophic Spill Event Analysis) (BOEM 2021b)
- *Biological Environmental Background Report for the Gulf of Mexico OCS Region* (BEBR) (BOEM 2021a)

- *Programmatic Description of the Potential Effects from Gulf of Mexico OCS Oil- and Gas-Related Activities: A Supporting Information Document* (Oil and Gas SID) (OCS Report BOEM 2023-053) (BOEM 2023)
- *Biological and Conference Opinion on Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement's Oil and Gas Program Activities in the Gulf of America* (NMFS 2025 BiOp) (Issued by National Marine Fisheries Service [NMFS] on May 20, 2025) (NMFS 2025b)
- *Gulf of America Regional OCS Oil and Gas Lease Sales and Post-Lease Activities: Final Programmatic Environmental Impact Statement* (2025 GOA PEIS) (OCS EIS/EA BOEM 2025-042) (BOEM 2025b)

This SEA analyzes the potential impacts resulting from the proposed site-specific activities. Relevant affected environment discussions and impact analyses from the 2025 GOA PEIS are summarized and utilized for site-specific analysis through tiering. Where applicable, additional information available in the BEBR, Oil and Gas SID, and other supporting documents above was incorporated by reference, consistent with DOI's Handbook of NEPA implementing procedures. Relevant new information published after the above-referenced environmental analyses is included by citation. Lease stipulations, the Outer Continental Shelf Lands Act (OCSLA), all applicable Federal, State, and local regulations (as per 30 CFR § 550.101(a)); guidance provided in all applicable Notices to Lessees and Operators (NTLs) (as per 30 CFR § 550.103); and mitigation and monitoring measures identified in this SEA, the 2025 GOA PEIS, FWS 2018 BiOp, and the NMFS 2025 BiOp have been considered in the evaluation of the Proposed Action.

Secretarial Order 3423 directed the renaming of the Gulf of Mexico to the Gulf of America. As a result, BOEM is updating new content to refer to the Gulf of America, while legacy content such as previously published reports, studies, and NEPA documents remain unchanged.

1.1 BACKGROUND

BOEM and the Bureau of Safety and Environmental Enforcement (BSEE) have been delegated the authority under OCSLA to manage and oversee the exploration and development of OCS oil, gas, and mineral resources while ensuring safe operations and the protection of the human environment. Working together, BOEM and BSEE manage oil and gas leases, permits, authorizations, and regulate exploration, development, production, and decommissioning. Prior to authorizing activities related to these phases, BOEM conducts resource and NEPA reviews. BOEM's Office of Leasing and Plans oversees the submittal of Exploration Plans (EPs) and DOCDs pursuant to 30 CFR part 550 subpart B.

As required by 30 CFR § 550.201, lessees and operators submit EPs and DOCDs to provide BOEM with information needed to adequately evaluate the overall potential impacts to the human environment prior to conducting activities on the lease. Submittal of an environmental impact analysis (EIA) is required in EPs under 30 CFR § 550.227 and in DOCDs under 30 CFR § 550.261, wherein the operator provides environmental information and makes impact conclusions regarding their proposed activities.

1.2 Purpose of and Need for the Proposed Action

BP has submitted a plan to conduct development activities on the OCS. The purpose of the Proposed Action is to drill, complete, and commercially produce hydrocarbon resources from six wells on OCS Lease Number OCS-G 25792, which would contribute to the Nation's energy needs.

The need for this action is established by BOEM's responsibility under OCSLA to make OCS lands available for expeditious and orderly development, subject to environmental safeguards, in a manner that is consistent with the maintenance of competition and other national needs. Section 25 of OCSLA (43 United States Code (U.S.C.) § 1350) requires oil and gas lessees seeking to conduct development activities on the OCS to first obtain approval from the Secretary who has delegated the authority to grant such approval to BOEM.

In response to the Proposed Action in BP's plan, BOEM is required by OCSLA to approve, approve with modifications, or deny the plan within 120 days (refer to 43 U.S.C. § 1345(h)(1)). The criteria that BOEM will apply in reaching a decision to approve, approve with modifications, or deny the plan within 120 days and the scope of its discretion are provided by Section 25 of OCSLA and detailed in the implementing regulations (30 CFR part 550 subpart B). Authorizing the Proposed Action, as outlined in the Initial DOCD N-10256, allows BP to pursue its rights under the lease and to conduct development drilling activities, producing oil and gas and resulting in royalties for the U.S. Treasury and an important feedstock for the economy.

1.3 Description of Proposed Action

BP's Initial DOCD, as amended, proposes to drill, complete and produce six wells with four associated back up locations (Proposed Action). Wells DC1-A, DC1-B, DC1-C, DC2-A, DC2-B, DC2-C, and backup wells DC1-D, DC1-E, DC2-D and DC2-E are located in KC Block 292, Lease Number OCS-G 25792 in the CPA of the OCS. In addition, an FPU will be installed in KC Block 293 with 12 mooring lines located in KC Blocks 292, 293, 336, and 337. The Proposed Action is located southwest of Port Fourchon, Louisiana, approximately 190 miles (mi) (306 kilometers [km]) from the nearest shoreline in Terrebonne Parish, Louisiana. The water depth of the project area ranges from 5,561 – 6,085 feet (ft) (1,695 – 1,855 meters [m]). BP proposes using a

dynamically positioned (DP) drillship, i.e., a mobile offshore drilling unit (MODU), to drill these wells. The projected duration of the proposed drilling, completion, and commencement of production of one well is 292 days, with all proposed activities in the Initial DOCD planned between July 2026 and June 2030. The installation of the FPU and associated infrastructure is planned between July 2027 through September of 2028.

The DOCD provides air quality and activity schedule information for associated lease term infrastructure. Drill Center 1 (DC1) includes four (4) well/manifold jumpers, one (1) subsea pump system, four (4) flowline jumpers, and four (4) PLETS and holdback system. Drill Center 2 (DC2) includes four (4) well/manifold jumpers, and one (1) flowline jumper. The proposed ROW pipelines would be built, owned and operated by Enbridge and are not included in this DOCD but rather, will undergo separate site-specific environmental reviews through the BOEM/BSEE TIMS Web application submittals. However, potential impacts from pipelines and mitigation measures were analyzed more broadly in the 2025 GOA PEIS, from which this SEA tiers, with additional information and analyses in the Oil and Gas SID, BEBR, and NMFS 2025 BiOp, which are incorporated by reference. Chapter 5.2.7.3 of the Oil and Gas SID describes the permitting and NEPA review processes associated with pipeline applications. Pipeline applications are reviewed separately but not approved by BSEE until any associated DOCDs are approved by BOEM. Through these reviews, BOEM will verify that BP has conformed to all requirements. Therefore, it is anticipated that any potential impacts from associated pipelines would be mitigated by existing lease sale stipulations and COAs applied through site-specific reviews of pipeline applications.

Supply and crew boat facilities to support the proposed activities are to be located in existing facilities in Port Fourchon, Louisiana, approximately 220 mi (354 km) northeast of the project location. Port Fourchon would be used as the debarkation point for equipment, supplies, and crews supporting the proposed activities. Helicopter support would be flown out of Houma, Louisiana, approximately 229 mi (369 km) northeast of the project area. BP does not expect any shore-based construction or expansion in association with these proposed activities. The types of support vessels and their potential travel frequency during exploratory drilling are included in BP's plan (BP Exploration & Production Inc. 2025). No new or unusual technology is proposed by BP.

1.4 IMPACT-PRODUCING FACTORS

For purposes of this analysis, an impact-producing factor (IPF) is the outcome of a proposed activity that may pose a vulnerability risk or potential impact to the human environment, such as noise (acoustic source), air emissions, discharges and waste (effluent), or offshore habitat modification (physical disturbance). The impact analysis evaluates the potentially affected environment and the degree of the effects of the

action consistent with Section 1.2 of DOI's Handbook of NEPA implementing procedures. Each phase of oil and gas operations typically have specific types of IPFs that may affect physical or environmental conditions and/or may affect one or more natural, cultural, or socioeconomic resource(s). The IPFs are categorized as routine activities, accidental events, and other effects that are reasonably foreseeable and have a close causal connection to the Proposed Action. Detailed descriptions of routine activities and accidental events considered in this SEA are provided in **Appendix A**, and the vulnerability (effects or impacts) of resources to IPFs is also available in the BEBR and Oil and Gas SID.

1.4.1 Routine Activities

Routine activities are generally sequential and occur on a regular basis during the lifetime of a lease (approximately 50 years). Examples of routine activity include geological and geophysical (G&G) surveys,[1] drilling wells, installing production structures and/or subsea infrastructure (platforms, wellheads, manifolds, subsea tie-ins, pipelines), ancillary activities, and decommissioning. the routine development activities proposed by BP would result in the following IPFs:

1. bottom disturbance or offshore habitat modification;
2. noise;
3. discharges and wastes;
4. space-use conflicts; and
5. air emissions.

1.4.2 Accidental Events

Though not planned, intended, nor anticipated, BOEM recognizes that there is potential for accidental events. The impacts and complexity of an accidental event can vary greatly dependent upon the type, interrelated factors, type and amount of material, time of year, and resources impacted. The primary IPFs from potential accidents related to the proposed activities could include the following:

1. accidental releases (oil/chemical spills and oil spill response, emergency flaring/venting, or marine trash and debris);
2. accidental collisions resulting in a spill (vessel to vessel or vessel to structure);

[1] The G&G activities for oil and gas exploration and development are authorized on the basis of whether or not the proposed activities occur before leasing takes place (prelease) and are authorized by a permit. If the G&G activity will occur on an existing lease they may be treated as an ancillary activity or through plan approval. Limited ancillary activities are authorized by the OCS lease itself and only require notice to BOEM. Other surveys (including deep penetration seismic airgun surveys) are authorized through OCS plan approvals, plan revisions, or a separate G&G permit if the survey will extend off the existing lease.

3. accidental vessel strike (vessel to organism); and
4. accidental entanglement/entrapment (equipment or facility and organism).

1.5 Accidental Spill Concerns

Based on experience and the operations proposed in BP's plan, the potential sources of spills from the proposed activity would include the following:

1. a storage tank accident on the MODU or vessel(s);
2. a transfer operation mishap between the supply vessel(s) and the MODU;
3. a leak resulting from damage to the fuel tanks or equipment on the MODU or vessel(s); and/or
4. a loss of well control (LWC).[2]

As required by 30 CFR §§ 550.219 and 550.250, lessees or designated operators are required to provide BSEE and BOEM with an oil spill response plan (OSRP) that is prepared in accordance with 30 CFR part 254 subpart B with their proposed exploration, development, or production plan for the facilities that they will use to conduct their activities or to alternatively reference their approved Regional OSRP. In addition, lessees or designated operators are required to report incidents under 30 CFR § 250.188(a) (e.g., fatalities, blowouts, explosions) and oil spills pursuant to 30 CFR § 250.187(d) and 30 CFR § 254.46 (from a rig, production facility, or pipeline estimated to be more than 1 barrel [bbl] [42 gallons (gal)]). As required in 30 CFR § 254.46(a), immediate notification is required for spills from a facility, another offshore facility, or offshore spill of unknown origin.

Spill Response Requirements

Agency regulations require that all lessees and designated operators of oil handling, storage, or transportation facilities located seaward of the coastline submit an OSRP before they can operate a facility. BSEE has issued NTL 2012-N06, "Guidance to Owners and Operators of Offshore Facilities Seaward of the Coast Line Concerning Regional Oil Spill Response Plans," which informs operators of OSRP requirements and requires that they have adequate resources available to protect the environment from spills or releases from their facilities. The Environmental Protection and Response Plan within the OSRP outlines the availability of spill containment and cleanup equipment

[2] The definition for loss of well control is as follows: uncontrolled flow of formation or other fluids (the flow may be to an exposed formation [an underground blowout] or at the surface [a surface blowout]); uncontrolled flow through a diverter; and/or uncontrolled flow resulting from a failure of surface equipment or procedures. Not all loss of well control events would result in a blowout as defined above, but they are most commonly thought of as releases to the human environment. A loss of well control can occur during any phase of development, e.g., development drilling, well completion, production, or workover operations (BOEM 2021b).

and trained personnel necessary to ensure that a full response can be deployed during an oil-spill emergency.

All the proposed activities and facilities in this plan will be covered by the Regional OSRP filed by BP (Operator Number 02481) in accordance with 30 CFR part 550 and 30 CFR part 254 and deemed in compliance by BSEE on January 10, 2025. BP also certifies it has the capability to respond, to the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in their Initial DOCD (BP Exploration & Production Inc. 2025).

Potential Spills from Vessels/Transfer Operations

As indicated above, offshore spills from BP's proposed activities are possible if an accident were to damage a storage tank onboard the drilling rig, crew boat, offshore support vessel, or fuel supply vessel. Historically, accidents of this nature have resulted from unintentional vessel collisions and transfer incidents during the offloading of diesel fuel to the drilling rig. BP plans to use a drillship using a subsea blowout preventer (BOP) to conduct the proposed activities. There are several tanks onboard the MODUs that store fuel and lubricants necessary for the rig's operation. A worst-case discharge (WCD) scenario[3] from a rupture or spill from the vessels and other support are provided in **Table 1-1**.

Table 1-1. Worst-Case Discharges from Proposed Drilling Rigs and Vessels

Vessel	Largest Main Tank Capacity*	Total Capacity*
DP Drillship (Transocean Invictus)	14,937 bbl	57,222 bbl
DP Drillship (Atlas)	12,985 bbl	64,492 bbl
Crew Boat	N/A	1,000 bbl
Supply Boat	N/A	1,000 bbl
Shuttle Tanker	N/A	50,000 bbl

[3] Information regarding the WCD totals and calculations is not required under the DOI NEPA implementing regulations; however, the information is included as part of the review process and compliance with 30 CFR § 254.47; BOEM NTL 2015-N01, "Information Requirements for Exploration Plans, Development and Production Plans, and Development Operations Coordination Documents on the OCS for Worst Case Discharge and Blowout Scenarios;" and Frequently Asked Questions as part of every EP and development and production plan (DPP)/DOCD. In addition, the August 16, 2010, CEQ Report prepared following the Deepwater Horizon explosion, oil spill, and response recommended that BOEM should "Ensure that NEPA documents provide decisionmakers with a robust analysis of reasonably foreseeable impacts, including an analysis of reasonably foreseeable impacts associated with low-probability catastrophic spills for oil and gas activities on the OCS" (CEQ 2010). BOEM's Gulf of Mexico Catastrophic Spill Event Analysis technical report is a robust analysis of the impacts from low-probability catastrophic spills and is referenced in this analysis to inform decision-making (BOEM 2021b).

Vessel	Largest Main Tank Capacity*	Total Capacity*
Diesel Oil Supply Vessel (Boat Fuel)	N/A	50,000 gal (1,190 bbl)
Diesel Oil Supply Vessel (Rig Fuel)	N/A	150,000 – 250,000 gal (3,571 – 5,952 bbl)
Helicopter	N/A	760 gal (18.1 bbl)

*bbl = barrel; gal = gallon; N/A = not applicable.

Potential Spills from a Loss of Well Control (LWC)

BSEE requires that all LWC incidents be reported immediately per 30 CFR § 250.188(a)(3). Offshore LWCs that cause large-scale, oil-spill[4] events are rare and not expected. Most LWC accidents are only expected to release a relatively small amount of oil into the environment before the well is brought under control by the operator or the well is sealed by natural processes known as bridging over.[5] It is important to note that spill volume is only one factor that influences the nature and severity of an event's impacts. Each oil-spill event is unique; its outcome depends on several factors. These factors include time of year and location, atmospheric and oceanographic conditions (e.g., winds, currents, coastal type, and sensitive resources), specifics of the well (i.e., flow rates, hydrocarbon characteristics, and infrastructure damage), and response efforts (i.e., speed and effectiveness). For these reasons, the severity of impacts from an oil spill cannot be predicted based on volume alone (BOEM 2021b). In the event of an LWC, an operator's first course of action is to activate the BOP to close the well. The BOP may be located on the surface of the drilling rig or subsea (on the seafloor). There are built-in redundancies in the BOP system to allow activation of selected components with the intent to seal off the well bore. If a subsea BOP cannot be operated from the drill rig, it can be operated at the seafloor using remotely operated vehicles (ROVs).

According to loss of well control data available on BSEE's website at: https://www.bsee.gov/stats-facts/offshore-incident-statistics and BSEE annual

[4] As applicable to NEPA, Eccleston (2008) describes a catastrophic event as "large-scale damage involving destruction of species, ecosystems, infrastructure, or property with long-term effects, and/or major loss of human life." For oil and gas activities on the OCS, a catastrophic event is a high-volume, extended-duration oil spill regardless of the cause. The high-volume, extended-duration oil spill, or catastrophic spill, has been further defined by the National Oil and Hazardous Substances Pollution Contingency Plans as a "spill of national significance" or "a spill which, because of its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of Federal, State, and local, and responsible party resources to contain and cleanup the discharge" (40 CFR part 300, Appendix E) (BOEM 2021b).

[5] In an LWC or blowout, the flow duration is dependent on the oil reservoir characteristics and the tendency for the well to fill in or bridge naturally (bridge over), and the timing of the intervention. The flow of a blowout well could, and often does, change as the blowout naturally bridges, the reservoir is depleted, or the reservoir pressure is reduced (Buchholz et al. 2016).

reports,[6] on average an LWC event with a surface release occurred three times or less per year from 2007 to 2023. This average is based on more than 100 exploration and development wells drilled annually. From 2015 to 2023 there were nine LWC events in water depths below 1,000 ft and 12 LWC events in water depths greater than 1,000 ft. As discussed below, the operator has an OSRP in place that addresses the WCD scenario and LWC events. Based on BSEE records from 2007 to 2023 and the safety measures in place, an LWC that results in a crude oil spill of greater than 50 bbls is unlikely to occur.

Potential Site-Specific Spill Risk and Response

To prevent pollution and ensure safety, drilling operations will utilize appropriately designed casing and cement programs, subsea blowout preventers, and mud monitoring systems. All equipment and personnel will comply with 30 CFR parts 250 and 550, as well as applicable NTLs. BP's plan describes measures for LWC prevention, likelihood for surface intervention to stop a blowout, and early intervention in the event of a blowout. BP's standards for well control, personnel safety, and an emergency response plan are discussed in the regional OSRP and included in emergency response plans submitted by BP. As per the information provided in the DOCD and BP's approved regional OSRP, the MODU would deploy a subsea BOP while drilling the relief well (BP Exploration & Production Inc. 2025).

The WCD from drilling or production operations of a subsea well is the daily rate of uncontrolled flow of natural gas or oil into the open wellbore. Operators must submit WCD calculated volumes and associated data according to NTL 2015-N01, "Information Requirements for Exploration Plans, Development and Production Plans, and Development Operations Coordination Documents on the OCS for Worst Case Discharge and Blowout Scenarios," as part of every EP and DOCD. Though not proposed or expected, BP has estimated that a WCD scenario from a blowout of one of the wells under the proposed activities could be 45,000 barrels of oil per day (BOPD) of 24.4° American Petroleum Institute (API) gravity crude. In accordance with enhanced agency oversight, BOEM verified the operator's calculations used to determine the WCD volume.[7] The regional OSRP for the Project was reviewed, found in compliance,

[6] The 2007 to 2016 BSEE annual reports can be found here: https://www.bsee.gov/newsroom/library/annual-report. The 2014 Annual Report was based on a calendar year. The 2015 Annual Report and subsequent reports were based on U.S. fiscal year (FY), which runs from October 1 to September 30 (BSEE 2016). The last Annual Report is from FY 2016. Data from years 2015 to 2023 were acquired from: https://www.bsee.gov/stats-facts/offshore-incident-statistics.

[7] Information provided regarding the WCD totals and calculations is not required under the DOI NEPA implementing regulations; however, the information is included as part of the review process and compliance with 30 CFR § 254.47; NLT 2015-N01, "Information Requirements for Exploration Plans, Development and Production Plans, and Development Operations Coordination Documents on the OCS for Worst Case Discharge and Blowout Scenarios"; and Frequency Asked Questions as part of every EP and DPP/DOCD.

and approved by BSEE on January 10, 2025, as noted in Section 9.1 of the EIA. Per 30 CFR part 254, the OSRP addresses a range of spill sizes and sources, including the WCD, and includes required response strategies, equipment, and personnel. A detailed oil spill response discussion addressing topics like resource identification, release modeling, response technologies, and source containment is available in Appendix G of the DOCD.

BP indicated in its plan that while bridging over (or 'bridging') is possible due to generally low formation strengths in the Gulf of America, no bridging over was assumed in the worst-case discharge scenario calculations.

In the event that a relief well is required due to a blowout, BP indicates in its plan that there are two drilling rigs currently available that have the capability to drill the relief well if needed (BP Exploration & Production Inc. 2025). For this project, BP estimates that it would take approximately 3 to 10 days to mobilize the necessary equipment and spud; 60 days from spud to casing shoe above the WCD zone, plus 30 days for ranging, intersection, and kill operations; for a total of approximately 90-100 days to drill and complete a relief well. There are no existing facilities/platforms nearby from where the relief well can be drilled. Additional details related to the proposed activities can be found in BP's Initial DOCD (BP Exploration & Production Inc. 2025).

Oil-Spill Risk and Assessment

Spills with volumes greater than 10,000 bbl are uncommon. From 2001 to 2023, there have been only three spills greater than 10,000 bbl in the Gulf of America OCS. One was the *Deepwater Horizon* oil spill at 4.9 MMbbl (ABS Consulting Inc. 2016), which is categorized as a low-probability catastrophic spill, which is not reasonably foreseeable. In October 2017, a subsea wellhead jumper (KAA-0120) in Mississippi Canyon Block 209, about 53 miles southeast of the Louisiana coast, failed and released an estimated 16,000 barrels of oil into the Gulf of America. The unintended release occurred after Delta House platform operations were restarted following Hurricane Nate due to a crack in the flowline discovered through remotely operated vehicle inspection. Carried southwest by ocean currents, the spill did not reach shore (BSEE 2019). There was also a pipeline spill in November 2023 near the mouth of the Mississippi River. As of December 2023, approximately 26,000 bbl were estimated to have been released. Details regarding the cause and source are not yet available, however, the use of dispersants have not been reported and there have been no reported wildlife or shoreline impacts.

In the event of a spill, there is no single method of containing and removing the oil that would be 100 percent effective. Removal and containment efforts to respond to an ongoing spill would likely require multiple technologies, including mechanical cleanup, chemical dispersant application, and less frequently, in-situ burning of the

slick. Even with the potential to deploy all of these technologies, it is likely that, with the operating limitations of current spill response technology, not all of the oil could be contained and removed from the offshore environment. It is likely that larger spills in deep waters and under the right conditions would require the simultaneous use of all available cleanup methods (i.e., mechanical cleanup, dispersant application, and in-situ burning).

The approved OSRP for the proposed project addresses a range of spill sizes and sources, including the WCD, and required response strategies. However, when considering the historical/statistical data, subsea containment improvements, BOEM and BSEE's enhanced oversight, and industry's heightened safety awareness since the *Deepwater Horizon* oil spill (as noted below), it is reasonable to conclude that an accidental spill event of similar magnitude is unlikely to occur. Events that are statistically unexpected to occur, but would still be possible but exceedingly unlikely, such as a catastrophic discharge event, and are not considered a part of the proposed activities and, therefore, are not discussed in detail in this document. For more information on a low-probability catastrophic event and the resulting analysis of potential effects, refer to BOEM's *Gulf of Mexico Catastrophic Spill Event Analysis* technical report (BOEM 2021b), incorporated by reference herein.

Oil and Gas Production Safety Systems

On September 28, 2018, BSEE published revisions to the 2018 Oil and Gas Production Safety Systems Rule, which became effective on December 27, 2018 (83 FR 49216), and on May 2, 2019, BSEE published revisions for the 2019 Well Control and Blowout Preventer Rule, which became effective on July 15, 2019 (84 FR 21908). On August 23, 2023, BSEE published a final rule revising certain regulatory provisions published in the 2019 final well control rule for drilling, workover, completion, and decommissioning operations, which became effective on October 23, 2023 (88 FR 57334). For purposes of this site-specific analysis, BOEM has evaluated the regulatory changes and agrees with BSEE's conclusions that the rule changes do not change or increase environmental risks from what they were under the 2016 or 2019 rules. BOEM agrees because the changes to the rules carefully removed unnecessary burdens while leaving critical safety provisions intact and did not change the overall risks related to oil and gas activities on the OCS. These updates were also accounted for in the 2025 GOA PEIS analysis, from which this SEA tiers.

2 ALTERNATIVES CONSIDERED

2.1 NO ACTION

Alternative 1 – If selected, BP would not be authorized to undertake the proposed activities and the DOCD would be denied. If the proposed activities are not undertaken, they would not cause activity-specific routine or accidental impacts.

Activities related to other existing leases, authorizations, and permits associated with the overall OCS activities would not increase. The No Action Alternative would not significantly change the environmental impacts of overall OCS oil and gas exploration and development activities as described in the 2025 GOA PEIS, and routine impacts would continue to occur elsewhere on the OCS, as could impacts from accidental events on other OCS leases. However, these activities on this lease block would not occur as described in DOCD N-10256. Selecting the No Action Alternative would not preclude the lessee from submitting a new DOCD for proposed activities on the lease, which would entail a separate, independent review and site-specific NEPA analysis before a decision is made.

2.2 PROPOSED ACTION

Alternative 2 – If selected, BP would be authorized to undertake the proposed activities as requested in N-10256. Related activities conducted in State waters or onshore would be subject to State and local regulations. The lessee/operator would conduct operations on the OCS in accordance with the lease stipulations; OCSLA; applicable Federal regulations (as per 30 CFR § 550.101(a)); guidance provided in all appropriate NTLs (as per 30 CFR § 550.103); and appropriate mitigation measures, terms and conditions, and reasonable and prudent measures set out in the FWS 2018 BiOp and the NMFS 2025 BiOp as applicable. These consist of the following:

- **COMPLIANCE WITH BIOLOGICAL OPINION TERMS AND CONDITIONS AND REASONABLE AND PRUDENT MEASURES:** This approval is conditioned upon compliance with the Reasonable and Prudent Measures and implementing Terms and Conditions of the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. This includes mitigation, particularly any Terms and Conditions applicable to the plan, as well as record-keeping and reporting sufficient to allow BOEM and BSEE to comply with reporting and monitoring requirements under the BiOp; and any additional reporting required by BOEM or BSEE developed as a result of BiOp implementation. The NMFS Biological Opinion may be found here: https://www.fisheries.noaa.gov/resource/document/biological-and-conference-opinion-bureau-ocean-energy-management-and-bureau. The BiOp Attachments and Appendices may be found here: https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.
- **MARINE DEBRIS PROTOCOL**: The applicant will follow the protocols provided under Attachment 2 (A.2): Marine Debris Protocol found in the Biological Opinion issued by the National Marine Fisheries Service

on May 20, 2025.[8] The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.

- **VESSEL-STRIKE AVOIDANCE AND INJURED AND/OR DEAD AQUATIC PROTECTED SPECIES REPORTING PROTOCOLS:** The applicant will follow the protocols provided under Attachment 3 (A.3): Vessel Strike Avoidance and Injured and/or Dead Aquatic Protected Species Reporting Protocols found in the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.
- **IN-WATER LINE PRECAUTION PROTOCOL:** The applicant will follow the protocols provided under Attachment 5 (A.4): In-water Line Precaution Protocol found in the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.
- **MOON POOL MONITORING PROTOCOL:** The applicant will follow the protocols provided under Attachment 6 (A.5): Moon Pool Monitoring Protocol found in the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.
- **VESSEL TRANSIT WITHIN THE RICE'S WHALE AREA AS IDENTIFIED IN THE 2020 BIOLOGICAL OPINION'S REASONABLE AND PRUDENT ALTERNATIVE (2020 RWA):** The applicant will follow the protocols provided under Attachment 4 (A.6): Vessel Transit within the Rice's Whale Area as identified in the 2020 Biological Opinion's Reasonable and Prudent Alternative (2020 RWA) found in

[8] The NMFS 2025 BiOp has been challenged in two U.S. District Courts, the Western District of Louisiana and the District of Maryland. In *Louisiana v. NMFS*, the Western District of Louisiana remanded the 2025 NMFS BiOp without vacatur, meaning that the BiOp remains in effect while NMFS addresses deficiencies identified by the court with the jeopardy finding and reasonable and prudent alternative for Rice's whale and two reasonable and prudent measures related to quieting technology and marine debris. The marine debris protocol identified herein is part of BOEM's proposed action as part of the NMFS consultation and resulting BiOp, and thus not impacted by the court's decision and remand. Briefing in *Sierra Club v. NMFS.* in the District of Maryland is continuing through at least April 2026.

the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.

- **SEA TURTLE RESUSCITATION GUIDELINES PROTOCOL:** The applicant will follow the protocols provided under Attachment 10 (A.7): Sea Turtle Resuscitation Guidelines Protocol found in the Biological Opinion issued by the National Marine Fisheries Service on May 20, 2025. The protocols can be accessed on NOAA Fisheries internet website at https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.

2.3 Summary and Comparison of the Alternatives

If selected, Alternative 1, No Action Alternative, would result in the DOCD being denied and BP not conducting the proposed development activities. Alternative 1 would not result in any immediate activity-specific impacts to the human environment, and the lessee may not develop or continue to develop the oil and gas resources of its lease, unless a new DOCD is submitted and can be approved. Alternative 1 does not meet the underlying purpose and need as defined in **Chapter 1.2** because the potential oil and gas resources at this site would not be developed and produced.

Alternative 2 would result in BOEM approving the DOCD and the lessee/designated operator being authorized to conduct proposed activities. Alternative 2 is BOEM's preferred alternative as it meets the purpose of OCSLA, allows the lessee to continue to develop its lease and achieve its development and production objectives, and incorporates mitigation and monitoring requirements (as components of project design) to minimize or negate potential environmental impacts. **Table 2-1** provides an overall summary of impacts to resources.

Table 2-1. Summary of Alternatives and Potential Impacts to Resources

Resource	Alternative 1: No Action	Alternative 2: Proposed Action
Marine Mammals	None	Negligible to Moderate
Sea Turtles	None	Negligible to Minor
Air Quality	None	Negligible to Minor
Archaeology*	None	Negligible
Benthic Communities*	None	Negligible
Birds*	None	Negligible
Fish and EFH*	None	Negligible
Human/Socioeconomic Resources*	None	Negligible

Resource	Alternative 1: No Action	Alternative 2: Proposed Action
Other Marine Uses*	None	Negligible
Water Quality*	None	Negligible

None – The action has no effects on the resource.
Negligible - Impacts may or may not cause observable changes to natural conditions; does not reduce the integrity of the resource.
Minor - Impacts cause observable and short-term changes to natural conditions but does not reduce the integrity of the resource.
Moderate - Impacts cause observable and short-term changes to natural conditions and/or reduces the integrity of the resource.
Major - Impacts cause observable and long-term changes to natural conditions and reduces the integrity of the resource.
NOTE: The descriptions above are a general summary/definition of the overall impacts. Refer to each specific resource in Chapter 3 for a more detailed impact-level definition.
* Denotes resources eliminated from detailed analysis

Based on this site-specific analysis, BOEM's other environmental reviews under OCSLA and NEPA, and adherence to all required mitigation measures and regulatory guidance incorporated into the Proposed Action, no additional alternatives were carried forward for detailed analysis.

Section 2.1 of the DOCD provides information on the filing or approval status of the individual and/or site-specific Federal, State and local application approvals or permits that must be obtained prior to conducting the proposed activities. BOEM has a well-established suite of commonly applied mitigation measures (see Chapters 5 and 6 of the Oil and Gas SID) that can be applied to any of the required subsequent BOEM/BSEE permits or approvals to ensure compliance with BOEM and BSEE's regulations and other Federal laws. BOEM is also able to revise applicable mitigations as needed to adaptively manage mitigation compliance and effectiveness at each approval or permitting stage. Therefore, this SEA evaluated two alternatives: (1) No Action and (2) Proposed Action. Appendix C provides reasoning for why BOEM determined additional alternatives to address the following topics of concern raised by the public were not warranted:

- Rice's Whale (see responses to BOEM-2025-0022-0004 and BOEM-2025-0022-0030)
- Deepwater and high-pressure/high-temperature (HP/HT) drilling (see responses to BOEM-2025-0022-0002, BOEM-2025-0022-0004, and BOEM-2025-0022-0051)
- Environmental justice concerns including community benefit agreements (see responses to BOEM-2025-0022-0013 and BOEM-2025-0022-0014)

3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

3.1 INTRODUCTION

The discussion below will briefly describe/summarize the pertinent affected resources, discuss the site-specific review that was conducted, and provide the analysis of the proposed activities' potential impacts to the human environment. The description of the affected environment and impact analysis are presented together in this chapter for each resource. For the impact analysis, resource-specific significance criteria were developed for each resource category.

A detailed description of resources on the OCS, along with a detailed impact analysis of the routine and accidental impacts of the proposed activities on these resources, can be found in Chapter 4 of the 2025 GOA PEIS, from which this SEA tiers. Additional supporting analyses and descriptions are included in the BEBR, Oil and Gas SID, and Gulf of Mexico Catastrophic Spill Event Analysis, which are incorporated by reference for all resources discussed below. Throughout this SEA, where information is incomplete or unavailable and cannot be obtained within a reasonable cost or timeframe, or the means to obtain it are unknown, BOEM makes clear that such information is lacking and where possible, makes use of reliable existing data and resources in its place. BOEM has determined that it can make an informed decision at this time with the information currently available. BOEM's subject-matter experts have applied scientifically credible information using accepted theoretical approaches and research methods, such as information on related or surrogate species, where appropriate.

3.1.1 Potentially Affected Resources

Preliminary screening for this assessment was based on a review of the relevant literature, previous SEAs, 2025 GOA PEIS, and statistics/data pertinent to historic and projected activities. For this SEA, BOEM evaluated the site-specific impacts that may result from the operator's proposed activities and identified the following potentially affected resources:

- marine mammals (including both ESA-listed and non-listed species);
- sea turtles (all are ESA-listed species); and
- air quality

3.1.2 Resources Not Affected or Negligibly Impacted

Based on the site-specific review and impact conclusions reached, the following resources are scoped out of this SEA on the basis that the Proposed Action would not have an impact on the resource because the resource is not present within the

proposed activity area and/or the proposed activities would have no impact/effect or no more than a negligible impact (**Table 3-1**).

Table 3-1. Resources Not Included for Further Analysis

Resource	Description	Reason For No In-Depth Analysis
Water Quality	BOEM requires projected waste and discharge information for specific proposed activities to be submitted in an exploration plan, as outlined by NTL 2008-G04. The U.S. Environmental Protection Agency (USEPA) Regions 4 and 6 regulate the discharge of routine operational waste streams generated from offshore oil- and gas-related activities. Section 403 of the Clean Water Act (CWA) requires that National Pollutant Discharge Elimination System (NPDES) permits be issued for discharges to the ocean in compliance with USEPA's regulations for preventing unreasonable degradation of the receiving waters. The NPDES permits specify effluent limitations and monitoring requirements for discharges associated with offshore oil and gas extraction activities. There are two general NPDES permits that cover the OCS. Permit GMG290000, issued by USEPA Region 6, covers the Western Planning Area (WPA) and CPA; Permit GEG460000, issued by USEPA Region 4, covers the Eastern Planning Area (EPA) and a small part of the CPA. BSEE has regulatory authority through 30 CFR § 250.300 to prevent and control water pollution. BSEE's Office of Environmental Compliance performs inspections to support the USEPA.	The proposed exploration activities are located on Keathley Canyon Blocks 292 and 293, which is located approximately 190 mi (306 km) from the nearest coastline off Terrebonne Parish, Louisiana. Keathley Canyon Block 292 is within USEPA Region 6 and falls under the requirements of NPDES Permit GMG290000. Discharges authorized under the NPDES permit would have no effect to negligible impact on the pH, temperature, dissolved oxygen content, salinity, oxidation-reduction potential, or turbidity of the water. Furthermore, any hydrocarbons present in discharges that meet the NPDES permit would be below concentrations that would produce physical or chemical changes to water quality. In addition to permitted discharges, unpermitted spills may occur. BOEM has previously estimated that most accidental spills will be less than 50 bbl in volume, based on historical spill rates and projected OCS activity. Potential impacts on resources from these small spills would be rendered negligible by natural processes such as weathering and dispersion that would degrade the spill products. Water quality can be degraded by trash and debris, but activities proposed will comply with Federal regulations and the requirements in the NMFS 2025 BiOp A.2 Marine Debris Protocol to reduce the potential for trash and marine debris from the proposed activities, which reduces the potential impacts to negligible.
Benthic Communities	Benthic fauna inhabit the seafloor throughout the OCS at all water depths. In shallow water (<984 ft [300 m]), naturally occurring geological or biogenic seafloor with measurable vertical relief serves as important habitat for a wide variety of sessile and mobile marine organisms. Corals in the region that are protected under the ESA include elkhorn coral, staghorn coral, boulder star coral, lobed star coral, and mountainous star coral. In deep water (>984 ft [300 m]), chemosynthetic communities form around natural hydrocarbon seepages. Deepwater coral communities can co-occur on hard substrates near hydrocarbon seeps with chemosynthetic organisms and routinely colonize other hard substrates.	Based on review of high-resolution geophysical survey and the BOEM 3D Seismic Anomaly database, no known or mapped benthic resources were identified within the proposed activity area; therefore, with existing regulatory requirements in place, the potential impact is negligible and no additional mitigation or monitoring measures are applied. Activities proposed will comply with Federal, State, and local regulations and NTLs to reduce the risk for potential for accidental events; therefore, potential impacts to benthic communities from accidental events are expected to be negligible.
Archaeological Resources	BOEM is required under 36 CFR § 800.4(b)(1) to make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. BOEM regulation 30 CFR § 550.194 requires an operator to submit an archaeological report based on high-resolution geophysical survey analyzing the potential for an undertaking to adversely affect archaeological resources. To mitigate adverse impacts to these resources, BOEM requires that the operator either avoid the features identified as possible archaeological resources in the operator's archaeological report or establish to the satisfaction of the Regional Director that an archaeological resource does not exist or will not be adversely affected by operations. Mitigation of adverse impacts to archaeological resources determined to be significant under 36 CFR § 60.4 within the identified Area of Potential Effect may be determined following consultation with the Advisory Council on Historic Preservation and appropriate State Historic Preservation Offices per 36 CFR § 800.6.[9] Under 30 CFR § 550.195, lessees are required to immediately halt seafloor disturbing operations within 1,000 feet of the resource and notify BOEM's Regional Director of the discovery of any potential archaeological resources within 72 hours.	Based on review of the archaeological survey and additional data, no potential archaeological resources were identified within the Proposed Action area. Therefore, with existing regulatory requirements in place, there are no anticipated effects and therefore, no additional mitigation or monitoring measures are applied.
Fish and Invertebrate Resources and Essential Fish Habitat	Fish and invertebrate resources refers to all estuarine and marine fish and invertebrates endemic to the region, with a particular emphasis on species of ecological and economical importance. EFH refers to all waters and substrate necessary for spawning, breeding, feeding, and growth to maturity for federally managed fisheries species on the OCS (16 U.S.C. §§ 1801 *et seq.*).	The proposed activities in Keathley Canyon Blocks 292 and 293 will not occur within delineated EFH and will not occur within specified distances of deepwater benthic communities that would trigger a project-specific EFH consultation (i.e., minimum separation distances described in NTL-2009-G40). Minimum distance requirements were cooperatively developed by BOEM and NMFS during past programmatic EFH consultations for bottom-disturbing activities occurring near sensitive benthic habitats. Overall, N-10256 is expected to have negligible population-level impacts to fish and invertebrate resources in the OCS, as well as EFH, due to the geographic location and localized, short-term nature of the proposed activities. Therefore, no site-specific avoidances or mitigations are needed or applied.

[9] The technical requirements of the archaeological resource survey and report are detailed in 30 CFR 550.194 and 195.

Resource	Description	Reason For No In-Depth Analysis
Marine and Coastal Birds	Several bird groups use the U.S. Gulf of America environment, because the area serves multiple habitat and life staging purposes. Birds from six distinct taxonomic and ecological groups are represented within the GOA region, including passerines (i.e., Passeriformes), raptors (i.e., Falconiformes, Accipitriformes), seabirds (i.e., Charadriiformes, Pelecaniformes, Procellariiformes, Gaviiformes, Podicipediformes), waterfowl (i.e., Anseriformes, Gaviiformes), shorebirds (i.e., Charadriiformes), and wading or marsh birds (i.e., Ciconiiformes, Gruiformes). Currently, nine federally listed protected bird species occur in the northern GOA: Cape Sable seaside sparrow; Mississippi sandhill crane; piping plover; rufa red knot; roseate tern; whooping crane; wood stork; eastern black rail; and black-capped petrel.	Overall, reasonably foreseeable impacts to birds from routine activities are not expected to be significant because the majority of activities would be well outside the range and pathways of most birds. Potential impacts from routine activities could include behavioral effects, exposure to or intake of OCS oil- and gas-related contaminants and discarded debris, sublethal chronic effects from air emissions, mortality and energetic costs associated with structure presence and associated lighting, disturbance-related impacts, and displacement of birds from habitats that are destroyed, altered, or fragmented, thus making these areas temporarily unavailable. Also, secondary impacts from pipeline and navigation canals to coastal habitats will occur over the long term and may temporarily displace birds to other habitats. The ESA-listed birds are part of the FWS ESA consultations (stated therein that no incidental takes of any listed species are anticipated under BOEM/BSEE proposed action) held in conjunction with or contemporaneously with the preparation of the 2025 GOA PEIS.
Human/ Socioeconomic Resources	The coastal zone of the OCS is not a physically, culturally, or economically homogenous unit. The counties and parishes along the Gulf Coast cover approximately 1,631 mi (2,625 km) and include multiple uses for recreational activities (beaches), deepwater ports, oil and gas support industries, manufacturing, farming, ranching, and hundreds of thousands of acres of wetlands and protected habitat. Offshore oil and gas activities affect onshore areas because of the various industries involved and because of the complex supply chains for these industries. Many of these impacts occur in counties and parishes along the coastal region. Employment stability in the oil and gas industry and its support sectors correlate directly with fluctuations in OCS oil- and gas-related activity levels, which are, in turn, closely related to the changes in oil and gas commodity prices.	The potential impacts resulting from the industry's routine activities occur within the larger socioeconomic context of the region. Given the existing, extensive, and widespread support system for the OCS oil- and gas-related industry and its associated labor force, the impacts of routine activities related to a single lease sale are expected to be negligible, widely distributed, and to have little impact. Routine activities related to this Proposed Action 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. No new or expansion of existing shore bases or onshore support infrastructure and facilities is planned as part of the Proposed Action; therefore, potential impacts would be negligible.
Other Marine Uses	The region is very active with multiple existing users and designated uses, including oil and gas activities, fishing (commercial or recreational), shipping, military, significant sand resource areas (SSRA) blocks, and artificial reefs. Future activities may include renewable energy development, aquaculture, and other alternative uses.	The Proposed Action would have negligible to no impacts on other marine uses, and no additional mitigation or monitoring measures are applied.

3.2 MARINE MAMMALS

3.2.1 Affected Environment

Twenty-one species of cetaceans (baleen and toothed whales) and one species of Sirenia (i.e., manatee) regularly occur in the GOA region and are identified in the NMFS Marine Mammal Stock Assessment Reports (Hayes et al. 2024). A description of marine mammals can be found in Chapter 4.8 of the 2025 GOA PEIS, from which this SEA tiers, with additional information in Chapter 3.7 of the BEBR and Section 6 of the NMFS 2025 BiOp, which are incorporated by reference.

The Proposed Action is located in Keathley Canyon Blocks 292, 293, 336, and 337, 190 mi (306 km) from the shore in water depths of 5,561- 6,085 ft (1,695 – 1,855 m).

Threatened or Endangered Marine Mammal Species

Two cetacean species, the sperm whale (*Physeter macrocephalus*) and the Rice's whale (*Balaenoptera ricei*), regularly occur in the GOA region and are listed as endangered under the ESA. The Florida manatee (*Trichechus manatus latirostris*), a subspecies of the West Indian manatee (*Trichechus manatus*), has been documented all along the GOA in nearshore waters, typically less than 4 m (13 ft) deep and within 1,000 m (328 ft) of the shore (Slone et al. 2022). West Indian manatees are currently listed as threatened; the Florida manatee subspecies is proposed to be listed as threatened, and the Antillean manatee (*Trichechus manatus manatus*) subspecies as endangered, which would replace the listing of the West Indian manatee (90 FR 3131). Florida manatee critical habitat is currently designated in Florida (42 FR 47840), and critical habitat revisions are proposed (89 FR 78134). The sperm whale was listed as endangered throughout its range on December 2, 1970. The GOM Bryde's (now Rice's) whale was listed as endangered on May 15, 2019 (84 FR 15446). The Rice's whale critical habitat is currently proposed by NMFS in the northern GOA from the 100 to 400 m (328 to 1,312 ft) isobath (88 FR 47453).

The only resident baleen whale in the northern GOA is the Rice's whale. The majority of Rice's whale detections are limited to the northeastern GOA along the continental shelf between roughly 100 and 400 m (328 to 1,312 ft) depths (Garrison et al. 2024; NOAA Fisheries 2026; Rosel et al. 2021), though they have been detected less frequently in the central, western, and southern GOA (NOAA Fisheries 2024; 2026; Rappucci et al. 2023; Soldevilla et al. 2022; Soldevilla et al. 2024). Predicted densities and occurrence of Rice's whales remain highest in their northeastern Gulf habitat (Farmer et al. 2022; Garrison et al. 2024). Sperm whales in the GOA are not evenly distributed, showing greater densities in areas associated with oceanic features that provide the best foraging opportunities (Garrison et al. 2018).

Non-ESA-Listed Marine Mammal Species

Nineteen toothed cetaceans (including beaked whales and dolphins) regularly occur in the GOA region that are not ESA-listed (Hayes et al. 2024). Despite being non-listed, the Marine Mammal Protection Act of 1972 (MMPA) protects all marine mammals regardless of ESA status.

Unusual Mortality Event (UME)

Under the MMPA, an UME is defined as "a stranding that is unexpected; involves a significant die-off of any marine mammal population; and demands immediate response." There are currently no active UMEs in the GOA region. A list of active and closed UMEs with updated information can be found at the following website: https://www.fisheries.noaa.gov/national/marine-life-distress/active-and-closed-unusual-mortality-events.

3.2.2 Impact Analysis

The IPFs with the proposed activities in the project area (Keathley Canyon Block 292, 293, 336, and 337) that could affect marine mammals include (1) noise (drilling and/or production and vessel/aircraft noise), (2) vessel strike, (3) entanglement and entrapment, (4) marine trash and debris, (5) oil/chemical spills, and (6) oil spill response. For this SEA, impacts were evaluated and assigned levels of environmental impact caused by IPFs as listed below. **Table 3-2** provides a summary of the impact analysis for marine mammals.

- **None** – The action has no effect.
- **Negligible** – An individual or group of animals would be subject to nominal to slight measurable impacts. No mortality or injury to any individual would occur, and no disruption of behavioral patterns would be expected. The disturbance would last only as long as the human-caused stimulus was perceptible to the individual or group.
- **Minor** – An individual or group of animals would be subject to a human-caused stimulus and would be disturbed, resulting in an acute behavioral change. No mortality or injury to an individual or group would occur.
- **Moderate** – An individual or group of animals would be subject to a human-caused stimulus and would be disturbed, resulting in a chronic behavioral change. Individuals may be impacted but at levels that do not affect the fitness of the population. Some impacts to individual animals may be irreversible.

- **Major** – An individual or group of animals would be subject to a human-caused stimulus, resulting in physical injury or mortality, and would include sufficient numbers that the continued viability of the population is diminished, including annual rates of recruitment or survival. Impacts would also include permanent disruption of behavioral patterns that would affect a species or stock.

Table 3-2. Summary of Impact Levels to Marine Mammals

Activity Type	Impact-Producing Factor	Magnitude of Potential Impact Alternative 1	Magnitude of Potential Impact Alternative 2
Routine Activities	Noise	None	Negligible
Accidental Events	Vessel Strike	None	Negligible to Moderate
Accidental Events	Marine Trash and Debris	None	Negligible
Accidental Events	Oil/Chemical Spills	None	Negligible to Minor
Accidental Events	Response Activities	None	Negligible to Minor
Accidental Events	Entanglement and Entrapment	None	Negligible

3.2.2.1 Alternative 1

If selected, Alternative 1, No Action Alternative, would result in the operator not undertaking the proposed activities as described in the plan. Therefore, the direct or indirect activity-specific IPFs to marine mammals would not occur. Activities related to previously issued leases and permits (as well as those that may be issued in the future under a separate decision) related to OCS activities would not increase. The No Action Alternative would not contribute to the environmental impacts of overall OCS oil- and gas-related activity as described in the 2025 GOA PEIS, and routine and accidental impacts would still occur from other activities.

3.2.2.2 Alternative 2

If selected, Alternative 2, Proposed Action, would result in the operator undertaking the proposed activities as requested and conditioned in the plan. The operator will adhere to the applicable NMFS 2025 BiOp protocols: A.2 Marine Debris Protocol, A.3 Vessel Strike Avoidance and Injured and/or Dead Aquatic Protected Species Reporting Protocols, A.5 Moon Pool Monitoring Protocol, A.6 Vessel Transit within the Rice's Whale Area as identified in the 2020 Biological Opinion's Reasonable and Prudent Alternative (2020 RWA), and A.4 In-Water line Precautions Protocol (BP Exploration & Production Inc. 2025). Compliance with the regulations, protocols, and the NMFS 2025 BiOp are expected to negate or lessen the chance of moderate to major impacts on marine mammals under this alternative.

3.2.3 Routine Activities

Noise

Vessel noise from the Proposed Action would produce low levels of noise, generally in the 150 to 170 decibels (dB) re 1 µPa-m at frequencies below 1,000 Hz. Underwater radiated noise from vessels is transitory (i.e., temporarily ensonifying an area as the vessel passes through) and generally does not propagate at great distances from the vessel. The intensity of noise from service vessels is roughly related to ship size and speed; relative noise tends to increase with increasing size and speed (Erbe et al. 2019). A comprehensive review of the literature on marine mammals and vessel noise (Erbe et al. 2019; 2025) revealed that changes in behavior vary widely across species and are heavily dependent on context. Vessel noise could interfere with marine mammal communication either by masking important sounds from conspecifics (a member of the same species), masking sounds from predators, or it may trigger animals to alter their vocalizations (Tyack 2008). There is the possibility of short-term disruption of movement patterns and/or behavior caused by vessel noise. Therefore, considering its transitory nature, vessel noise associated with the Proposed Action is not expected to significantly affect marine mammals.

According to Southall et al. (2007; 2019; 2021), for behavioral responses to non-impulsive noise sources (e.g., drill noise), data indicate considerable variability in received levels associated with behavioral responses. Further, research suggests that the sensitivity of marine mammals to drilling noise varies between and within species and is likely context-dependent (Richardson et al. 1990). The source levels from drilling (154 dB and below, as cited by Greene, 1986 in Richardson et al. 1995) are below the acoustic thresholds for onset of auditory injury and temporary threshold shift (for non-impulsive sound sources) for marine mammals established by NMFS (NMFS 2024). While behavioral responses may result from offshore drilling, they are expected to be short-term and intermittent. Since drilling associated with the Proposed Action would be temporary and localized, and considering the wide range and movements of marine mammals in the GOA, marine mammals are not expected to be significantly affected by drilling noise.

Helicopter noises contain dominant tones (resulting from rotors) generally below 500 Hz (Richardson et al. 1995). Air traffic may elicit a startle response and interrupt marine mammals at the surface (depending on the activity of the animals; Richardson et al. 1995). Aircraft noise is generally short in duration and transient in nature, although it may ensonify large areas. Much of the noise from a passing aircraft is reflected and does not penetrate the air-water interface (Urick 1972). Since helicopter flights associated with the Proposed Action would be temporary and pass within seconds, and given the relevant guidelines and regulations, marine mammals are not expected to be adversely affected by routine helicopter traffic operating at prescribed required Federal Aviation Administration altitudes.

Marine mammals may exhibit some avoidance behaviors, but their behavioral or physiological responses (e.g., stress) to noise associated with the Proposed Action are unlikely to cause injury or have population-level impacts. Therefore, impacts to marine mammals from noise associated with the proposed activities are expected to be negligible.

3.2.4 Accidental Events

Vessel Strike

All marine mammals are vulnerable to accidental vessel strike; however, some marine mammal species may be more vulnerable than others, including primarily slow-moving species (e.g., manatees) or those that spend extended periods of time at the surface (e.g., Rice's whales), and deep-diving species (e.g., sperm whales) while on the surface (Vanderlaan and Taggart 2007). For example, Rice's whales may spend up to 88 percent of their time at night, and 70 percent of their time overall, within 15 m (39 ft.) of the ocean surface (Soldevilla et al. 2017), making them vulnerable to collisions with large vessels (Stevens et al. 2024).

Accidental vessel strike on a marine mammal can result in injury, mortality, or even no apparent effects depending on the circumstances (Laist et al. 2001; Pace 2011; Van Waerebeek et al. 2007; Vanderlaan and Taggart 2007). Several factors affect the risk and severity of vessel strike to marine mammals, including species type, speed, health, and behavior of the animal; and the path, speed, size, and number of vessels (Laist et al. 2001; Martin et al. 2016; Vanderlaan and Taggart 2007). Vessel speed and vessel size are of note when assessing strike risk; larger vessels at higher speeds pose the most risk for strike on marine mammals (Garrison et al. 2025; Stevens et al. 2024). Most severe and lethal whale injuries involve large ships (>80 m [262 ft]) at higher speeds: 89 percent of ship strike records show that vessels were moving >14 kn (16 mph); most strikes occurred over or near the continental shelf; and the whales were usually not seen beforehand or seen too late to be avoided (Laist et al. 2001; Van Waerebeek et al. 2007).

The operator has not proposed any vessel transits within the Rice's Whale Area defined by NMFS. Per the NMFS 2025 BiOp protocol A.6 Vessel Transit within the Rice's Whale Area as identified in the 2020 Biological Opinion's Reasonable and Prudent Alternative (2020 RWA), the operator is required to provide notification and concurrence to fulfill the reporting requirements to BOEM and BSEE prior to any vessel transit changes that propose entering the 2020 RWA. In addition, adherence to the NMFS 2025 BiOp protocol A.3 Vessel Strike Avoidance and Injured and/or Dead Aquatic Protected Species Reporting Protocols would prevent or substantially reduce marine mammal interactions with vessels by requiring separation distances, speed restrictions, and the use of onboard observers for monitoring during certain activities. NMFS also provides all boat operators with whale watching guidelines, which are

derived from the MMPA. These guidelines suggest safe navigational practices based on speed and distance limitations when encountering marine mammals. With these protocols in place, and considering the wide geographic range and movements of marine mammals in the GOA, impacts to marine mammals from vessel strike are expected to be negligible to moderate.[10]

Marine Trash and Debris

Entanglement in marine debris could lead to injury, infection, reduced mobility, increased susceptibility to predation, decreased feeding ability, fitness consequences, and mortality (e.g., drowning) (Gall and Thompson 2015; Senko et al. 2020). In addition, marine debris ingestion could lead to intestinal blockage, which can affect feeding ability and lead to injury or death (Gall and Thompson 2015; Senko et al. 2020). Operators are required to follow BSEE, USCG, and USEPA regulations pertaining to marine trash and debris prevention and handling. With adherence to these regulations and the NMFS 2025 BiOp A.2 Marine Debris Protocol, which is designed to prevent or minimize accidental marine debris, impacts to marine mammals from marine debris are expected to be negligible.

Oil/Chemical Spills

Historical trends in the GOA show that the frequency of oil spills has decreased substantially over the last two decades, and most spills are categorized as small (i.e., less than 1,000 bbl; ABS Consulting Inc. 2016; Anderson and LaBelle 1990; Anderson et al. 2012). Improvements in technology, industry practice, and regulations have contributed in part to decreased spill risk. Potential impacts of an oil spill depend on a variety of factors, such as spill magnitude, frequency, timing, location, and the meteorological and oceanographic conditions at the time (National Research Council 2003). Further, the impacts of an oil spill could depend on oil characteristics; time of year; response efforts (e.g., burning, dispersant); and types of habitats, as well as the behavior and physiology of the marine mammals themselves (Johnson and Ziccardi 2006; Sullivan et al. 2019; Ziccardi et al. 2015). Marine mammals could experience decreased health, reproductive fitness, and longevity, increased vulnerability to disease, and possibly mortality. The oil from a spill can adversely affect marine mammals by causing soft-tissue irritation, fouling of baleen plates, respiratory stress from the inhalation of toxic fumes, food reduction or contamination, direct ingestion of oil and/or tar, and temporary displacement from preferred habitats. There is evidence that some species of marine mammals can metabolize hydrocarbons (Engelhardt 1983; Lee and Anderson 2005). However, the extent to which species metabolize and eliminate hydrocarbons, and the specific gene biomarker pathways used are unclear (Ruberg et al. 2021). An oil spill may physiologically stress an animal (Geraci and St. Aubin 1980),

[10] In the unlikely (i.e., not reasonably foreseeable) event of a strike on an ESA-listed whale that results in mortality, the determination could be major.

making it more vulnerable to disease, parasitism, environmental contaminants, and predation. Because the potential occurrence of a spill and contact with species is low due to applicable regulatory requirements (refer to **Chapter 1.5**) in this plan submittal, and considering the wide geographic range and movement of marine mammals in the GOA, the effects on marine mammals from oil/chemical spills are expected to be negligible to minor.

Response Activities

When deemed necessary, the removal methods used during any spill would be determined by the USCG's Federal On-Scene Coordinator (FOSC) and representatives of the Regional Response Team (RRT) or National Response Team (NRT); therefore, accidental event response activities would be conducted on a case-by-case basis, as outlined in BP's approved regional OSRP and Appendix G of the DOCD. Response activities could cause increased human presence in the water after an oil spill (e.g., vessels) which could contribute to changes in behavior and/or distribution, thereby potentially stressing marine mammals further and perhaps making them more vulnerable to various physiological and toxic effects of spilled oil. Response vessels could increase the risk of vessel strike. Removing oil from the surface would reduce the risk of contact and render it less likely to adhere to skin, baleen plates, or other body surfaces (Neff 1990).

One assumption concerning the use of dispersants is that the chemical dispersion of oil would considerably reduce the impacts to marine mammals, primarily by reducing their exposure to petroleum hydrocarbons (French-McCay 2004; National Research Council 2005). The acute toxicity of most oil dispersant chemicals is low relative to the constituents and fractions of crude oil and refined products. Dispersants may be irritants to tissues and sensitive membranes (National Research Council 2005). Impacts through skimmers could be through capture and/or entrainment. In-situ burns could impact some marine mammals if they were in the burning oil; however, it is expected that animals would avoid the area once it is ignited. In both skimming and controlled burning activities, the use of trained observers is common. Based on BOEM's review of the applicable scientifically credible information available, the low potential for a spill to occur and contact a species due to applicable regulatory requirements (refer to **Chapter 1.5**), and considering the wide geographic range and movement of marine mammals in the GOA, the effects on marine mammals from response activities are expected to be negligible to minor.

Entanglement and Entrapment

Entanglement, such as from lines in the water, and entrapment can result in stress, injury, or death of marine mammals (Gall and Thompson 2015; Moore et al. 2009; Senko et al. 2020). Entangled marine mammals may drown or starve due to being restricted by gear, suffer physical trauma and systemic infections, and/or be hit by

vessels due to an inability to avoid them. Moon pools are too small to allow a marine mammal in the GOA to enter and are therefore highly unlikely to entrap them. The operator will adhere to the NMFS 2025 BiOp A.4 In-Water Line Precaution Protocol and the A.5 Moon Pool Monitoring Protocol which appreciably reduce the likelihood of marine mammals being entangled or entrapped in gear from the proposed activity (BP Exploration & Production Inc. 2025). With applicable required protocols per the NMFS 2025 BiOp, marine mammal entanglement in gear associated with the proposed activity is unlikely to occur since lines in the water would be taut as required to prevent looping and tangling. Thus, because the possibility of entanglement and entrapment is low and since the operator will adhere to the applicable NMFS 2025 BiOp Protocols, the effects on marine mammals are expected to be negligible.

Conclusion

Long-term or permanent displacement of marine mammals from preferred habitats and the destruction or adverse modification of any habitats are not expected to occur due to the scope, timing, and the short-term nature of the proposed development activities, and considering the wide-ranging movements and behaviors of marine mammals in the GOA. Furthermore, application of the NMFS 2025 BiOp protocols, in addition to other relevant regulations, would prevent or minimize potential effects to marine mammals from the above discussed IPFs. Based on the above analysis, BOEM finds that the potential effects from the Proposed Action are unlikely to rise to significant levels.

3.3 Sea Turtles

3.3.1 Affected Environment

Five sea turtle species, all federally listed as threatened or endangered, are known to inhabit the waters of the Gulf of America OCS: leatherback (*Dermochelys coriacea*); green (*Chelonia mydas*); hawksbill (*Eretmochelys imbricata*); Kemp's ridley (*Lepidochelys kempii*); and loggerhead (*Carettra caretta*). These species are all highly migratory, and individual animals will migrate into nearshore waters as well as other areas of the North Atlantic Ocean, GOA, and Caribbean Sea. The Northwest Atlantic Ocean Distinct Population Segment (DPS) of loggerhead turtle and the North Atlantic DPS of green turtle are ESA-listed as threatened. Hawksbill turtles, Kemp's ridley turtles, leatherback turtles, and breeding populations of green turtles in Florida are ESA-listed as endangered. Floating *Sargassum* patches are federally designated as critical habitat for the loggerhead turtle (79 FR 39856), and proposed for the green turtle (88 FR 46572). Garrison et al. (2020) found that spatial and seasonal variation in loggerheads in the northern GOA represents the shift in habitats and behavioral modes across seasons, with animals moving into deeper waters and spending progressively less time at the surface during cooler months. Further, Lamont and Hart (2023) found that time at the surface was greater for loggerhead, Kemp's ridley, and green turtles in

summer, though did not differ between BOEM's EPA and CPA, except for Kemp's ridleys, which spent more time at the surface in the WPA than the EPA. A description of sea turtles can be found in Chapter 4.9 of the 2025 GOA PEIS, from which this SEA tiers, and Chapter 3.6 of the BEBR, the FWS 2018 BiOp, and the NMFS 2025 BiOp, which are incorporated by reference.

The Proposed Action is located in Keathley Canyon Blocks 292, 293, 336, and 337, 190 mi (306 km) from the shore in water depths of 5,561– 6,085 ft (1,695 – 1,855 m).

3.3.2 Impact Analysis

Sea turtles are susceptible to many natural and human impacts, including impacts while on land, in the benthic environment, and in the pelagic environment due to their life history. The IPFs associated with the proposed activities in Keathley Canyon Blocks 292, 293, 336, and 337 that could affect sea turtles include (1) noise (drilling and/or production and vessel/aircraft noise), (2) vessel strike, (3) entanglement and entrapment, (4) marine trash and debris, (5) oil/chemical spills, and (6) oil-spill response. For this SEA, impacts were evaluated and assigned levels of environmental impact caused by IPFs as listed below. **Table 3-3** provides a summary of impact to sea turtles.

- **None** – The action has no effect.
- **Negligible** – An individual or group of animals would be subject to nominal to slight measurable impacts. No mortality or injury to any individual would occur, and no disruption of behavioral patterns would be expected. The disturbance would last only as long as the human-caused stimulus was perceptible to the individual or group.
- **Minor** – An individual or group of animals would be subject to a human-caused stimulus and would be disturbed, resulting in an acute behavioral change. No mortality or injury to an individual or group would occur.
- **Moderate** – An individual or group of animals would be subject to a human-caused stimulus and would be disturbed, resulting in a chronic behavioral change. Individuals may be impacted but at levels that do not affect the fitness of the population. Some impacts to individual animals may be irreversible.
- **Major** – An individual or group of animals would be subject to a human-caused stimulus, resulting in physical injury or mortality, and would include sufficient numbers that the continued viability of the population is diminished, including annual rates of recruitment or

survival. Impacts would also include permanent disruption of behavioral patterns that would affect a species or stock.

Table 3-3. Summary of Impact Levels to Sea Turtles

Activity Type	Impact-Producing Factor	Magnitude of Potential Impact Alternative 1	Magnitude of Potential Impact Alternative 2
Routine Activities	Noise	None	Negligible
Accidental Events	Vessel Strike	None	Negligible to Minor
Accidental Events	Marine Trash and Debris	None	Negligible
Accidental Events	Oil/Chemical Spills	None	Negligible to Minor
Accidental Events	Response Activities	None	Negligible to Minor
Accidental Events	Entanglement and Entrapment	None	Negligible

3.3.2.1 Alternative 1

If selected, Alternative 1, No Action Alternative, would result in the operator not undertaking the proposed activities as described in the plan. Therefore, direct or indirect activity-specific IPFs to sea turtles would not occur. Activities related to previously issued leases and permits (as well as those that may be issued in the future under a separate decision) related to the OCS activities would not increase. The No Action Alternative would not contribute to the environmental impacts of overall OCS oil- and gas-related activity as described in the 2025 GOA PEIS, but routine and accidental impacts would still occur from other activities.

3.3.2.2 Alternative 2

If selected, Alternative 2, Proposed Action, would result in the operator undertaking the proposed activities as requested and conditioned in the plan, and applicable regulations. The operator will adhere to the applicable NMFS 2025 BiOp protocols: A.2 Marine Debris Protocol, A.3 Vessel Strike Avoidance and Injured and/or Dead Aquatic Protected Species Reporting Protocols, A.5 Moon Pool Monitoring Protocol, A.7 Sea Turtle Resuscitation Guidelines Protocol, and A.4 In-water Line Precaution Protocol (BP Exploration & Production Inc. 2025). Compliance with the regulations, applicable protocols, and NMFS 2025 BiOp are expected to negate or lessen the chance of significant impacts on sea turtles under this alternative.

3.3.3 Routine Activities

Noise

The dominant source of noise from vessels is propeller operation, and the intensity of this noise is largely related to ship size and speed. Vessel noise from the

proposed activities would produce low levels of noise, generally in the 150 to 170 dB re 1 µPa-m at frequencies below 1,000 Hz. Underwater radiated noise from vessels is transitory and generally does not propagate at great distances from the vessel. Vessel noise may impact sea turtle behavior, leading to temporary startle responses, altered submergence patterns, masking of biologically relevant sounds, and physiological stress (National Science Foundation 2011; Samuel et al. 2005). Sea turtles may exhibit a startle reaction, such as diving or swimming away, and temporary stress responses by increasing submergence time, extending dive durations, or surfacing (Lenhardt 1994; O'Hara and Wilcox 1990; Samuel 2004; Samuel et al. 2005). Hazel et al. (2007) found that sea turtles typically respond behaviorally to vessels at a distance of approximately 33 ft. (10 m) or closer. Current evidence indicates that sea turtles respond to vessel noise at very close ranges, making population-level impacts unlikely. While behavioral responses do occur, attributing them specifically to noise rather than visual or other cues remains challenging. Vessel noise generated by the Proposed Action would be localized and short-term. The most likely effects of vessel noise on sea turtles could include short-term behavioral changes and auditory masking.

There is very little information on the impacts of drilling and production noise on sea turtles. However, sea turtle hearing sensitivity is within the frequency range (100-1,000 Hz) of sound produced by low-frequency sources such as marine drilling (Popper et al. 2014). It is unlikely that sounds from drilling would reach injury thresholds, unless the sea turtle is within very close proximity to the drilling activity (Finneran et al. 2017; McCauley et al. 2000; Piniak et al. 2012), but it may cause temporary avoidance or displacement of sea turtles.

The dominant tones for aircraft noise, both airborne and underwater, are generally below 500 Hz (Richardson et al. 1995) and are within the auditory range of all sea turtles. Given the frequency range and sound levels produced, when aircraft travel at relatively low altitude, aircraft noise has the potential to elicit stress or behavioral responses in turtles (e.g., diving or swimming away or altered dive patterns) (BOEM 2016; National Science Foundation 2011). Sea turtle sensitivity to airborne noise is not well understood, and existing studies have yielded mixed results. Noise from helicopter overflights may elicit a startle response from sea turtles, and there is the possibility of short-term disruption of activity patterns and temporary sublethal stress (National Research Council 1990). Since helicopter noise would be temporary and pass within seconds, and given the relevant guidelines and regulations, sea turtles are not expected to be adversely affected by routine helicopter traffic operating at prescribed required Federal Aviation Administration altitudes.

Sea turtles may exhibit some short-term avoidance behaviors, but their behavioral or physiological responses (e.g., stress) to noise associated with the Proposed Action are unlikely to have population-level impacts. Therefore, impacts to

sea turtles from noise associated with the proposed activities are expected to be negligible.

3.3.4 Accidental Events

Vessel Strike

There is limited data available concerning potential sea turtle impacts from vessel strikes due to a lack of studies and/or the challenges with detecting such impacts (Nelms et al. 2016). Nonetheless, strikes from all types of vessels are known to result in sea turtle injury and mortality in the GOA (Lutcavage et al. 1997; Nelms et al. 2016; Work et al. 2010). Sea turtles are vulnerable to vessel strikes due to the time they spend at the surface. Recent studies show that the time spent at the surface for basking, feeding, orientation, and mating is approximately 11 percent for loggerheads (Garrison et al. 2020), approximately 19 percent for greens (Roberts et al. 2022), and between 11 and 23 percent for Kemp's ridleys (Garrison et al. 2020), depending on the season. Serious injury, and/or minor, non-lethal injury can occur from vessel strike on a sea turtle, with the associated effects varying based on the size and speed of the vessel. There have been no documented sea turtle collisions with OCS oil- and gas-related vessels in the GOA; however, collisions with small or submerged sea turtles may go undetected. The operator will adhere to the NMFS 2025 BiOp A.3 Vessel Strike Avoidance and Injured and/or Dead Aquatic Protected Species Reporting Protocols, which prevents or minimizes the potential for vessel strikes by requiring the use of a visual observer (e.g., captain), vessel speed restrictions, and separation distances. Thus, effects on sea turtles from vessel strike are expected to be negligible but might be minor for undetected sea turtles underwater (e.g., vessel displacing water inadvertently moving sea turtles in wake).

Marine Trash and Debris

Entanglement in marine debris could lead to injury, infection, reduced mobility, increased susceptibility to predation, decreased feeding ability, fitness consequences, and/or mortality (e.g., drowning) of sea turtles (Gall and Thompson 2015; Senko et al. 2020). Marine debris ingestion could lead to intestinal blockage, which can impact feeding ability and lead to injury or death (Senko et al. 2020). Marine debris found on beaches can block nesting attempts and impede hatchlings from reaching the sea, potentially increasing their susceptibility to predation (Senko et al. 2020). Operators are required to follow BSEE, USCG, and USEPA regulations pertaining to marine trash and debris prevention and handling. With adherence to these regulations and the NMFS 2025 BiOp A.2 Marine Debris Protocol, which appreciably reduces the likelihood of accidental marine debris from the proposed activity. Thus, effects on sea turtles from marine trash and debris are expected to be negligible.

Oil/Chemical Spills

Historical trends in the GOA show that the frequency of oil spills has decreased substantially over the last two decades, and most spills are categorized as small (i.e., less than 1,000 bbl; ABS Consulting Inc. 2016; Anderson and LaBelle 1990; Anderson et al. 2012). Improvements in technology, industry practice, and regulations have contributed in part to decreased spill risk. Potential impacts of an oil spill depend on a variety of factors, such as spill magnitude, frequency, timing, location, and the meteorological and oceanographic conditions at the time (National Research Council 2003). Studies have shown that direct exposure of sensitive tissues (e.g., eyes, nares, and other mucous membranes) and soft tissues to oil may produce irritation and inflammation, and can adhere to turtle skin or shells (Lutcavage et al. 1995; Overton et al. 1983; Van Vleet and Pauly 1987). Sea turtles surfacing within or near an oil spill would be expected to inhale petroleum vapors, potentially causing respiratory stress. Ingested oil, particularly the lighter fractions, can be acutely toxic to sea turtles. Sea turtle eggs, hatchlings, and small juveniles are particularly vulnerable if contacted with oil (Fritts and McGehee 1982; Lutz and Lutcavage 1989). Sea turtle eggs laid on sandy beaches would likely be lethally impacted by contact with spilled oil (NPS 2010). The effects of contact with spilled oil on sea turtles could include mortality; decreased health, reproductive fitness, and longevity; as well as increased vulnerability to disease and contamination of prey species. Based on BOEM's review of the applicable scientifically credible information, the low potential for an oil spill to occur and contact a species due to applicable regulatory requirements (refer to **Chapter 1.5**), and considering the wide-ranging movements of sea turtles in the GOA, the potential effects on sea turtles from oil/chemical spills are expected to be negligible to minor.

Response Activities

Response activities would be conducted on a case-by-case basis and only when deemed necessary. The removal methods used during any spill would be determined by the USCG's FOSC and representatives of the RRT or NRT. Spill response activities as outlined in Appendix G of the DOCD and in BP's approved regional OSRP could cause an increase in vessel traffic, and thus, an increased possibility for vessel strikes on sea turtles. Cleanup efforts in offshore waters may result in additional injury or mortality of sea turtles, particularly to neonates and juveniles. Due to the nature of the response activities, impacts could occur by a short-term behavioral change of sea turtles in the immediate affected area. Spill response impacts could include interrupted or deterred nesting behavior, crushed nests, entanglement in booms, and increased hatchling mortality due to predation from the increased time required to reach the water, assuming no outside intervention (Lutcavage et al. 1997). Increased human presence could influence turtle behavior and distribution, thereby stressing animals and making them more vulnerable to predators, the toxicological effects of oil, or other anthropogenic sources of mortality. Based on BOEM's review of the applicable scientifically credible information available, the low potential for an oil spill to contact

species due to applicable regulatory requirements (refer to **Chapter 1.5**), and considering the wide-ranging movements of sea turtles in the GOA, the potential effects on sea turtles from response activities are expected to be negligible to minor.

Entanglement and Entrapment

Entanglement, such as from lines in the water, and entrapment can result in stress, injury, or death of sea turtles (Gall and Thompson 2015; Senko et al. 2020). Sea turtles have become entrapped in dredge equipment (National Research Council 1990) and have the potential to become entrapped in any submerged structure that an individual is able to enter. Sea turtles can enter and surface within moon pools, potentially being entrapped. The operator will adhere to the NMFS 2025 BiOp A.4 In-Water Line Precaution Protocol (requiring lines in the water to be taut as required to prevent looping and tangling) and A.5 Moon Pool Monitoring Protocol, which appreciably reduce the likelihood of sea turtles being entangled or entrapped in gear from the proposed activity (BP Exploration & Production Inc. 2025). With applicable required protocols per the NMFS 2025 BiOp, sea turtle entanglement in gear associated with the proposed activity, in addition to sea turtle entrapment in moon pools (though typically remains open to water if used), is unlikely to occur. Thus, because the possibility of entanglement and entrapment is low and since the operator must adhere to applicable NMFS 2025 BiOp protocols, the effects on sea turtles are expected to be negligible.

Conclusion

Long-term or permanent displacement of sea turtles from preferred habitats and the destruction or adverse modification of any habitats are not expected to occur due to the scope, timing, and short-term nature of the proposed activities, and considering the wide-ranging movements and behaviors of sea turtles in the GOA. Furthermore, application of the NMFS 2025 BiOp protocols, in addition to other relevant regulations, are expected to prevent or minimize potential effects to sea turtles from the above discussed IPFs. Based on the above analysis, BOEM finds that the potential effects from the Proposed Action on sea turtles are unlikely to rise to a level of significance.

3.4 Air Quality

“Air Quality” refers to the degree to which the ambient air is free from pollution generated from various natural and anthropogenic air emission sources. The term “air emission” describes the gases and particles released by different sources, while “ambient air” is defined in 40 CFR 50.1(e) as the portion of the atmosphere outside of buildings that is accessible to the public. Air emissions associated with OCS oil- and gas-related activities on the OCS can influence ambient air pollutant levels in nearby coastal regions. For this analysis, these onshore areas include Texas, Louisiana,

Mississippi, Alabama, and Florida. This area includes Breton Wilderness Area where air quality and air quality-related values (AQRVs) are protected.

Air quality is evaluated through several pollution indicators. For criteria air pollutants, **Table 3-4** identifies the areas currently designated as nonattainment under the National Ambient Air Quality Standards (NAAQS). The term “maintenance” area refers to an area that now meets the NAAQS but is still under an approved maintenance lan to ensure continued compliance.

Table 3-4. Nonattainment and Maintenance Areas on the U.S. Gulf Coast

State	Area	8-hr O3 (1997)	8-hr O3 (2008)	SO2 (2010)	Lead (2008)
Alabama	Troy	–	–	–	NAA
Florida	Tampa	–	–	–	NAA
Florida	Hillsborough County	–	–	NAA	–
Florida	Nassau County	–	–	NAA	–
Louisiana	Baton Rouge	M	M	–	–
Louisiana	St. Bernard Parish	–	–	NAA	–
Texas	Beaumont-Port Arthur	M	–	–	–
Texas	Houston-Galveston-Brazoria	NAA	NAA	–	–
Texas	Frisco	–	–	–	NAA

M = maintenance area; NAA = nonattainment area; O3 = ozone; SO2 = sulfur dioxide; – = the area is in attainment of the NAAQS.
Source: USEPA (2021).

3.4.1 Affected Environment

The proposed activities would occur approximately 190 mi (307 km) from the nearest shoreline, with air emission related operations located within surface lease block KC 292 and 293. Air quality over Federal OCS waters is not classified under the NAAQS. In contrast, nearby coastal states contain areas classified as nonattainment or maintenance for one or more criteria air pollutants (**Table 3-4)**. All other onshore areas are in unclassifiable/attainment status. Sensitive areas, including the Breton Wilderness Area, may also be affected by transported emissions from the proposed activities.

Air quality conditions over the OCS are influenced by a wide range of emission sources. These include existing OCS oil and gas operations and associated support vessels; commercial marine traffic; and other anthropogenic and natural contributors identified in Chapter 4.1 of the 2025 GOA PEIS. Pollutants emitted onshore can also be recirculated offshore under sea-breeze conditions and subsequently transported back to the coast.

Emissions form the Proposed Action constitute only a small fraction of total OCS-wide emissions. For the facilities in KC 292 and 293, no prior DOCD plans have

been approved. As a result, emissions associated with the Proposed Action represent 100 percent of the facility-specific emissions.

3.4.2 Impact Analysis

The IPFs associated with the proposed activities in KC 292 and 293 that could impact the air quality include (1) air emissions emitted from routine activities (drilling and production related equipment, vessels, and flaring/venting), (2) air emissions emitted from accidental events such as oil/chemical spills, emergency flaring/venting, and response activities. An air quality analysis was conducted on the air emission estimates presented in the plan to assess potential impacts to the air quality. For this SEA, impacts were evaluated and assigned levels of environmental impact caused by IPFs as listed below.

- **None** – The action has no effect.
- **Negligible** – No measurable impact(s). Impacts would be indistinguishable from localized existing conditions.
- **Minor** – a measurable negative impact on air quality that is likely distinguishable from localized existing conditions.
- **Moderate** – a notable and measurable negative impact on air quality that is likely distinguishable from localized existing conditions.
- **Major** – a notable and measurable negative impact on air quality, locally, with chronic effects that would not fully recover even after remedial action is taken.

Table 3-5 lists the potential IPFs and associated impact levels for each alternative. Overall, routine and accidental impacts to air quality from the proposed activities are expected to be minor.

Table 3-5. Summary of Impact Levels for Air Quality

Activity Type	Impact-Producing Factor	Magnitude of Potential Impact Alternative 1	Magnitude of Potential Impact Alternative 2
Routine Activities (drilling, production, vessel support, and routine flaring and venting)	Air emissions and pollution	None	Minor
Accidental Events	Oil/Chemical Spills	None	Minor
Accidental Events	Response Activities	None	Minor
Accidental Events	Emergency Flaring and Venting	None	Minor

A more detailed discussion of the IPFs and types of impacts to air quality that could occur from the proposed activities is included in Chapter 4.1 of the 2025 GOA PEIS, from which this SEA tiers.

3.4.2.1 Alternative 1

If selected, Alternative 1, No Action Alternative, would result in not undertaking the proposed activities as described in the plan. Therefore, the site-specific IPFs to air quality would not occur. Activities related to previously issued leases and permits, as well as those that may be issued in the future under separate decisions related to OCS oil- and gas-related activities, would continue. Under the No Action Alternative, the environmental impacts described in the 2025 GOA PEIS for OCS oil- and gas-related activities would remain unchanged; however, any previously approved activities would continue, and routine, accidental, and previously authorized activities and associated impacts could still occur.

3.4.2.2 Alternative 2

If selected, Alternative 2, Proposed Action, would result in the operator undertaking the proposed activities. As described in the analyses below, the Proposed Action would have minor impacts on air quality. However, because the Houston-Galveston-Brazoria area is the nearest area listed in **Table 3-2** to the Proposed Action and is currently designated as nonattainment for ozone (O_3), even a small contribution in that area could have more of an impact.

3.4.3 Routine Activities

For pollutants that are minimally affected by or do not undergo chemical transformation, the strongest impacts occur closer to the location of the Proposed Action. In contrast, pollutants that do chemically transform like ozone (O_3) tend to produce stronger impacts farther from the Proposed Action and later in time. The calculated emission amounts for the proposed activities did not exceed any emission exemption amount per 30 CFR § 550.303(d), except for nitrogen oxides (NO_x). All other pollutants were below their applicable thresholds. The estimated peak yearly emissions are shown in **Table 3-6.** Further modeling was performed for NOx, the pollutant with the highest projected emissions, and found to be below the relevant thresholds.

Table 3-6. Estimated Peak Yearly Emissions in Tons per Year (tpy)

	TSP	PM10	PM2.5	SOx	NOx	VOC	Pb	CO	NH_3
Facility Amounts	447.39	271.09	263.16	10.55	11935.44	894.35	0.04	3178.26	3.02
Support Vessel Amounts	83.26	50.23	48.73	1.21	1994.90	57.36	0.01	312.89	0.58

BOEM considered the cumulative impact of many plan approvals in Chapter 4.1 of the 2025 GOA PEIS, from which this document tiers.

3.4.4 Accidental Events

Emergency Flaring and Venting

If an accidental or emergency flaring or venting of gas occurs, PM, NO_x, SO_x, CO, VOCs, and/or methane (CH_4) would be released to the atmosphere. These emissions can contribute to O_3 formation. Additionally, any flared and vented gas may contain H_2S that may convert to SO_2. In general, emergency flaring and venting events are infrequent and of short duration. The emissions (PM, NO_x, SO_x, VOCs, CH_4, CO, and SO_2) are more abundant near the site and would disperse as it travels.

Oil/Chemical Spills

If an oil spill occurs, VOCs from the surface oil slick would vaporize into the atmosphere. Increases in O_3 concentrations could occur because VOCs are precursors to O_3 formation. Additionally, if a fire occurs, PM and combustion product emissions would be emitted. In general, accidental oil spill and gas release events are infrequent and are usually contained within a few days. The emissions (VOCs, PM, and combustible emissions) are more likely to be abundant near the site of the release and will disperse with distance. Given the proposed project's distance from the nearest shoreline, most air quality impacts would occur in offshore waters with minimal chance to affect onshore air quality.

Response Activities

Response activities may include scheduled burnings or dispersants to minimize potentially significant degradation to air quality from the release itself; however, response activities can also impact air quality through air emissions from equipment, vessels, aircraft, burning of gas and oil, and the application of dispersants via aircraft. The appropriateness of in-situ burn application would be determined in coordination with the FOSC and affected SOSC as outlined in Section 19 of the approved regional OSRP. Likewise, any proposed dispersant use must first be approved by the Region 6 response team, which includes BSEE and USEPA. In most cases, dispersant use is not approved within 3 miles of shore. See Appendix G of the DOCD for a detailed discussion of topics like release modeling, response technologies, and source containment, which were factored into this analysis.

Conclusion

The potential impacts of the projected emissions to the coastal areas are below all applicable thresholds; therefore, they are expected to be minor. Overall, routine and accidental impacts to air quality from the proposed activities are expected to be minor.

4 CONSULTATION AND COORDINATION

Coastal Zone Management Act

Per 15 CFR part 930 subpart D (private activities that require a Federal permit or license) and subpart E (OCS plans), proposed activities must be "fully consistent" with enforceable policies of a State's coastal management program. Consistency concurrence has been received from the states of Louisiana, Texas, and Alabama.

Endangered Species Act

The ESA of 1973 (16 U.S.C. §§ 1531 *et seq.*), as amended, establishes a national policy designed to protect and conserve threatened and endangered species and the ecosystems upon which they depend. Section 7(a)(2) of the ESA requires each Federal agency to ensure that any action that it authorizes, funds, or carries out is not likely to jeopardize the continued existence of a listed species or result in the adverse modification of designated critical habitat.

BOEM and BSEE engaged in consultation under the ESA with NMFS and FWS. On May 20, 2025, the NMFS published their Biological and Conference Opinion on Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement's Oil and Gas Program Activities in the Gulf of America (NMFS 2025b) and associated Attachments and Appendices (NMFS 2025a), which contain protocols BOEM implements for ESA compliance, including several included as part of the Proposed Action for the consultation. In addition, any future BiOp amendments or COAs will be binding on subsequent post-lease actions. The NMFS 2025 BiOp and supporting documents can be found online at https://www.fisheries.noaa.gov/resource/document/biological-and-conference-opinion-bureau-ocean-energy-management-and-bureau. The NMFS 2025 BiOp Attachments and Appendices can be found online at: https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion.

Based on BOEM's internal step-down review on February 24, 2026, this plan does not require a step-down review by NMFS. BOEM concludes the action or activity may affect listed species or critical habitat, but it is an action or activity whose effects have been analyzed and addressed programmatically in the NMFS 2025 BiOp.

On April 20, 2018, the U.S. Fish and Wildlife Service (FWS) issued a 10-year BiOp for BOEM and BSEE activities with no terms and conditions, and any future consultations may be informal, dependent upon the likelihood of take of ESA-listed species under that Service's jurisdiction (FWS 2018). On March 6, 2024, BOEM and BSEE requested reinitiation of consultation with FWS regarding updated oil-spill risk analyses, new listings, and general species information. FWS requested additional information from BOEM and BSEE in a letter dated December 20, 2024; the Bureaus

responded on February 5, 2025. On March 28, 2025, the FWS sent BOEM a letter with its evaluation of the new information and data, and its determination that nothing considered during the reinitiated consultation changed the conclusions of the FWS 2018 BiOp and that no further ESA consultation with the Service for the Proposed Action is necessary (FWS 2025). The FWS 2018 BiOp remains in effect and any future BiOp amendments or associated COAs will be binding on subsequent post-lease actions.

Marine Mammal Protection Act

BOEM petitioned NMFS for rulemaking under the MMPA (16 U.S.C. §§ 1361 et seq.) relating to G&G surveys on the OCS in the Gulf. On January 19, 2021, NMFS published in the *Federal Register* a final Incidental Take Regulation (ITR), which became effective on April 19, 2021 (86 FR 5322). A draft revision to this regulation that corrects some calculation errors and therefore, adjusts taking allowable under the regulations was published on January 5, 2023 (88 FR 916). On April 24, 2024, NMFS published in the *Federal Register* its final rule, "Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to Geophysical Surveys in the Gulf of Mexico" and the rule is effective from May 24, 2024, through April 19, 2026 (89 FR 31488). There are no changes to the specified activities or the specified geographical region in which those activities would be conducted, nor to the original 5-year period of effectiveness. A new request for MMPA authorization was prepared and submitted by industry on March 24, 2025. On September 3, 2025, NMFS' Office of Protected Resources received a request from the NMFS Office of Policy for the reimplementation of ITRs governing the incidental taking of marine mammals during G&G survey activity conducted in the GOA (90 FR 42569). The proposed rule for reimplementing the ITRs was published on February 24, 2026 (91 Fed. Reg. 9014).

Magnuson-Stevens Fishery Conservation and Management Act

Pursuant to Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act, Federal agencies are required to consult with NMFS on any action that may result in adverse effects to EFH. The NMFS published the final rule implementing the EFH provisions of the Magnuson-Stevens Fisheries Conservation and Management Act (50 CFR part 600) on January 17, 2002. Certain OCS oil- and gas-related activities authorized by BOEM may result in adverse effects to EFH and therefore require EFH consultation. BOEM, BSEE, and NMFS conducted a programmatic EFH consultation for OCS oil- and gas-related activities in the GOA in 2022. This consultation covers reasonably foreseeable oil- and gas-related activities on the GOA OCS, including proposed lease sales and activities related to exploration, development, production, and decommissioning, including, but not limited to, geological and geophysical activities, drilling, construction, support, removal, and site clearance operations. The oil and gas EFH consultation can be found at: https://www.boem.gov/regions/gulf-america-ocs-region/oil-and-gas-efh-consultations

(BOEM 2022). BOEM has determined that the Proposed Action is covered under this existing programmatic consultation.

National Historic Preservation Act

In accordance with the NHPA (54 U.S.C. §§ 300101 *et seq*.), Federal agencies are required to consider the effects of their undertakings on historic properties. The implementing regulations for Section 106 of the NHPA, issued by the Advisory Council on Historic Preservation (36 CFR part 800), specify the required review process. In accordance with 36 CFR § 800.8(c), BOEM uses the NEPA substitution process and documentation to comply with Section 106 of the NHPA. Because of the extensive geographic area analyzed in the 2025 GOA PEIS, BOEM defers identification of historic properties and completion of the Section 106 review process until site-specific analysis of postlease activities can be completed prior to approving those activities. Due to the site-specific analysis described in this SEA and additional mitigation measures, if applicable, BOEM has determined that no significant impacts to historic properties are likely to occur as a result of the Proposed Action.

Clean Air Act

The CAA Amendments of 1977 designated 156 Class I Areas, consisting of national parks and wilderness areas that are offered special protection for air quality and the AQRVs. The Breton Wilderness Area in Louisiana is a Class I Area. The Class I Areas, compared to the Class II Areas, have lower Prevention of Significant Deterioration (PSD) air quality increments that new sources may not exceed and are protected against excessive increases in several AQRVs, including visibility impairment, acid (sulfur and nitrogen) deposition, and nitrogen eutrophication. The Regional Haze Rule (40 CFR § 51.308) has a goal of natural visibility conditions by 2064 at Class I Areas, and States must submit Regional Haze Rule State Implementation Plans that demonstrate progress towards that goal.

Because the proposed activities are located 281 mi (452 km) from the Breton Wilderness Area, coordination with the FWS was not deemed necessary for this Proposed Action.

Clean Water Act

The USEPA (Regions 4 and 6) regulates the discharge of routine operational waste streams generated from offshore oil- and gas-related activities. Section 403 of the CWA requires that NPDES permits be issued for discharges to State territorial waters, the contiguous zone, and the ocean in compliance with the USEPA's regulations for preventing unreasonable degradation of the receiving waters. There are two general NPDES permits that cover the oil- and gas- related discharges on the OCS. Permit

GMG290000, issued by USEPA Region 6, covers the WPA and CPA; Permit GEG460000, issued by USEPA Region 4, covers the EPA and a small part of the CPA.

The final NPDES General Permit No. GMG290000 for New and Existing Sources and New Dischargers in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category for the Western and Central Portion of the Outer Continental Shelf of the Gulf of Mexico was reissued by USEPA Region 6 on May 11, 2023, with an effective date of May 11, 2023, and an expiration date of May 10, 2028 (USEPA 2023).

Government-to-Government Tribal Consultation

In accordance with Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments," Federal agencies are required to establish regular and meaningful consultation and collaboration with Tribal officials in the development of Federal policies that have Tribal implications to strengthen the United States' government-to-government relationships with Indian Tribes and to reduce the imposition of unfunded mandates upon Indian Tribes.

On October 2, 2023, BOEM sent a formal letter to federally recognized tribes notifying them of the development of a new Programmatic EIS. That letter was addressed to each of the Gulf Coast State-affiliated tribes, including the Absentee Shawnee Tribe of Indians, Alabama-Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Apache Tribe of Oklahoma, Caddo Nation of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Chitimacha Tribe of Louisiana, Choctaw Nation of Oklahoma, Comanche Nation of Oklahoma, Coushatta Tribe of Louisiana, Eastern Shawnee Tribe of Oklahoma, Jena Band of Choctaw Indians, Kiowa Indian Tribe of Oklahoma, Mescalero Apache Tribe, Miccosukee Tribe of Indians of Florida, Mississippi Band of Choctaw Indians, Muscogee (Creek) Nation, Poarch Band of Creek Indians, Seminole Tribe of Florida, Seminole Nation of Oklahoma, Shawnee Tribe, Southern Ute Indian Tribe, Thlopthlocco Tribal Town, Tonkawa Tribe, and the Tunica-Biloxi Tribe of Louisiana. See Appendix H of the 2025 GOA PEIS for an example of the letter that was sent to the tribes.

No tribes have requested formal government-to-government consultation on these activities; however, a few tribal representatives have requested to be notified if any pre-contact archaeological resources are identified and/or adversely impacted by BOEM-permitted activities. To date, no such discoveries or adverse impacts have occurred. Were they to occur during activities associated with the proposed plan, BOEM will notify and invite consultations with the above tribes as requested.

Greenhouse Gas Analysis

BOEM updated its analysis of life cycle GHG emissions for a single representative GOA oil and gas lease sale with the publication of the 2025 GOA PEIS.

The full analysis includes a newly developed quantitative estimate of a lease sale's impact on foreign oil production and the related upstream GHG emissions, and can be found in Appendix K of the 2025 GOA PEIS. It also estimates emissions from use of energy substitutes in the absence of leasing. BOEM's analysis of GHG life cycle emissions resulting from a lease sale (Appendix K of the 2025 GOA PEIS and summarized in Chapter 4.0.2.1) indicates that domestic life cycle emissions from OCS oil and natural gas (including upstream, midstream, and downstream) are similar to those resulting from displaced energy substitutes given that OCS production would replace large portions of domestic energy market substitutes. However, when considering the impact of changes in foreign oil production and consumption, global emissions increase in each activity level.

BOEM acknowledges that the models used in those analyses were developed for programmatic analyses and that there may be limitations on the scalability of the models from that analysis to the site-specific review here. The programmatic analysis depends on a global price change, and individual site-specific decisions may not cause large enough changes in production to generate a market response for substitute energy sources. The site-specific analysis represents a small subset of the activities analyzed in the 2025 GOA PEIS greenhouse gas analysis. BOEM has reviewed that analysis and determined that it provides the best available information and that the reasonably foreseeable impacts of the activities proposed in Initial DOCD N-10256 are not likely to result in significant impacts beyond a subset of those analyzed in the 2025 GOA PEIS greenhouse gas analysis.

U.S. Government Accountability Office

In February 2016, the U.S. Government Accountability Office (GAO) prepared a report entitled "Oil and Gas Management: Interior's Bureau of Safety and Environmental Enforcement Restructuring Has Not Addressed Long-Standing Oversight Deficiencies" (GAO 2016). This report examined the extent to which BSEE's restructuring at the time had an effect on its capabilities for (1) investigations, (2) environmental compliance, and (3) enforcement. The GAO reviewed laws, regulations, and policies related to BSEE's restructuring and oversight activities. In the report, the GAO had nine recommendations, including that BSEE (1) complete and update its investigative policies and procedures, (2) conduct and document a risk analysis of the regional-based reporting structure, and (3) develop procedures for enforcement actions. BSEE began addressing the recommendations in 2016 and according to GAO, as of 2021, all recommendations related to BSEE's restructuring and offshore oil and gas oversight have been closed and implemented (GAO 2021). The GAO removed the segment from its High Risk Series in 2021. After independently reviewing the GAO reports and the updates on the GAO website closing out the recommendations on oversight and restructuring, BOEM has determined that the GAO report and the recommendations that have now been implemented by BSEE do not change the reasonably foreseeable environmental

impacts that may result from an oil and gas lease sale and that were evaluated in the 2025 GOA PEIS, from which this SEA tiers.

In March 2021, the GAO published a report, “Offshore Oil and Gas: Updated Regulations Needed to Improve Pipeline Oversight and Decommissioning” (GAO 2021) that determined BSEE’s pipeline regulations were outdated. In response, DOI continues to strengthen oversight and currently working towards the implementation of updated regulations.

The GAO, in its January 2024 report “Interior Needs to Improve Decommissioning Enforcement and Mitigate Related Risks” (GAO 2024) noted that delayed decommissioning increases environmental, safety, and financial risks. The GAO made four recommendations to DOI to strengthen BSEE and BOEM's decommissioning oversight and enforcement: (1) strengthen BSEE's approach to proactively overseeing and enforcing decommissioning deadlines; (2) complete planned actions to identify, propose, finalize, and fully implement changes to decommissioning regulations and guidance; (3) complete planned actions to further develop, finalize, and fully implement changes to financial assurance regulations and procedures that reduce financial risks; and (4) complete planned actions to assess and revise qualification procedures to address decommissioning capacity and compliance history. The DOI is currently working towards implementing the GAO report recommendations.

Appendix C of the 2025 GOA PEIS acknowledges the findings and recommendations of the 2021 and 2024 GAO reports, which have been factored into the impact analysis in the 2025 GOA PEIS. BOEM has determined the GAO reports or implementation of their recommendations does not affect BOEM’s conclusions regarding reasonably foreseeable impacts from the proposed activities (i.e., will not result in significant impacts) as related to this site-specific review.

5 PUBLIC COMMENT

BP’s N-10256 DOCD was deemed submitted (as per 30 CFR § 550.231) on May 1, 2025, and was made publicly available for 60 days, which included a 10-day period on https://www.regulations.gov (Docket ID BOEM-2025-0022). On May 11, 2025, twenty submissions were received, which included detailed comments and additional related documentation (publications). An additional comment letter with signature endorsements and numerous individual comments was mailed to the BOEM Office of Leasing and Plans within the 60-day public review period. On September 12, 2025, BP submitted an amended DOCD to reflect the most recent NMFS Biological Opinion and ESA protocols. The updated DOCD was posted to BOEM’s website for an additional 60 days from January 12, 2026, to March 13, 2026. See Appendix C for a summary of the comments received on the DOCD and BOEM’s responses.

APPENDICES

A IMPACT-PRODUCING FACTOR DESCRIPTIONS

Descriptions of the impact-producing factors (IPFs) are provided below. The information provided below are summaries of the information included in the main text of this SEA. Additional detailed information can also be found in Appendix B of the 2025 GOA PEIS and Chapters 2 and 3 of the Oil and Gas SID.

Routine Activities

1. **Bottom disturbance** from well and anchor emplacement and drilling activities – Physical disturbance to the seabed, benthic habitats, and/or communities. Typically, wells drilled in shallow water (0-300 m [0-984 ft]) create a splay of drilling muds and cuttings that spread 250 m (820 ft) from the well, and the coverage area would be approximately 500 m (1,640 ft) from the well in deepwater (300 to 1,524 m [984 to 5,000 ft]) and ultra deepwater (greater than 1,524 m [5,000 ft]) water depths.
2. **Noise** from drilling activities and vessel and helicopter transportation – A subjective term reflective of societal values regarding what constitutes unwanted or undesirable intrusions of sound. Noise generated from these activities can be transmitted through both air and water, and may be of long or short duration, distance, and sound level. The intensity level and frequency of the noise emissions are highly variable, both between and among the various types of sound sources, along with the received sound levels to the resources. The primary sources of vessel noise are propeller cavitation, propeller singing, and rotating machinery; other sources include auxiliaries, flow noise from water dragging along the hull, and bubbles breaking in the wake (Richardson et al., 1995).[11] Drilling operations (these can include pile driving, generators, pumps, etc.) often produce noise that includes strong tonal components at low frequencies, including infrasonic frequencies in at least some cases.[12]
3. **Discharges and Wastes** from vessel operations and exploration activities – Releases into the environment resulting from multiple sources. The primary operational wastes and discharges generated during offshore oil and gas

[11] The intensity of noise from service vessels is roughly related to ship size, laden or not, and speed. Large ships tend to be noisier than small ones, and ships underway with a full load (or towing or pushing a load) produce more noise than empty vessels. For example, a 16-m (52-ft) crewboat may have a 90-hertz (Hz) tone with a source level of 156 dB re: 1µPa, and a small ship may have a broadband source level of 170-180 dB re: 1µPa (Richardson et al., 1995). Helicopter sounds contain dominant tones (resulting from rotors) generally below 500 Hz (Richardson et al., 1995).

[12] Dynamically positioned MODUs (drillships and semisubmersibles) are noisier than anchored MODUs (Richardson et al., 1995). Sound and vibration paths to the water are through either the air or the risers, in contrast to the direct paths through the hull of a drillship. Sound from drilling activities has been measured from the 20- to 1,000-Hz band levels at a range of 1.8 km (1.1 mi) at levels of 113-126 dB re: 1µPa.

exploration and development are drilling fluids, drill cuttings, various waters (e.g., bilge, ballast, fire, and cooling), deck drainage, sanitary wastes, and domestic wastes. During production activities, additional waste streams include produced water, produced sand, and well-treatment, workover, and completion fluids. Minor additional discharges occur from numerous sources. These discharges may include desalination unit discharges, blowout preventer fluids, boiler blowdown discharges, excess cement slurry, several fluids used in subsea production, and uncontaminated freshwater and saltwater.

4. **Offshore Habitat Modification/Space Use** – Wells, platforms, pipelines, subsea infrastructure, and other structures create obstructions to the recovery of marine minerals and other existing or future users (commercial and recreational fishing, aquaculture, renewable, artificial reefs, etc.) of the OCS. BOEM is required to consider the impact of the proposed activities on other users of the OCS. For marine minerals, no-dredging zones are 500 ft (152 m) from any structure and 1,000 ft (305 m) from a pipeline. The well and platforms would be permanent obstructions, even if removed to 15 ft (5 m) below the substrate, as dredging cannot be performed within 500 ft (152 m) due to the risk to the dredge and infrastructure. The pipeline obstruction could be temporary in that pipelines can be removed upon abandonment. All military activities on the OCS occur within military warning areas designated by the Federal Aviation Administration in coordination with the U.S. Department of Defense. Lessees and permittees conducting oil and gas operations within these warning areas are required to coordinate with the appropriate military command.
5. **Air Emissions and Pollution** from equipment and vessels – Emissions associated with drilling from OCS oil- and gas-related activities are attributed to gasoline, diesel, and natural gas fuel usage in engines such as propulsion engines, prime engines, mud pumps, draw works, and emergency power. Emissions associated with production from OCS oil- and gas-related activities are attributed to boilers, diesel engines, combustion flares, fugitives, glycol dehydrators, natural gas engines, turbines, pneumatic pumps, pressure/level controllers, storage tanks, cold vents, and others. Pollutants emitted during drilling activities include combustion gases (i.e., CO, NO_x, PM, SO_2, CO_2, CH_4, and N_2O), as well as non-combustion sources (i.e., VOCs, PM, and CH_4).[13]

[13] CO – carbon monoxide; NOx – nitrogen oxide; PM – particulate matter; SO2 – sulfur dioxide; CO2 – carbon dioxide; CH4 – methane; N2O – nitrous oxide; and VOC – volatile organic compound.

Accidental events

1. **Oil/Chemical Spills** (loss of well control and chemical/drilling fluid) **and Response Activities** – BSEE requires operators to report any spill greater than 1 barrel (bbl) (42 gallons [gal]) occurring on the OCS and maintains a database for all reported incidents.[14] All losses of well control are required to be reported to BSEE.

Loss of Well Control

The current definition for loss of well control is as follows:

- uncontrolled flow of formation or other fluids (the flow may be to an exposed formation [an underground blowout] or at the surface [a surface blowout]);
- uncontrolled flow through a diverter; and/or
- uncontrolled flow resulting from a failure of surface equipment or procedures.

Not all loss of well control events would result in a blowout as defined above, but they are most commonly thought of as releases to the human environment. A loss of well control can occur during any phase of development, i.e., exploratory drilling, development drilling, well completion, production, or workover operations. A loss of well control can occur when improperly balanced well pressure results in sudden, uncontrolled releases of fluids from a wellhead or wellbore (Neal Adams Firefighters Inc. 1991; PCCI Marine and Environmental Engineering 1999). For more information regarding losses of well control, refer to Chapter 2.9.1.4 of the Oil and Gas SID

The physical and chemical properties of oil greatly affect its transport and fate in the environment. Following a spill, the composition of the released oil can change substantially due to weathering processes such as evaporation, emulsification, dissolution, and oxidation. The ultimate fate of oil in the environment and its impacts are influenced not only by the magnitude, spatial extent, and duration of the event but also

[14] Not included in BSEE's data records are spills less than 1 bbl. Spills of any size and composition are required to be reported to the U.S. Coast Guard's (USCG) National Response Center and are further documented in the USCG's Marine Information for Safety and Law Enforcement (2001-present) database and its predecessors. Also not included in BSEE's database are spills that have occurred in Federal waters from OCS barging operations and from other service vessels that support the OCS oil and gas industry. These data are included in the USCG's record of all spills; however, the USCG's database does not include the source of oil (OCS versus non-OCS) or in the case of spills from vessels, the type of vessel operations; such information is needed to determine if a particular spill occurred as a result of OCS operations. Spills from vessels are provided for tankers in worldwide waters and tankers and barges in U.S. coastal and offshore waters.

by the response methods that may be employed. Horizontal transport of oil is accomplished through spreading, advection, dispersion, and entrainment. Vertical transport involves dispersion, entrainment, Langmuir circulation (a series of shallow, slow, counter-rotating vortices at the ocean's surface aligned with the wind developed when wind blows steadily over the sea surface), sinking, overwashing, partitioning, and sedimentation.

Chemical and Drilling Fluid Spills

Chemicals and synthetic-based drilling fluids are considered because they may be persistent (nondegradable) and are comparatively toxic. A study of chemical spills from OCS oil and gas activities determined that only two chemicals could potentially impact the marine environment – zinc bromide and ammonium chloride (Boehm et al. 2001). Other common chemicals spilled include methanol and ethylene glycol, which are used in deepwater and ultra deepwater operations where gas hydrates tend to form due to cold temperatures. These alcohol-based chemicals are nonpersistent (degradable) and exhibit comparatively low toxicity.

1. **Air emissions** from emergency flaring/venting and/or oil spills – Activities that produce emissions include drilling operations, platform construction and emplacement, platform operations, flaring, fugitive emissions, evaporation of volatile organic compounds during transfers and spills, and support vessel emissions. Various onshore facility activities supporting offshore oil and gas operations, or receiving oil or gas from them, emit air pollutants. This includes emissions from helicopters, vessels, stationary engines (e.g., generators), and equipment leaks (i.e., fugitive emissions). The USEPA defined criteria pollutants released by OCS sources include CO, NO_2, PM_{10}, $PM_{2.5}$ and SO_2.
2. **Vessel Strike (Vessel to Marine Species or Habitat) and Collisions (Vessel to Vessel; Vessel to Structure)** – BOEM's data show that, from 2007 through 2019, there were 181 OCS oil- and gas-related vessel collisions (BSEE 2021). Most collision mishaps are the result of service vessels colliding with platforms or vessel collisions with pipeline risers. Fires resulted from hydrocarbon releases in several of the collision incidents. Diesel fuel is the product most frequently spilled, while oil, natural gas, corrosion inhibitor, hydraulic fluid, and lube oil have also been released as the result of a vessel collision. Approximately 10 percent of vessel collisions with platforms in the OCS caused diesel spills.

   Vessels could strike marine mammals, sea turtles, and other marine animals during transit. To limit or prevent such strikes, the National Marine Fisheries Service (NMFS) provides all boat operators with whale-watching guidelines, which is derived from the Marine Mammal Protection Act (MMPA). These guidelines suggest safe navigational practices based on speed and distance

limitations when encountering marine mammals. Requirements in the NMFS 2025 BiOp Vessel Strike Avoidance and Injured and/or Dead Aquatic Protected Species Reporting Protocols address vessel strike prevention.

3. **Marine Trash and Debris** – During construction or operation activities, equipment may be dropped to the seafloor. If this happens within the planned construction site, the bottom disturbance impacts are conservatively considered as part of the routine impacts; however, accidental drops may occur during transport. The discharge of marine debris by the offshore oil and gas industry and supporting activities is subject to a number of laws and treaties. These include the Marine Debris Research, Prevention, and Reduction Act; the Marine Plastic Pollution Research and Control Act; and the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex V Prevention of Pollution by Garbage from Ships. Regulation and enforcement of these laws is conducted by a number of agencies such as the U.S. Environmental Protection Agency (USEPA), National Oceanic and Atmospheric Administration (NOAA), and U.S. Coast Guard (USCG). Requirements in the NMFS 2025 BiOp Marine Debris Protocol address marine debris prevention.
4. **Entanglement/Entrapment** – Marine animals may become entangled or entrapped in facility (platform) or vessel moon pool, flexible lines, equipment, or gear used during construction, drilling, production/operation, and decommissioning activities. Lines in the water, moon pools, or accidental marine debris may pose an entanglement/entrapment risk. Entanglement and entrapment can lead to injury, infection, reduced mobility, increased susceptibility to predations, decreased feeding ability, fitness consequences (increased potential for vessel strike due to an inability to avoid), and/or mortality of marine wildlife. Requirements in the NMFS 2025 BiOp In-Water Line Precaution Protocol and the Moon Pool Monitoring Protocol address entanglement/entrapment prevention.

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C PUBLIC REVIEW AND COMMENTS ON THE DOCD

The DOCD was posted to Regulations.gov from May 1, 2025 to May 11, 2025 as part of the 60-day public review period on the Initial DOCD submission. On September 12, 2025, BP submitted an amended DOCD to reflect the most recent NMFS Biological Opinion and ESA protocols. The updated DOCD was posted to BOEM's website for an additional 60 days from January 12, 2026, to March 13, 2026.

BOEM received a total of 20 submissions through regulations.gov, which included a comment letter (i.e., Earthjustice et.al. – A) on behalf of Earthjustice, Sierra Club, Center for Biological Diversity, Healthy Gulf, and Turtle Island Restoration Network, along with the other 19 submissions providing references cited throughout the comment letter. An additional comment letter was received via postal mail on June 30, 2025. The June 30, 2025 letter (i.e., Earthjustice et.al. – B) included comments endorsed by 24,827 signatories urging BOEM to deny the proposed project. The letter also included 1,840 personalized comments (i.e., Earthjustice et.al. – C). Of those submissions, BOEM identified 84 unique and substantive comments that are addressed in the table below. All comments and attachments were included in the administrative record and considered during development of the SEA.

Email comments were also received during the additional 60-day period from January 12, 2026, to March 13, 2026. BOEM reviewed the additional comments and verified that all concerns raised were previously considered and addressed in responses to the comments received during the initial 60-day review period.

The comments and responses presented in the table below are organized by the following topics: Topic 1–OCSLA and NEPA Analyses and Decisions;
Topic 2–Mitigation Measures and Reporting Requirements; Topic 3–Deepwater Drilling Concerns; Topic 4–Hurricanes and Weather Concerns; Topic 5–Protected Species and Sensitive Habitats; Topic 6–Cumulative Analysis; Topic 7–Oil Spills;
Topic 8–Decommissioning; Topic 9–Greenhouse Gas Emissions and Climate Change;
Topic 10–Air and Water Quality; Topic 11–Socioeconomic Effects; and
Topic 12- Comments Out of Scope.

Please note that some comment letter excerpts have been shortened or truncated to maintain focus on the substantive contents of the comment. Similarly, all footnotes in the original comments were not included in the table but were fully considered and captured in the decision file. BOEM has addressed the substantive issues contained within the full comment letters. Further, BOEM acknowledges that within many of the form letters, personalized statements were also included. Each form letter was reviewed to identify unique substantive comments. So, although not all of the personal statements, opinions, and general preferences are individually addressed in

the table below, the substantive portions of these comments were considered and grouped together with other similar comments.

C.1 TOPIC 1: OCSLA AND NEPA ANALYSES AND DECISIONS

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0001	If approved, this will be BP's first completely new oilfield development in the Gulf of Mexico since the catastrophic *Deepwater Horizon* disaster on BP's well site. At the same time, BP is not positioned to keep operations safe in these risky conditions; the company is the process of laying off thousands of employees and outsourcing critical engineering jobs to India. Given the extreme conditions of this new development and the threats to the human, marine, and coastal environments, the Bureau of Ocean Energy Management (BOEM) must disapprove this plan under the Outer Continental Shelf Lands Act (OCSLA). At the very least, BOEM must prepare an Environmental Impact Statement to fully evaluate the impacts of the Kaskida Project under the National Environmental Policy Act (NEPA). Here, BOEM's data center suggests that the agency intends to prepare an environmental assessment (EA) to support its review of the Kaskida Project. As described below, the significant impacts from the Kaskida Project necessitate that BOEM instead prepare an Environmental Impact Statement (EIS).	BOEM has prepared this Site-Specific Environmental Assessment (SEA) and reached a Finding of No Significant Impact (FONSI) for the activities proposed in BP's submitted DOCD. Furthermore, BOEM and BSEE reviewed and determined no new or unusual technology is proposed by BP. Therefore, in accordance with the NEPA and DOI NEPA implementing procedures, preparation of an EIS is not required. Regardless, this SEA tiers to the 2025 GOA PEIS, and incorporates by reference, numerous technical reports that analyzed potential impacts from oil and gas development activities, including those proposed by BP for the Kaskida Project. Should BOEM's decision be to approve the DOCD, additional permits and approvals are required before drilling can commence. BSEE must, for example, still issue permits for development wells. BSEE's operations are governed by a wide variety of laws, regulations, and policies and are often informed by communications with the offshore industry. BSEE enforces compliance with these laws and regulations and periodically updates the rules to reflect advancements in technology and new information. BSEE incorporates over 100 technical standards into its regulatory program. The standards are related to equipment specifications, operating practices, equipment manufacturing, and hydrocarbon measurement that all operators must demonstrate compliance with to safely develop OCS leases in the GOA. BOEM's routine oil and gas operations analysis in the 2025 GOA PEIS, from which this SEA tiers, is inclusive of all types of oil and gas development including deepwater and ultra-deepwater extraction. Additional information pertaining to oil and gas activities are

Commenter	ID Number	Comment	Response
			described in the Oil and Gas SID and BEBR, both of which are incorporated by reference into the SEA. BOEM and BSEE have specific guidance and reviews for deepwater wells in the GOA, including those with HPHT conditions, to ensure that post-lease drilling activities are conducted in a safe manner. For example, the final rule for Oil and Gas and Sulfur Operations in the Outer Continental Shelf – High Pressure High Temperature Updates on August 30, 2024 and effective October 29, 2024 (89 FR 71076), adds requirements for new or unusual technology, including equipment used in HPHT environments; revises and reorganizes the information submission requirements for a project's Conceptual Plans and Deepwater Operations Plan (DWOP); and requires independent third parties to review certain information prior to submission to BSEE. Additionally, BSEE will continually review the DWOP to ensure the drilling system and operational equipment can withstand any high-pressure or high-temperature conditions throughout the life of the project. For more information on the high pressure and high temperature operations, refer to BOEM's HPHT Production found at https://www.boem.gov/sites/default/files/documents/about-boem/HPHT-Production-in-the-GOM.pdf. The report describes new technology, how it is reviewed, how HPHT wells are permitted, and safeguards in place to mitigate risk. Specific guidance for HPHT projects can be found in NTL 2019-G02, NTL 2019-G03, and NTL 2019-G04 which are on BSEE's website at https://www.bsee.gov/guidance-and-regulations/guidance/notice-to-lessees.

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0002	BP's EIA is also at odds with BOEM's own long-standing effort to gather precisely this sort of data for marine life in the Gulf. In 2017, BOEM launched a cooperative program 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." That information is all the more important given the profound changes in the Gulf brought about by the Deepwater Horizon catastrophe, as BOEM has repeatedly acknowledged. To the extent that any such information remains unknown, BOEM should consider how that impacts its NEPA obligations. The Ninth Circuit has found that "missing or incomplete information that has not been essential to a reasoned choice among alternatives at the lease sale stage may later become essential" when assessing a site-specific project. Courts have cautioned that it is during the later stages of the OCSLA process, i.e., during exploration and development, that BOEM must carefully consider issues such as the "risks of deepwater drilling." Indeed, in the lease sale context, courts have turned away legal challenges with the expectation that those types of site-specific, operational issues "will receive ample review" that "compl[ies] with NEPA at the later exploration and production stages." BOEM must avoid perpetuating a shell game that avoids ever squarely addressing much needed analyses, including a full accounting of the risk of an oil spill in light of factors such as a well's water depth (i.e., deep water drilling increases the likelihood of an accident); and location (i.e., remote areas may be more difficult to reach while also subject to increasing storm severity).	This SEA tiers from the 2025 GOA PEIS, incorporates the Oil and Gas SID by reference, and considers any relevant, new information pertaining to the effects of the *Deepwater Horizon* oil spill on the affected environment throughout the resource analysis. Spill risk and response is thoroughly analyzed as part of the OSRP, DWOP, and DOCD plan reviews, and this SEA assumes compliance with requirements resulting from all plan reviews, as well as consultations with other agencies. All proposed activities and facilities in this DOCD will be covered by the Gulf of Mexico regional OSRP last reviewed and approved by BSEE on January 10, 2025. The regional OSRP includes information about enhanced measures for responding to a spill in open water, near shore spill response, and shoreline spill response based on lessons learned from the *Deepwater Horizon* oil spill. Under 30 CFR 254.30, BP is obligated to review their regional OSRP every two years and make any necessary updates to remain in compliance. BSEE must also conduct its own, separate biennial review of the regional OSRP to confirm continued compliance with the 30 CFR 254.30 requirements. As of 2025, operators announced 39 HPHT wells drilled across 8 discovered fields, including exploration wells, producing wells, and water injection wells, with no spills or blowouts reported during the drilling phase. Throughout preparation of this SEA, BOEM has considered where information may be incomplete or unavailable and complied with the DOI NEPA regulations, procedures and Handbook. BOEM has identified that information and found that it could not be obtained at a reasonable cost or the means to obtain it are not known, and is not relying on that information. BOEM used the best available science, including data and information on similar activities, areas, resources or species, where appropriate in its place.

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0003	Even EAs must assess a "no action" alternative, *i.e.*, the status quo, and a reasonable range of alternatives to the proposed action. *Earth Island Inst. v. U.S. Forest Serv.*, 697 F.3d 1010, 1022 (9th Cir. 2012); *W. Watersheds Project v. Abbey*, 719 F.3d 1035, 1053 (9th Cir. 2013) (holding EA on grazing inadequate for lack of reasonable range of alternatives); 42 U.S.C. § 4332(2)(E); 40 C.F.R. § 1508.9(b). The range of "reasonable" alternatives is determined by the purpose and need for the action, which cannot be so narrow as to only allow one alternative to accomplish the goals, and must match the underlying statutory goals. *Nat'l Parks & Conservation Ass'n v. Bureau of Land Mgmt.*, 606 F.3d 1058, 1070 (9th Cir. 2010). Further, if the "no action" alternative is not "reasonable"—does not advance the stated goals—then discussion of merely the preferred alternative and "no action" alternative does not meet the NEPA's bare requirement for a brief discussion of reasonable alternatives. *Klamath Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 2019 WL 1553673, at *4 (D. Or. Feb. 20, 2019), *report and recommendation adopted*, 2019 WL 2774317 (D. Or. July 2, 2019). In the EIA, however, it states that no formal alternatives were evaluated. That violates both NEPA and BOEM's regulations which require EIA's to describe alternatives that were considered and to compare potential environmental impacts. 30 C.F.R. § 550.261(c)(4).	The regulations at 30 CFR 550.261 do not *require* that an EIA include a range of alternatives but rather, that *if* the operator considered other alternatives during the preparation of their DOCD, that those alternatives be adequately described in the associated EIA. BOEM has prepared this SEA which includes a No Action Alternative. BOEM has a well-established suite of commonly applied mitigation measures that can be applied to plan approval to ensure compliance with BOEM's operating regulations and requirements and other Federal laws. Therefore, to the extent required under NEPA section 102(2)(H) and the DOI implementation of NEPA regulations (43 CFR part 46) released in February 2026, BOEM determined that no additional alternatives beyond the Proposed Action and No Action Alternative warranted consideration in the SEA in order to make an informed decision on the proposed action.

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0004	**I. BOEM MUST PREPARE AN EIS FOR THE KASKIDA PROJECT** […] NEPA demands that the Bureau prepare an EIS if there are "substantial questions" about whether any of the impacts resulting from a project "may" significantly affect the environment. See Native Ecosystems Council v. Forest Serv., 428 F.3d 1233, 1239 (9th Cir. 2005); Friends of Animals v. Culver, 610 F. Supp. 3d 157, 171 (D.D.C. 2022). As discussed below, there are several significant impacts likely to result from the Kaskida Project that require the preparation of an EIS. See 42 U.S.C. § 4332(C). These significant impacts include: (1) the increased risks of drilling in ultradeep waters; (2) the increased risk of a major oil spill and the resulting impacts; (3) Rice's whale; (4) climate; and (5) impact from decommissioning.	All of these issues will be addressed iteratively through BOEM and BSEE reviews of the DOCD and associated permit and consultation requirements. Additionally, the 2025 GOA PEIS, from which this SEA tiers, analyzed the potentially significant impacts pertaining to (1) the increased risks of drilling in ultradeep waters; (2) the increased risk of a major oil spill and the resulting impacts; (3) Rice's whale (formerly GOM Bryde's whale); (4) climate-related factors; and (5) decommissioning. Additional supporting information and analyses are included in the Oil and Gas SID and BEBR, which are incorporated by reference into this SEA. The SEA did not identify any new potentially significant impacts or concerns that were not already considered and disclosed in the previous NEPA or supporting documents. Furthermore, the DOCD includes numerous processes and actions that are intended to mitigate potential impact on the environment. The project is expected to comply with applicable federal, state, and local requirements as well as permit conditions of approval concerning protected species, air pollutant emissions, discharges to water, and waste management. Therefore, impacts from the Proposed Action are expected to be minimized and do not warrant preparation of an EIS.

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0005	Worse, BP, along with several other big oil companies, is in the process of implementing laying offs. It is planning to lay off over 4,000 of its employees and 3,000 contractors. With less employees, BP will not be prepared to respond to a major accident or to ensure the safety of this highly risky project. And BP plans to outsource its engineering and safety oversight to lower- cost locations, like India. That means lower-cost employees from across the globe will be monitoring for a blow out or accident. They will not have the same tools to respond and will not be nearby to help control the situation. Given all these risks, BOEM should disapprove the DOCD or at the very least must require modifications to ensure the safety of the Gulf of Mexico and it communities.	BOEM and BSEE's oversight is governed by a wide variety of laws, regulations, and Executive Orders and is often informed by communications with the offshore industry. BSEE enforces compliance with these regulations and periodically updates the rules to reflect advancements in technology and new information. BSEE incorporates over 100 technical standards into its regulatory program. The standards are related to equipment specifications, operating practices, equipment manufacturing, and hydrocarbon measurement of which all operators must demonstrate compliance in order to develop OCS leases in the GOA. BP must demonstrate that they are prepared to deal with the potential for a blowout and WCD based on the currently accepted standards for well-design, casing, and cementing, and be independently certified by a professional engineer. BP’s internal business decisions as they pertain to company restructuring, employment, and/or the use of contractors is outside the purview of BOEM’s decision-making specific to this DOCD. Regardless of BP’s internal business decisions, they will be required to demonstrate the ability of both them, and any contractors, to meet all of the necessary requirements and standards prior to receiving approval to conduct any proposed development activities.

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0006	**XIX. BOEM MUST DISAPPROVE THE DOCD FOR THE KASKIDA PROJECT UNDER OCSLA**. The Secretary should disapprove the DOCD for the Kaskida Development Project under OCSLA, 43 U.S. Code § 1351(h)(1). As described above, the DOCD does not meet the basic statutory or regulatory requirements. That alone is cause to disapprove the DOCD. The proposed operations also pose significant threats to national security and the marine, coastal and human environment, warranting disapproval under subsections (C) and (D) of this provision. The 2022 National Security Strategy recognizes that, "[o]f all of the shared problems we face, climate change is the greatest and potentially existential for all nations." A number of other recent reports issued by the Department of Homeland Security, the Department of Defense, the National Security Council, and the National Intelligence Director all highlight the threat that climate change poses to national security. For example, the Office of the Director of National Intelligence issued a report noting that climate change will increasingly exacerbate a number of risks to U.S. national security interests through (1) increased geopolitical tension as countries argue over who should be doing more, and how quickly, and compete in the ensuing energy transition; (2) cross-border geopolitical flash points from the physical effects of climate change as countries take steps to secure their interests; and (3) climate effects straining country-level stability in select countries and regions of concern.	See response to BOEM-2025-0022-0047. Climate-related factors as an IPF to various resources has been acknowledged in the SEA and was evaluated programmatically in the 2025 GOA PEIS, from which this SEA tiers, with additional supporting information and analyses included in the Oil and Gas SID and BEBR.

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0007	Furthermore, disapproval is warranted under 43 U.S.C § 1351(h)(1)(D). As described above, there are massive risks to the Gulf of Mexico's marine, coastal, and human environment from proposed ultra deepwater drilling by BP—the same company that caused the catastrophic Deepwater Horizon oil spill in 2010. At the very least, BOEM must require BP to modify its DOCD to protect the marine, coastal, and human environment. Id. Finally, the DOCD discusses that it plans to install a floating production unit on Lease Block 293, a lease that has already expired. The DOCD states that BP will obtain a right of use easement for the production unit. However, OCSLA only allows easements or rights of way to "support" production of oil. 43 U.S.C. § 1337(p)(1)(B). It only allows direct production through an easement from sources other than oil and gas. Id. 1337(p)(1)(C). The production platform that BP plans to install would be directly producing oil, not "supporting" production. In any event, BOEM must first go through the rigorous process of granting the easement before approving the DOCD. Id. 1337 (p)(2)-(10).	The DOCD and associated applications under other statutes, are carefully reviewed by BOEM and BSEE to ensure all known risk factors and potential effects have been considered and adequately addressed. The DOCD includes numerous processes and actions that are intended to mitigate potential impact on the environment. The project is expected to comply with applicable federal, state, and local requirements as well as permit conditions of approval concerning protected species, air pollutant emissions, discharges to water, and waste management. Therefore, impacts from the Proposed Action are expected to be minimized. BP is applying for a Right-of-Use and Easement (RUE) for the expired lease on Keathley Canyon Block 293 for the installation of the Kaskida semi-submersible FPU and for portions of the platform anchorage system. However, a pending RUE does not preclude BOEM's ability to review and make a statutory decision on the DOCD. BOEM reviews RUE requests to ensure the proposed activities conform to sound conservation practices and are carried out in a safe and environmentally sound manner as to prevent harm or damage to any natural resource or human, marine, or coastal environment. The DOCD and RUE reviews happen concurrently, and potential impacts are addressed in both requests. Furthermore, If the DOCD is approved, and prior to conducting drilling operations, the operator is required to submit and obtain approval for an APD. The APD application is managed by BSEE as described in Chapter 5.2.2.1 of the Oil and Gas SID.

Earthjustice et.al. - A	BOEM-2025-0022-0008	**XX. BOEM RELIES ON AN UNLAWFUL BIOLOGICAL OPINION AND INCIDENTAL TAKE STATEMENT**. 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" such species' critical habitat. "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." Formal consultation requires NMFS to formulate a "biological opinion" ("BiOp") on whether that action is likely to jeopardize species. Both the action agency and the consulting agency must "use the best scientific and commercial data available" in evaluating the action's effects. 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. The ESA also requires NMFS to provide an incidental take statement ("ITS") when the agency anticipates that incidental taking of a threatened or endangered species will occur. The Kaskida Project relies on the BiOp and 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, and the 2020 BiOp is unlawful. On August 19, 2024, the U.S. District Court for the District of Maryland found the 2020 NMFS BiOp unlawful because it underestimated the risk and	The DOCD has been updated to incorporate the NMFS 2025 BiOp and associated Attachments and Appendices (NMFS 2025a). As stated in the COAs outlined in the SEA, the operator will be required to comply with the most recent consultations, opinions, mitigations, protocols, and Conditions of Approval (COAs) available at the time. The Endangered Species Act of 1973 (ESA, 16 U.S.C. §§ 1531 et seq., as amended) establishes a national policy designed to protect and conserve threatened and endangered species and the ecosystems upon which they depend. Section 7(a)(2) of the ESA requires each Federal agency to ensure that any action that the agency authorizes, funds, or carries out is not likely to jeopardize the continued existence of a listed species or result in the adverse modification of designated critical habitat. On April 20, 2018, USFWS issued a 10-year BiOp for BOEM and BSEE activities with no terms and conditions, and any future consultations may be informal, dependent upon the likelihood of take of ESA-listed species under that Service's jurisdiction. On March 6, 2024, BOEM and BSEE requested reinitiation of consultation with USFWS regarding upcoming oil-spill risk analyses, new listings and general species information. On March 28, 2025, the USFWS sent BOEM a letter with its evaluation of the new information and data, and its determination that nothing considered during the reinitiated consultation changed the conclusions of the FWS 2018 BiOp and that no further ESA consultation with the Service for the proposed action is necessary. The FWS 2018 BiOp remains in effect and any future BiOp amendments or associated COAs will be binding on subsequent post-lease actions (https://www.boem.gov/regions/gulf-america-ocs-region/oil-and-gas-esa-consultations-and-protocols).

		harms of oil spills to protected species, incorrectly assumed that the populations of Rice's whales and Gulf sturgeon remained the same after the Deepwater Horizon oil spill, failed to address all stressors likely to affect the Rice's whale, failed to recognize oil spill take as incidental take, and adopted an "irrational surrogate" to determine take by vessel strikes. An agency cannot satisfy its substantive ESA obligations by relying on a facially flawed biological opinion. As such, BOEM must ensure these failures are remedied in a new consultation and consider any relevant new information. Because the BiOp is unlawful, BOEM may not rely on it to comply with its section 7 obligations for the approval of the Kaskida Project. Indeed, Congress established the section 7 consultation process explicitly "to ensure compliance with the [ESA's] substantive provisions." Therefore, without a valid biological opinion, Interior would be out of compliance with both its procedural and substantive obligations under section 7 of the ESA.	On March 13, 2020, NMFS issued its previous programmatic Biological Opinion (NMFS 2020 BiOp) and Amended Incidental Take Statement (ITS) and Revised Appendices on April 26, 2021 (2021 Amended ITS and Revised Appendices). The NMFS 2020 BiOp, as amended, was intended to cover ten years of OCS oil and gas activities in the GOA, including lease sales. However, on August 19, 2024, the United States District Court for the District of Maryland remanded the NMFS 2020 BiOp to NMFS and vacated the BiOp as of May 21, 2025. See Sierra Club v. NMFS, 8:20-cv-3060, ECF No. 211-2 paragraphs 7-9 (Sept. 16, 2024). On October 25, 2022, BOEM and BSEE had reinitiated consultation with NMFS and NMFS issued a new biological opinion (NMFS 2025 BiOp), which supersedes and replaces the NMFS 2020 BiOp, on May 20, 2025. The NMFS published their Biological and Conference Opinion on Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement's Oil and Gas Program Activities in the Gulf of America and associated Attachments and Appendices, which contain the most current protocols BOEM implements for ESA compliance. The relevant terms and conditions, reasonable and prudent measures, reasonable and prudent alternative for the Rice's whale, as well as the provisions of the NMFS 2020 BiOp as amended that are a part of the proposed action in the NMFS 2025 BiOp (e.g., the vessel mitigations found in the NMFS 2025 BiOp at Section 3.1.6.5 and Attachment A.6 Vessel Transit within the Rice's Whale Area as identified in the 2020 Biological Opinion's Reasonable and Prudent Alternative [2020 RWA]), and other protocols identified in the NMFS 2025 BiOp Attachments and Appendices are made a binding part of the lease through the "Protected Species" Stipulation. The most recent BiOp amendments or COAs (currently the NMFS 2025 BiOp) will be binding on subsequent post-lease actions. The NMFS 2025 BiOp, as amended, and supporting

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			documents can be found at https://www.fisheries.noaa.gov/resource/document/biological-and-conference-opinion-bureau-ocean-energy-management-and-bureau. The NMFS 2025 BiOp Attachments and Appendices can be found at: https://www.fisheries.noaa.gov/resource/document/attachments-and-appendices-2025-gulf-america-oil-and-gas-biological-opinion. Under the NMFS 2025 BiOp, certain post-lease approvals (e.g., for activities involving new and unusual technologies, certain tiers of seismic surveys, including certain ancillary geological and geophysical [G&G] surveys), will require an ESA step-review by BOEM, and applicable protocols and/or COAs will be applied. Therefore, lessees must notify BOEM before conducting any ancillary G&G surveys, including but not limited to ancillary G&G surveys that use high-resolution geophysical (HRG) acoustic sources. Some activities may be subject to NMFS step-down reviews as specified in the NMFS 2025 BiOp with potential additional requests for information (RFI).
Earthjustice et.al. - A	BOEM-2025-0022-0009	Separately, section 9 of the ESA prohibits "take" of endangered species by any person, including federal agencies. "Take" means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect." Take that is authorized by a valid ITS is not prohibited under section 9. Without a valid ITS, however, any take resulting from an agency action is unlawful. The invalidation of the BiOp invalidates the associated ITS. Accordingly, the Kaskida Project would cause unauthorized take in violation of section 9 of the ESA. For the same reasons, the Protective Species stipulation—Stipulation No. 4—which relies on the unlawful BiOp and ITS, is inadequate, and BOEM	See response to BOEM-2025-0022-0008.

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		may not rely on the mitigation measures included within to evaluate the effects on protected species. The Rice's whale, for instance, is a critically endangered species of baleen whale whose entire known range is limited to the Gulf of Mexico. As discussed above, oil and gas activities in the Gulf pose a series of threats to the survival and recovery of this species, including oil spills, noise, and vessel strikes. A number of these threats—including those at issue in the Kaskida Project—were deemed by NMFS' most recent species Status Review, prepared in 2016, as "likely to eliminate or seriously degrade" the population. As the review unanimously concluded, the whales "are at high risk of extinction as a result of their small population size and the suite of anthropogenic threats posed primarily by energy exploration, development and production, and vessel collisions. Small-scale incremental impacts over time or a single catastrophic event could result in extinction." Considering their highly vulnerable status, the greatest possible safeguards should be implemented to protect the Rice's whale from further decline. Existing mitigation measures for the Rice's whale, detailed in the Protected Species lease stipulation, require lessees to comply with the reasonable and prudent measures (RPMs) and implementing terms and conditions set out in the 2020 BiOp developed in consultation with NMFS under the "ESA. However, it is clear from NMFS' own analysis that these measures are insufficient to protect the Rice's whale from the impacts of oil and gas exploration and development activities in the Gulf of Mexico. For example, according to NMFS, oil and gas activities conducted in the Gulf with the reasonable and prudent alternative ("RPA") set out in the BiOp will cause an estimated 16 vessel	

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		strikes of Rice's whales over a 50-year period, with 12 of those strikes resulting in serious injury or mortality. This rate of mortality is patently incompatible with the continued survival of the species. As mentioned above, the District of Maryland declared the 2020 BiOp and ITS unlawful, finding that NMFS failed to provide measures to protect the Rice's whale from multiple threats and failed to explain how the provided vessel strike measures would prevent jeopardy to the species. The court ordered vacatur of the biological opinion effective May 21, 2025, and BOEM has reinitiated ESA consultation with NMFS.	
Earthjustice et.al. - B	BOEM-2025-0022-0010	The DOCD does not show that oil and gas development associated with the Kaskida Project complies with OCSLA or the ESA, is safe and will have sound conservation practices, or does not cause undue or serious harm or damage to the environment. BOEM also has not demonstrated that the Kaskida Project will prevent injury or loss of life, prevent damage or waste of natural resources or the environment, or that the agency has coordinated and consulted adequately with all interested parties and relevant federal agencies.	See response to BOEM-2025-0022-0008, as well as Section 4 of the SEA and Section G of the EIA for more information on the consultation and coordination associated with DOCD N-10256. The DOCD includes numerous processes and actions that are intended to mitigate potential impact on the environment. The project is expected to comply with applicable federal, state, and local requirements as well as permit conditions of approval concerning protected species, air pollutant emissions, discharges to water, waste management, and other IPFs. Therefore, impacts from the Proposed Action would be minimized. BP will comply with the applicable NMFS 2025 BiOp protocols as well as lease stipulations and other requirements of the DOCD approval letter.

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Earthjustice et.al. - B	BOEM-2025-0022-0011	BOEM must at the very least prepare an Environmental Impact Statement to fully evaluate the impacts of the Kaskida Project under the National Environmental Policy Act (NEPA). The comments below provide further details as to what an adequate evaluation of the Project under NEPA must look like, and why BOEM must disapprove the Project.	See responses to BOEM-2025-0022-0004 and the individual comments addressed throughout.
Earthjustice et.al. - C	BOEM-2025-0022-0012	Comment letter submitted by Earthjustice (EJ) which was utilized by approximately 1840 individuals through partial incorporation of EJ's listed concerns into their personal, written comments. In this comment letter EJ urges BOEM to deny BP's proposal to develop the ultra-deepwater drilling project Kaskida. EJ claims that the DOCD that BP submitted to BOEM fails to meet basic statutory or regulatory requirements that would be required for Kaskida to operate. EJ also states that proposed development would be one of the first projects in the region to utilize well equipment capable of handling pressures up to 20,000 lbs/square inch, which in EJ's opinion, makes this project highly risky due to increased likelihood of blowouts and uncontrolled spills. The letter also claims that BP's EIA for Kaskida fails to account for a full range of oil spill scenarios from estimated 80k bopd Kaskida could produce, impact of pollution on Gulf residents, as well as potential threats/impacts to deep-sea ecosystems and marine life. EJ states that BP's proposal is at odds with legal and regulatory requirements since the company proposes to install a FPU on an expired lease block. The letters suggest that the project threatens US national security and marine/coastal/human environments if BOEM were to approve.	All of the individual comments were evaluated for unique and substantive information to ensure all issues and concerns are adequately addressed in the SEA and DOCD, as appropriate. Comments that express general opinions about oil and gas development or recommend specific decisions will be incorporated into the administrative record and available to the decisionmaker during the deliberative process. The responses under Topic 3 address HPHT-related concerns. The responses under Topic 5 address concerns related to marine life and ecosystems. The responses under Topic 7 address oil spill-related concerns. Space-use conflicts and national security concerns were addressed programmatically in the 2025 GOA PEIS, from which this SEA tiers. Additional supporting information and analyses are included in the Oil and Gas SID and BEBR, which are incorporated by reference into the SEA. BOEM uses Information to Lessees and NTLs to mitigate space-use conflicts between BOEM program areas, military activities, and other ocean users.

C.2 Topic 2: Mitigation Measures and Reporting Requirements

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Earthjustice et.al. - A	BOEM-2025-0022-0013	BOEM should ensure that the Kaskida Project is subject to robust mitigation measures and stipulations that protect Gulf communities, marine life and ecosystems, and the climate. Mitigation measures are acts taken not only to avoid, minimize, rectify, reduce, or eliminate impacts but also to "compensat[e] for the impact by replacing or providing substitute resources or environments." Available evidence demonstrates that BOEM should, at a minimum, (1) improve methane emissions data and reporting from oil and gas sites through the incorporation of top-down measurements; (2) collaborate with impacted environmental justice communities and co-develop mitigation measures with these communities; (3) incentivize lessees to enter into community benefit agreements with environmental justice communities; (4) evaluate the agency's commonly applied post-lease mitigation measures and incorporate them as mandatory lease stipulations where appropriate; (5) require additional safeguards to prevent blowouts and catastrophic oil discharges; and (6) require BP to decommission idle wells prior to beginning new production.	Thank you for your comments. In reference to creating CBAs, please refer to comment response for BOEM-2025-0022-0014 for BOEM's compliance with the requirements of NEPA following the publication of E.O. 14154, *Unleashing American Energy* (Jan. 20, 2025), and a Presidential Memorandum, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025). BOEM's ambient air quality review focuses on NAAQS-related pollutants carbon monoxide (CO), sulfur dioxide (SOx), nitrogen oxides (NOx), volatile organic compounds (VOCs), and total suspended particulates (TSP) for purposes of the emission-exemption thresholds and significance-level determinations in 30 CFR part 550. Methane emissions are not regulated by BOEM and are out of scope for this plan. To assess the impacts from oil- and gas-related activities, BOEM uses an emissions inventory along with air dispersion and photochemical modeling. While an emissions inventory is an accounting of air emissions of criteria pollutants, precursors of criteria pollutants, and hazardous air pollutants from a variety of air emission sources, the comprehensive data from the inventory can be used to support air quality modeling to determine impacts. BOEM requires operators to submit their methane emissions every three years during BOEM's emission inventory data collection period. The data collected is used to satisfy USEPA's GHG reporting rules. Additionally, methane emissions are analyzed in BOEM's programmatic environmental documents. Methane emissions were evaluated programmatically in the 2025 GOA PEIS, from which this SEA tiers, with additional supporting information also available in the

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			Oil and Gas SID and BEBR, which are incorporated by reference. See response to BOEM-2025-0022-0051 regarding safeguards to prevent blowouts. Decommissioning concerns are addressed in Topic 8.
Earthjustice et.al. - A	BOEM-2025-0022-0014	In collaboration with environmental justice communities, BOEM should also co-develop and adopt mitigation measures that will adequately protect communities from the health, environmental, and social consequences of additional oil and gas development in the Gulf of Mexico. Co-development of measures is necessary to help ensure that the agency is truly addressing community concerns and adhering to community priorities. Community benefit agreements ("CBAs") are agreements signed by community benefit groups and developers, identifying a range of community benefits the developer agrees to provide as part of the development, in return for the community's support of the project. The goal of CBAs is to ensure that measurable, local benefits will be given to a community. These agreements are enforceable, legally-binding contracts for all parties that stipulate community benefits and are the direct result of substantial community input. For wind leasing in California, BOEM has provided credits off the lease purchase price to bidders if they entered into qualifying CBAs. Lessees receiving the Lease Area Use CBA 5% credit were required to enter in a CBA with a community, stakeholder group, or Tribal entity whose use of the geographic space of the lease area, or whose use of resources harvested from that geographic	30 CFR 550 does not require a detailed analysis of "environmental justice" be included in a DOCD. The DOCD and supporting EIA, however, did consider and evaluate potential impacts to minority and lower income groups in accordance with 30 CFR 550.261(b)(7). With respect to addressing environmental justice concerns, E.O. 14154, *Unleashing American Energy* (Jan. 20, 2025), and a Presidential Memorandum, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025), require DOI to strictly adhere to NEPA, 42 U.S.C. 4321 et seq. Further, E.O. 14154 and the 2025 Memorandum repeal E.O.s 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023), which had mandated federal agencies to address environmental justice. Because E.O.s 12898 and 14096 have been repealed, agencies are no longer directed to consider environmental justice generally in their environmental analyses, among other issues. BOEM has complied with the requirements of NEPA, including DOI's regulations and procedures implementing NEPA at 43 CFR 46 and 516 of the Departmental Manual in place during the time of the preparation of this SEA, consistent with the President's January 2025 Order and Memorandum. BOEM maintains that potential impacts that may arise from downstream support activities cannot be influenced by BOEM's decision-making given that BOEM has no regulatory authority over any onshore

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		space, is expected to be impacted by the lessee's potential offshore wind development. BOEM also provided a General CBA 5% credit "in exchange for an existing CBA or a commitment to enter into a new CBA with one or more communities, Tribes, or stakeholder groups that are expected to be affected by the potential impacts on the marine, coastal, and/or human environment (such as impacts on visual or cultural resources) from activities resulting from lease development that are not otherwise addressed by the Lease Area Use CBA." In the recent Gulf of Mexico wind lease sale, BOEM included in lease provisions that lessees are strongly encouraged to enter into "formal agreements to monitor community impacts and implement community benefits." BOEM does not make similar efforts for oil and gas leases, but could use this type of incentive system for the Kaskida Project. BOEM should incentivize BP to enter into CBAs with those that use the geographic space of those that would be affected by the impacts of development. Potential CBAs could, for example, stipulate that BP will provide annual funding for coastal habitat restoration projects, emissions reduction programs, health services, school districts, scholarships, and more. These requirements would be consistent with the terms of other CBAs between fossil fuel infrastructure companies and communities.	activities, including their location. Many other Federal and State agencies regulate onshore oil- and gas-related infrastructure, however, through air and wastewater discharge permitting and stream and wetland permitting. Through these permitting processes, the agencies are required to consider impacts for their proposed actions, and mitigate appropriately. Additionally, BOEM discusses the Gulf of Mexico Energy Security Act of 2006 and revenue sharing with states in the *Gulf of America OCS Regulatory Framework* (BOEM 2025a). Revenue generated from oil and gas production offshore in the GOA is distributed among Alabama, Louisiana, Mississippi, and Texas. Revenue was also directed to the Land and Water Conservation Fund for the preservation, development, and access to outdoor lands for public recreation. More information on revenue sharing with states can be found at: https://revenuedata.doi.gov/how-revenue-works/gomesa/.
Earthjustice et.al. - A	BOEM-2025-0022-0015	BOEM's final multisale environmental impact statement for its 2017 to 2022 oil and gas lease sales contained a list of "commonly-applied" or "standard" mitigation measures that the agency could apply to permits and approvals at the post-lease stage. These mitigations relate broadly to air quality, archaeological resources, artificial reef material, Flower Garden Banks National Marine Sanctuary, topographic features, hydrogen sulfide,	BOEM has reviewed the DOCD and considered all of the commonly applied mitigating measures and have incorporated the proposed COAs, which are summarized in the FONSI, throughout the SEA analysis. Where appropriate, the stipulations and COAs have been updated to reflect the latest ESA consultation requirements. If the DOCD or DPP is approved, and prior to conducting activities, the operator is required to submit and obtain approval for

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		hard bottoms/pinnacles, drilling hazards, and more. BOEM notes that "[m]any of these mitigating measures have been adopted and incorporated into regulations and/or guidelines governing OCS oil and gas exploration, development, and production activities." BOEM should take a close look at its entire list of commonly applied mitigation measures and determine which of the measures should be mandatory lease stipulations for the Kaskida Project. In particular, we recommend that BOEM evaluate and incorporate many of the post-lease commonly applied mitigation measures that relate to air quality—including the use of ultra-low sulfur content fuel, performance of stack testing to verify emission limits of engines, production curtailment during sulfur recovery unit shutdown, and more—into lease stipulations. BOEM should also incorporate the measures regarding anchoring approval in order to protect reef materials. BOEM should also incorporate the "zero discharge" and other practices to mitigate harm to chemosynthetic communities, as well as the measures to protect the Flower Garden Banks National Marine Sanctuary, topographic features, and hard bottoms, pinnacles, and potentially sensitive biological features. We also recommend making the pipeline corrosion inspection requirements mandatory in lease stipulations. Some of the requirements outlined for these mitigation measures are already part of current lease stipulations (for example, some of the topographic features mitigations), and incorporation of more of these post-lease measures into the lease stipulations, as appropriate, will lead to more uniform and transparent mitigation.	an APD, where additional measures or modifications to the existing measures can be considered through an adaptive management approach. New lease stipulations or modifications to lease stipulations is outside the scope of this SEA.

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Earthjustice et.al. - A	BOEM-2025-0022-0016	The 2010 BP Deepwater Horizon catastrophe arose from a single accident on an offshore drilling rig involving a failed cement installation, failed cement testing, and a failed blowout preventer system. BSEE has finalized changes to the Well Control Rule, which was first published in 2016 to correct some of the deficiencies that investigators found contributed to the Deepwater Horizon disaster. Although the final Well Control Rule improved standards for operations using blowout preventers, significant gaps remain. OCSLA requires the DOCD to adequately describe environmental safeguards and show how BP will meet all safety standards. 43 U.S.C. § 1351(c). BOEM should include several additional mitigation measures to require BP to implement safeguards to help prevent another similar catastrophe in the Gulf of Mexico.	See response to BOEM-2025-0022-0051.
Earthjustice et.al. - A	BOEM-2025-0022-0017	First, BP must have the capability to deploy the full range of Source Control and Containment Equipment ("SCCE") to control or contain a blowout. BSEE regulations currently require drilling operations to have access to SCCE generally but do not require that operations have access to specified types of SCCE. The mitigation measure should require drilling operations to have access to all eight types of SCCE listed as voluntary in BSEE regulations. Increasing the amount of mandatory SCCE equipment would provide necessary protections for worker safety and the environment. Well control cooperatives were set up after the BP Deepwater Horizon spill, and oil and gas companies can join these cooperatives to access the full suite of well control equipment for an annual fee.	See response to BOEM-2025-0022-0051. BP, through its membership in the Marine Well Containment Company and service contracts, has access to all of the equipment identified in 30 CFR 250.462(b). This equipment is inspected at least annually by BSEE to ensure that it is available, properly maintained, and ready for deployment. All operators on the OCS, including BP, are required to demonstrate in permits for drilling operations using a subsea BOP or surface BOP on a floating facility, that they have a plan and the capability to deploy any needed SCCE should there be a loss of well control while drilling.

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Earthjustice et.al. - A	BOEM-2025-0022-0018	Second, BP must have cement evaluation logs for all offshore wells. Cement failure was a root cause of the Deepwater Horizon blowout, yet BSEE generally relies on industry volunteering to run cement evaluation logs. Cement evaluation logs are critical to ensuring correct cement placement and verifying cement repairs. They should therefore be required for all offshore wells, and, in particular, for complex wells or wells in environmentally sensitive locations.	30 CFR 250.428 advises regarding adequacy of cement jobs for each well, and what must be done if the job does not go as initially planned. If the cement job is adequate, the regulations do not require further investigation. For an inadequate job, the regulations require remediation and provides for options for evaluation of cement, and subsequent remediation actions to ensure proper isolation of the shoe or hydrocarbon zone.
Earthjustice et.al. - A	BOEM-2025-0022-0019	Third, BOEM should prohibit BP from using a blowout preventer that is under investigation by BSEE. If a component failure or other issue is serious enough to warrant a BSEE-required investigation, it is serious enough to halt use of that same blowout preventer during that investigation until corrective actions are made and the blowout preventer has been verified fit for service.	Per 30 CFR 250.731, the operator, for each well, must secure an independent third party certification, verifying that the BOP will shear the pipe submitted in the well program, the BOP was designed, tested, and maintained to perform under maximum conditions at the well, the accumulator system has sufficient fluid to operate the BOP system, and the BOP is not compromised or damaged from previous service. This must be verified by an independent third party, with concurrence from BSEE, prior to commencing well operations.
Earthjustice et.al. - A	BOEM-2025-0022-0020	BOEM should adopt measures to protect Rice's whales from vessel strikes. We recommend that BOEM require the measures currently recommended in NTL No. 2023-G01, *Expanded Rice's Whale Protection Efforts During Reinitiated Consultation with NMFS*, as binding stipulations for BP. Specifically, these measures would require the following actions for all vessels conducting oil and gas activities (except where otherwise specified): 1. Use trained visual observers to monitor a 500-meter vessel strike avoidance zone. 2. Document and retain records for three years on details of transit within Rice's whale habitat (defined as the entire northern Gulf of Mexico Outer Continental Shelf between the 100- and 400-meter isobaths). Documentation	See response to BOEM-2025-0022-0008. As stated in the Protected Species Stipulation and the COAs outlined in the SEA, when an operator seeks BOEM or BSEE approval of any plan, permit, or other authorization under a lease, they will be required to comply with the most recent consultations, opinions, mitigations, protocols, and COAs available at the time.

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		must include what port is used for mobilization and demobilization. 3. Observe on all vessels, regardless of size, at all times a 10-knot or less, year-round speed restriction in Rice's whale habitat (defined as above), except when compliance with such restriction would place the safety of vessel or crew, or the safety of life at sea, in doubt. To the maximum extent practicable, avoid transit through Rice's whale habitat after dusk and before dawn, and during other times of low visibility, to further reduce the risk of vessel strike of Rice's whales. 4. Maintain a minimum separation distance of 500 meters from Rice's whales. If a whale is observed but cannot be confirmed as a species other than a Rice's whale, the vessel operator should assume that the whale is a Rice's whale and take appropriate action. 5. For vessels 65 feet or greater, maintain a functioning Automatic Identification System ("AIS") that is operating at all times, as required by the U.S. Coast Guard.	

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Earthjustice et.al. - A	BOEM-2025-0022-0021	Moreover, to protect Rice's whales from noise impacts BOEM should require the following measures as binding stipulations for the Project: 1. Restrict deep-penetration seismic surveys such that noise from such surveys does not reach or exceed sound pressure levels of 140 dB (re 1 micPa (RMS)) anywhere within Rice's whale habitat. This is the threshold at which species take begins according to the standard presently applied by NMFS under the Marine Mammal Protection Act. 2. Require use of the best commercially available noise-reduction technologies, such as marine vibroseis, modified airguns, and other alternatives, for all deep-penetration seismic surveys taking place in the northern Gulf of Mexico. Sources and operational standards meeting the criterion "best commercially available technology" will be determined by BOEM. 3. Require that all industry vessels transiting through Rice's whale habitat receive a quiet-vessel notation from an IACS-member ship-classification society.	See response to BOEM-2025-0022-0008. As stated in the Protected Species Stipulation and the COAs outlined in the SEA, when an operator seeks BOEM or BSEE approval of any plan, permit, or other authorization under a lease, they are required to comply with the most recent consultations, opinions, mitigations, protocols, and COAs available at the time.

C.3 Topic 3: Deepwater Drilling Concerns

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0022	It is well established that drilling is riskier in deeper waters, with the chances of well blowouts and uncontrolled oil spills increasing exponentially with depth. Experts still understand relatively little about the geology and effects of pressure in ultra-deepwater wells, while industry has not developed safe technology to handle the extreme pressures and temperatures that shape conditions for these operations.	The Conceptual Plan and DWOP provide for early dialogue between BSEE and industry before major capital expenditures on specific deepwater and subsea projects are committed. Because deepwater technology, like HPHT technology, has been evolving faster than BSEE's ability to revise OCS regulations, the Conceptual Plan and DWOP processes provide for a timely and flexible approach to providing guidance on regulatory requirements and keeping pace with the advancements in deepwater technology. All DWOP approvals provide conditions of approval to address using technologies that are not outlined in the regulations. Due to the use of new technology, BSEE conducts stepwise, detailed evaluations of HPHT applications according to BSEE's guidelines for HPHT development. In addition, the oil and gas industry has evolved to mitigate the potential risks during the drilling of HPHT wells in the ultra-deepwater zone. For instance, several years ago, the operators joined with service companies to initiate the "20K" project to research and manufacture the equipment to meet the needs of HPHT wells. Since the 20K Project's initiation, several operators have made investments and developed HPHT wells using proven industry-led technology to withstand 20,000 psi wells (Chevron 2024; McCulley 2013; Shell 2023; Whiteside 2024). Meanwhile, BSEE constantly reviews all DWOPs to ensure the drilling system and operational equipment can withstand the HPHT environment.

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0023	The Deepwater Horizon drilling rig, which was also operated by BP, was drilling in ultra- deepwater about 5,000 feet below the surface of the water when it suffered a blowout. The resulting explosion took the lives of 11 workers and spilled 200 million gallons of oil into the Gulf of Mexico, with disastrous consequences for people's livelihoods, the tourism industry, and ocean ecosystems. The economic impact of the Deepwater Horizon oil spill included more than 25,000 lost jobs, as well as financial losses totaling $2.3 billion for industry; $1.2 billion in total value added or gross regional product; $700 million in labor income; $160 million in state and local tax revenues and $160 million in federal tax revenues.	Comment noted. The drilling rig that caused the *Deepwater Horizon* blowout was operated and owned by Transocean, which was contracted by BP. Nevertheless, safety measures, technologies, regulatory standards, and permitting processes are substantially more robust following the *Deepwater Horizon* oil spill. As discussed in Chapter 5.13.3 of the Oil and Gas SID, several NTLs and guidance documents have been issued by BOEM and BSEE that clarify additional oil-spill requirements since the occurrence of the *Deepwater Horizon* explosion, oil spill, and response. The approved OSRP incorporates lessons learned following *Deepwater Horizon* and complies with updated BSEE and BOEM guidance (e.g., NTLs 2015-N01, 2012-N06, and 2013-N02), ensuring preparedness for spills of various sizes and durations. Please note that BOEM has analyzed a low-probability catastrophic event in the *Gulf of Mexico Catastrophic Spill Event Analysis: High-Volume, Extended-Duration Oil Spill Resulting from Loss of Well Control on Gulf of Mexico Outer Continental Shelf* in conjunction with its analysis of potential effects. A low-probability catastrophic spill is, by definition, not reasonably foreseeable and need not be overly emphasized in the SEA in order to avoid confusion over whether it is or is not part of the Proposed Action.

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0024	The Kaskida Project will take place in ultra-deep waters, greater than approximately 5,000 ft deep. Worse, BP is pushing ultra-deepwater drilling to extreme depths using new technologies. This is concerning, since the likelihood of well blowouts and uncontrolled oil spills increases “exponentially” with depth, making deepwater and ultra-deepwater drilling particularly risky. BOEM must consider the risks and potential impacts associated with the ultra- deepwater drilling proposed in the Kaskida Project.	Through the Conceptual Plan and DWOP processes, BSEE is able to analyze the proposed activity and submit requests for information (RFIs) for any items in question. As experience is gained and lessons learned are applied, deepwater drilling and safe operations in HPHT environments is evolving to become more common place. Oil spill risks are assessed through OSRPs and WCD estimates. BSEE has reviewed and approved BPs regional OSRP submittal in January 2025. In addition, the WCD submitted by BP for the site-specific plan was reviewed and approved by BOEM Resource Evaluation in the OPA WCD Verification Review completed in April 2025. Also, all HPHT barrier equipment qualifications are thoroughly reviewed by a BSEE approved independent third party, and their resulting reports are then reviewed by BSEE. More information on the use of independent third parties can be found here: https://www.boem.gov/sites/default/files/documents/about-boem/HPHT-Production-in-the-GOM.pdf for more information on the use of independent third parties as part of the HPHT permitting processes. Furthermore, as part of permit approval, BP would be required to demonstrate that all BOPs are designed, tested, and maintained to perform under the maximum environmental and operational conditions anticipated to occur at the wells, as verified by an independent third-party per 250.731(c). See responses to BOEM-2025-0022-0022 and BOEM-2025-0022-0023 for additional information.
Earthjustice et.al. - A	BOEM-2025-0022-0025	The likelihood of an oil spill is higher from deepwater and ultra-deepwater drilling than from drilling in shallower waters. Researchers have found that “deep water platforms have a much higher probability of an incident (such as a spill, accident, or injury) reported.” In fact, “company-reported incidents (such as blowouts, fires, injuries, and pollution) increase with water depth. …	The DOCD is not the final approval and does not by itself, authorize drilling operations. All of the risk factors identified in this comment are also considered as part of numerous other BSEE technical reviews for this project. These iterative, step-wise reviews also encompass regular meetings with the applicant over a period of at least 2 years or more, and thousands of pages of technical documents produced by

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		Controlling for these and other characteristics, for an average platform, each 100 feet of added depth increases the probability of a company-reported incident by 8.5%." Various factors—including increased reservoir pressure and temperature when drilling in deeper water, unstable rock and sediment, and increased stresses on pipeline infrastructure when drilling in deeper water—can increase the risk of blowouts. This risk is not hypothetical. In October 2020, as hurricane Zeta approached Transocean's Deepwater Asgard, the well experienced a "kick"—an eruption of oil, gas, or other fluids from deep underground that can lead to a blowout. Company officials directed the Deepwater Asgard to remain attached to the well, resulting in damage to the rig, a BSEE safety alert, and a lawsuit by workers on the platform. The mile-deep well that the Deepwater Asgard was drilling was capable of spilling 313,100 bbls per day for up to three months, and according to Rick Steiner, a marine conservationist and former professor at the University of Alaska, it could "easily" have become another BP spill. In 2021, an accident involving the Transocean Deepwater Pontus drillship, which involved a blowout preventer falling onto the wellhead during a routine operation, highlighted the potential for a serious accident during deepwater drilling. The risks are much more severe with ultra-deep and deepwater drilling because of the extreme conditions with high pressures and temperatures. Conventional oil rigs are unable to drill at these ultra-deepwater reservoirs because of the extreme conditions. The extreme pressures encountered in ultra-deepwater drilling, which can exceed 30,000 psi, pose significant challenges to drilling	independent third parties assessing the site-specific equipment qualifications to ensure they meet all technical and regulatory standards. Deepwater oil and gas development in the GOA is carefully managed through a robust network of offshore safety standards including established containment consortiums, increased BOP requirements, strengthened regulations, and more rigorous permitting processes following the *Deepwater Horizon* event. In addition, HPHT operations undergo an enhanced, specialized review process to ensure that equipment, procedures, and engineering designs meet the highest safety expectations. Two HPHT developments are already successfully producing in the GOA, and upcoming projects—such as Kaskida—will undergo the same rigorous level of review. These evaluations are conducted by BSEE and typically involve years of technical analyses, numerous multidisciplinary meetings, and thousands of pages of documentation prepared by independent experts to assess equipment performance under site-specific conditions. HPHT operations receive even more scrutiny than standard offshore projects. This heightened level of oversight is designed to further reduce the risk of well-control incidents and provide additional assurance that offshore energy development is being carried out safely and responsibly. See response to BOEM-2025-0022-0024 for additional information.

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		operations, as these conditions complicate well control and increase the likelihood of barrier and control failures, ultimately heightening the risk of catastrophic blowouts and hydrocarbon releases into the marine environment. The extreme temperatures encountered in ultra-deepwater drilling, which can reach up to 300 °C at the bottomhole, present significant challenges for drilling operations, as these high thermal conditions can adversely affect the properties of drilling fluids and cement, leading to increased risks of well control failures and compromised structural integrity of the wellbore.	
Earthjustice et.al. - A	BOEM-2025-0022-0026	There are also geological hazards that are intensified in deepwater environments. In the deepwater formations there may be faults, sand, or gas pockets that pose hazards. For example, one operator in the Gulf experienced a sediment washout of one of the drilling legs when it encountered sand. The unexpected geological environment can also cause unexpected pressure events. Additionally, the presence of gas hydrates in deepwater complicates drilling operations, as any disturbance to the environmental conditions—such as those caused by drilling fluids—can lead to hydrate dissociation that may release gas and water into the wellbore, causing reservoir instability, landslides, and potential blowouts. Furthermore, the mechanical stability of the strata above hydrate-bearing reservoirs can be compromised, increasing the risk of well control failures and making the drilling process inherently more hazardous compared to conventional drilling operations.	Plans submitted to BOEM are reviewed for geological and geophysical hazards through reviews conducted by BOEM's Office of Resource Evaluation. In the Geological Review, review items include: drilling targets, shallow hazards, domal material, deep bright spots and faults and other possible lost circulation zones, geopressure and possible abnormal pressure zones, distances from the nearest well or platform, geologic setting of the trap, H_2S information and classification, and any other relevant remarks and conclusions. In the Geophysical Review, review items include shallow hazards evaluation, a high- resolution survey report, data, water depth, shallow gas hazards, faults, available seismic evaluation, structural data, bright spots, deep faults, domal material, and pressure zones. BOEM's Geological Review for DOCD N-10256 determined that the potential for shallow gas at both drill centers and all wells is negligible. Additionally, the designation of the project area as H_2S absent was verified.

Earthjustice et. al. - B	BOEM-2025-0022-0027	**V. BP's DOCD DOES NOT DEMONSTRATE THAT BP HAS THE EXPERTISE, EXPERIENCE, OR EQUIPMENT TO DRILL A HIGH PRESSURE HIGH TEMPERATURE WELL OR RESPOND TO A SPILL.** Earthjustice's 6/30/2025 letter provided summary comments from Harvey Consulting Attached Letter are as follows: 1. BP's DOCD lacks sufficient information to confirm BP is qualified to drill the proposed deepwater HPHT wells, that the proposed equipment is appropriate and reliable to meet the 30 C.F.R. §550.202 threshold of "safe" operation, and the information necessary by 30 C.F.R. §550.243(e) describing any new or unusual technology planned for use. 2. BP's DOCD does not demonstrate that BP has the experience, expertise, and equipment to conduct safe drilling and emergency response operations for the proposed HPHT Kaskida drilling operations. BP's DOCD confirms that it intends to pursue, but does not currently have, HPHT qualifications. BP's DOCD proposes a drilling plan for which it is not currently qualified. 3. BP's DOCD does not include a list of deepwater HPHT wells drilled internationally so far, safety records, or whether experienced BP staff and contractors involved in those wells will be assigned to the Kaskida project. 4. BP's DOCD lacks descriptions of key safety and pollution prevention features for all rigs it proposes to use.	It is not fiscally or logistically practical to require an applicant/operator spend years and millions of dollars qualifying equipment before receiving DOCD approval. In addition, requiring such at the outset would likely discourage the continued development of technologies needed to safely operate in these GOA environments. Regardless, the HPHT qualifications process is a multi-year effort that began prior to receiving approval for the DOCD. It is a prerequisite for receiving the required APMs (Application for Permit to Modify) from BSEE, which occur following DOCD approval. The DOCD approval does not guarantee that drilling can commence. All qualification requirements must be met before APMs are issued. If these stringent requirements are not satisfied, APMs will not be granted, preventing BP from completing any wells for the project. See response to BOEM-2025-0022-0024 for additional information. The OCSLA multistage review process for plans and permits ensures that these types of activities are reviewed and considered multiple times to ensure the safety of the activity and environment prior to commencement of drilling or modifying production wells. These processes and technological requirements have been strengthened in the 16 years since the *Deepwater Horizon* event.

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		5. BP's Macondo well was not designed, implemented, or handled safely, leading to a major well blowout in 2010. BP's DOCD lacks information on the steps BP has taken to address the deficiencies identified in the BP Macondo well blowout investigations, ensuring that those lessons are learned and not repeated at Kaskida.	
Earthjustice et. al. - B	BOEM-2025-0022-0028	6. BP proposes two Mobile Offshore Drilling Units (MODUs) to drill the relief wells, the Black Lion and Black Hornet, each equipped with 15,000 psi blowout preventers (BOPs). The contract end dates for both units are in 2027, well before the scheduled completion of the six Kaskida wells by June 30, 2030, indicating that BP has not proposed relief well capability for the entire duration of the drilling operations. 7. BP's DOCD lacks sufficient technical details to support the proposed maximum blowout flow rate of 45,000 bopd for 90 days, with an estimated spill volume of up to 4 million barrels for the HPHT Kaskida deepwater wells. By comparison, BP's Macondo well blowout lasted 87 days, spilling an estimated 4.9 million barrels at a peak flow rate of 62,000 bopd. Chevron's recent HPHT Anchor Project estimated it would take 177 days to mobilize a rig, drill a relief well, and conduct kill operations, with a total worst-case spill volume estimated at 5.9 million barrels. BP's DOCD does not explain how it estimates that a spill from a HPHT Kaskida well would be smaller than the Macondo spill, or Chevron's Anchor Project or how it	See responses to BOEM-2025-0022-0024 and BOEM-2025-0022-0027 regarding technical qualifications and WCD reviews. While similar, there are differences between the reservoir and drilling site characteristics between the Anchor Project cited in the comment and this proposed project. In the case of this proposed Kaskida Project, drilling relief wells in these formations does not require HPHT equipment as the calculations for maximum pressure at the mudline are different for completions and drilling (full evacuation of the wellbore with formation fluids vs partial evacuation of the wellbore with formation fluids with some heavyweight mud remaining). When drilling the relief well, a 20k BOP is not required and kill weight fluid would be in place within the relief well before intercepting the blown out well. Additionally, prior to the relief well intercepting the blown out well, the operator would attempt to bullhead kill the shut-in well by injecting heavy weight mud through the capping stack. If pressure during drilling were suddenly higher than expected and required HPHT equipment, the APMs (both for Chevron and for BP) will prevent them from performing any additional operations in the HPHT environment if they do not propose and have approval for HPHT equipment. HPHT conditions are only present during the proposed completion operations, which will require a separate

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		would be contained within 90 days using one of the two relief well drilling rigs proposed with insufficient 15,000 psi-rated blowout preventers that are not designed for HPHT well control or the Marine Well Containment Company (MWCC) 20,000 psi capping stack, which BP reports may or may not be available. 8. BP's DOCD proposes BOP systems of a lesser standard than Chevron used, and BOEM approved, for Chevron's recent HPHT Anchor Project, which was drilled with the Transocean *Deepwater Titan* drillship using dual 20,000 psi BOP subsea stacks and a 20,000 psi choke manifold. 9. BP's DOCD tentatively, and without guarantee, proposes using MWCC Expanded Containment Response System (ECRS), which is rated with a 20,000 psi well capping capability "when it is available," but provides no evidence of a contract with MWCC to verify this equipment will be available if needed. 10. BP's DOCD lacks proposed technical solutions to identify and correct cement integrity deficiencies, which contributed to BP's Macondo blowout and are identified by experts as a leading HPHT technology gap. 11. BP's DOCD does not address known and well-documented increased blowout risk from deep HPHT wells, which is estimated at six to seven times higher than a non-HPHT well by the International Association	APM. BP will be required to demonstrate that all HPHT qualifications, among other factors, have been met before an APM for completion activities would be approved. Regarding the MWCC 20,000 psi capping stack, the DOCD states that BP is a member of the Marine Well Containment Company ("MWCC"), currently has access to MWCC's Interim Containment Response System ("ICRS") and will have full access to MWCC's Expanded Containment Response System when it is available. "When it is available" is referring to the time it takes to prepare, assemble, and mobilize the equipment. This equipment is verified at least annually by BSEE to ensure that it is available, properly maintained, and ready for deployment. The BSEE regulations on cement were strengthened following the *Deepwater Horizon* event. The Final Drilling Safety Rule (88 FR 57334) includes updated casing and cementing requirements, updated testing and verification requirements for safety features such as auto shear rams and BOPs, expanded BOP requirements for deepwater drilling operations, and updated provisions to train personnel in well monitoring, control, and maintenance of equipment. Cement requirements are outlined in 30 CFR Subpart D. Applicants must have a registered professional engineer involved in the casing and cementing design process. Following the DOCD process, this engineer must sign a certification, which is to be submitted with the APD, that certifies that the casing and cementing design is appropriate for the purpose for which it is intended under expected wellbore conditions, and is sufficient to satisfy specific tests and requirements. Therefore, all offshore permit applications require certification of the casing and cementing design process. The BSEE District Manager also has authority to require any additional logs based off the cement job

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		of Oil & Gas Producers based on prior U.S. and international drilling records. 12. BP's DOCD acknowledges that mechanical response equipment is limited to 3-foot seas and 20-knot winds. The average sea conditions in the Kaskida drilling location are typically 4-5 feet seas with 14-15 mph winds, making mechanical response ineffective, if not impossible, most of the time. Under U.S. law and regulation, mechanical recovery is the primary mandated response method for oil spills under the Oil Pollution Act of 1990 (OPA 90). Offshore facilities regulated by BSEE must comply with 30 C.F.R. Part 254, which requires drilling operators to demonstrate they have access to sufficient boom, skimmers, vessels, and storage to meet specific oil spill response planning standards for a worst-case discharge. Dispersants and in-situ burning cannot meet the mechanical recovery requirements of OPA 90 because they do not physically remove oil from the environment. Therefore, BP's proposed DOCD does not demonstrate it has the requisite mechanical response capability for the Kaskida location. According to BP's proposed plan, the environmental conditions in the Gulf will often surpass the operating limits of available mechanical oil spill cleanup equipment, preventing BP from effectively responding to a blowout with mechanical response tools or resulting in minimal actual oil recovery.	if it is warranted and BSEE engineers ensure that the cement modeling is correct, which shows the cement quality and coverage of a casing/liner string. See responses to BOEM-2025-0022-0024 and BOEM-2025-0022-0051 for more about WCD reviews and the BSEE approved regional OSRP supporting the proposed project. BSEE concluded the regional OSRP, when taken as a whole, adequately demonstrates that the owner/operator is prepared to effectively respond to a spill from their proposed offshore facility(ies) in accordance with the regulations. During adverse weather conditions, such as seas being greater than three (3) feet, the use of larger recovery and storage vessels, oleophilic skimmers, and large offshore boom will be maximized.

C.4 Topic 4: Hurricanes and Weather Concerns

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0029	Hurricanes complicate the blowout risks, as the storms are known to "play a large role in the occurrence of large spill events and occurrence of blowouts resulting in loss of well control in the Gulf of Mexico." Meanwhile, climate change has been linked to increased hurricane strength, volatility, and frequency, particularly in the Gulf. Emerging scientific consensus points to high water temperatures enabling the rapid intensifications of hurricanes Helene and Milton.	BSEE's regulatory oversight of offshore oil and gas operators and activities includes both preparations (including when shut-in and movement of rigs off site is required) and reporting requirements for hurricanes, tropical storms, and severe weather, which can be found at: https://www.bsee.gov/reporting-and-prevention/hurricane. With increased forecasting capabilities and the long history of storm activity in the Gulf of America, BOEM, BSEE and industry are well prepared to address storms, and these conditions are considered in operations and oil spill response requirements. See Chapter 3.4 of the SID and Chapter 4.0.2.1 for more information on climate change and its potential influence on storm frequency and intensity in the GOA.

C.5 Topic 5: Protected Species and Sensitive Habitats

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0030	As BOEM is aware, the critically endangered Rice's whale (Balaenoptera ricei) has been significantly impacted by Gulf oil and gas development. With a remaining population of approximately 50 individuals, the Rice's whale is one of the most imperiled marine mammals in existence and is especially vulnerable to low levels of human-caused mortality—in particular from vessel strikes, noise, oil spills, and pollution connected to offshore oil and gas operations in the Gulf. Scientists believe that the loss or harm to even one whale could lead to the species' extinction. BP's Kaskida Project proposes drilling in ultra-deep waters under extreme pressure in areas which are located near the proposed critical habitat for Rice's	See response to BOEM-2025-0022-0008. As stated in the COAs outlined in the SEA, the operator will be required to comply with the most recent consultations, opinions, mitigations, protocols, and COAs available at the time. On May 20, 2025, NMFS published its Biological and Conference Opinion on BOEM and BSEE's Oil and Gas Program Activities in the Gulf of America (NMFS 2025b) and associated Attachments and Appendices (NMFS 2025a), which contain the protocols BOEM currently applies for ESA compliance. The most recent studies and stock estimates pertaining to Rice's whale have been factored into the NMFS 2025 Biological and Conference Opinion. Rice's whale critical habitat is currently proposed by NMFS in the northern Gulf from the 100 m (328 ft) to 400-m (1,312 ft) isobath which is not considered

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		whales. BOEM must disapprove this project as a result of the extreme risks and must at least undertake a careful, calculated, and thorough examination of the impacts before approving this action.	ultra-deep waters. The proposed Kaskida Project and associated drilling activities are roughly 70 miles from the nearest proximity to the proposed critical habitat. Considering most oil spills are <50 bbl, it would be highly unlikely for a small spill of this size in the proposed action area of approximately 1,695 m (5,561 ft) to reach the Rice's whale proposed critical habitat. However, spill dispersion and potential impacts depend on a variety of factors, such as spill magnitude, frequency, timing, location, and the meteorological and oceanographic conditions at the time (NRC 2003). Past oil spills have contributed to the body of knowledge and lessons learned as part of BOEM, BSEE, and other agencies' continual efforts to reduce risks through strengthening regulatory standards, oversight, enforcement, and inspection. Lessees are required to perform OCS oil- and gas-related activities in accordance with regulatory requirements, such as the National Contingency Plans, which provide effective control and containment, and limit the volume and area of exposure. BOEM notes that final action by NMFS on the proposed critical habitat designation for Rice's whale is currently delayed until July 2027. Nevertheless, critical habitat designation would not be expected to warrant project modification since the proposed activities are well outside the spatial extent of the proposed critical habitat area and are not expected to result in any appreciable adverse effects.
Earthjustice et.al. - A	BOEM-2025-0022-0031	The act of drilling wells indisputably harms the surrounding marine environment. The noise from pile driving when installing platforms generates sounds with a "very high source level," and loud noises can disturb wildlife, cause physiological stress, and even impair hearing. Operating and servicing offshore platforms creates multiple sources of pollution, including inevitable smaller oil spills, debris, and other discharges that foul the nearby waters. Drilling requires considerable vessel and helicopter traffic that further floods the	These factors are considered in both the benthic biological review and Protected Species Step Down Determination review conducted by BOEM's Office of Environment prior to approving any proposed activities. Impact pile driving is not part of the proposed action in this DOCD. The proposed action and protocols found in the NMFS 2025 BiOp Attachments and Appendices (NMFS 2025a), as applicable, prevent or minimize potential effects. For example, the NMFS 2025 BiOp protocol A.6 Vessel Transit within the Rice's Whale Area as identified in the 2020 Biological Opinion's

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		marine habitat with noise and, in the case of the additional vessels, risks collisions with animals that can lead to injury or death. To assess what all that means for the immediate area, BOEM must bring to the fore information particular to the drilling location to better understand the site-specific effects. Yet the EIA demonstrates that BP's efforts to document effects for individual locations is insufficient, given the potential impact. That lack of effort may be a byproduct of BOEM's assumption, at least when considering potential harms to some species, that individuals are uniformly distributed across the Gulf. For example, BOEM concluded in a recent lease sale EIS that, for sea turtles, the "level of impacts" under multiple alternatives "would be the same" because of "the free-swimming ability and wide distribution of species." But readily available information demonstrates that where oil and gas activity occurs and which species it affects matter a great deal. The loggerhead turtle critical habitat designation discusses different habitat types critical to continued existence of loggerheads, including Sargassum habitat in the Gulf. Furthermore, the Gulf of Mexico Fishery Management Council's most recent review of Essential Fish Habitat (EFH) designations contains species descriptions, maps of EFH, and discussions of the underlying importance of different habitat types and different locations.	Reasonable and Prudent Alternative (2020 RWA) requires vessel restrictions in the event any service vessel transits the Rice's whale area to get to the project area. The NMFS 2025 BiOp A.2 Marine Debris Protocol is designed to prevent or substantially reduce accidental marine debris, thereby preventing or substantially reducing risk to protected species. Further, the NMFS 2025 BiOp A.3 Vessel Strike Avoidance and Injured and/or Dead Aquatic Protected Species Reporting Protocols require monitoring during transit and maintaining a separation distance while underway if marine mammals are detected. See response to BOEM-2025-0022-0030 for additional information on ESA compliance. While individual marine mammals or sea turtles may be attracted to offshore structures, it is unlikely that high levels of species aggregations would occur at this specific site. Sea turtles are distributed throughout the entire GOA, and are highly migratory; individuals migrate into nearshore waters as well as other areas of the GOA, North Atlantic Ocean, and Caribbean Sea. Rice's whale critical habitat is currently proposed by NMFS in the northern Gulf from the 100 m (328 ft) to 400-m (1,312 ft) isobath, which is not considered ultra-deep waters. Manatees would also not be expected in ultra-deep waters. Most other marine mammal species regularly found in the GOA have wide-ranging distributions throughout and outside the GOA. The project area for the Proposed Action overlaps with Essential Fish Habitat for a variety of highly migratory fishery species. These species have a wide range of EFH within the GOA. For some, their EFH also extends into the Caribbean and/or up the U.S. Atlantic Coast. The oil and gas EFH consultation applicable to the Proposed Action can be found at https://www.boem.gov/regions/gulf-america-ocs-region/oil-and-gas-efh-consultations. The benthic

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			biological review conducted by BOEM's Office of Environment prior to approving any proposed activities accounts for adopted conservation recommendations resulting from the 2022 EFH consultation.
Earthjustice et.al. - A	BOEM-2025-0022-0032	Ultra-deepwater drilling in the Gulf threatens sensitive deep-sea ecosystems and marine life, including endangered species. Among the species at risk are the endangered Kemp's ridley sea turtles, which rely on the Gulf's waters for feeding and nesting. The critically endangered Rice's whale inhabits the waters of the Gulf along the continental shelf break. The fragile deep- sea coral communities, which provide essential and delicate deep-sea habitats, will be harmed and were severely damaged by the BP oil spill. The disturbance and potential oil spills from drilling can devastate these delicate deep-sea ecosystems, leading to long-term impacts on biodiversity.	These factors are considered in both the benthic biological review and Protected Species Step-Down Determination review conducted by BOEM's Office of Environment prior to approving any proposed activities. Rice's whale critical habitat is currently proposed by NMFS in the northern Gulf from the 100 m (328 ft) to 400-m (1,312 ft) isobath which is not considered ultra-deep waters, as noted above in the response to BOEM-2025-0022-0030.
Earthjustice et.al. - A	BOEM-2025-0022-0033	NMFS' five-year study, titled "Trophic Interactions and Habitat Requirements of Gulf of Mexico Rice's Whales" was completed in 2021. The study was designed to use multiple lines of research—including photo-identification and mark-recapture analyses, tagging of individual whales, sampling of both the whales' fecal matter and the prey composition of the area they forage, monitoring of potential habitat with passive acoustics, mapping of the distribution of the whales' prey, and determination of the oceanographic features associated with their habitat—to develop "a comprehensive ecological understanding" of the species' habitat use. Together and individually, these multiple lines of evidence demonstrated that the Rice's whale persistently inhabits the western and central Gulf between the 100- and 400-meter isobaths, in addition to occupying the DeSoto Canyon in the eastern Gulf of Mexico as was previously documented.	See response to BOEM-2025-0022-0030 for additional information on ESA compliance and Rice's whale proposed critical habitat. This DOCD must adhere to the NMFS 2025 BiOp, which incorporated the studies cited in this comment. Chapter 3.2 of the SEA, in addition to Chapter 4.8 of the 2025 GOA PEIS, from which this SEA tiers, discusses the publicly available and relevant scientific literature on this topic. Rice's whale critical habitat is currently proposed by NMFS in the northern Gulf from the 100 m (328 ft) to 400-m (1,312 ft) isobath, which is not considered ultra-deep waters.

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		Based on the five-year study and other evidence, NMFS concluded in 2023 that the "best scientific information available" supported the designation of this area as critical habitat that is "essential to the conservation" of Rice's whales. On July 24, 2023, NMFS proposed to formally designate areas in DeSoto Canyon and in the western and central Gulf as the species' critical habitat under the ESA. 88 Fed. Reg. at 47,453. That designation, when final, carries with it a prohibition on federal activities that destroy or adversely modify this habitat. 16 U.S.C. § 1536(a)(2). NMFS has taken public comment on this proposal and is expected to issue a final rule soon. Evidence of the species' year-round occurrence in the central and western Gulf appears in NMFS' five-year study. This evidence includes two studies that used passive acoustics to detect Rice's whale vocalizations with hydrophones placed at multiple survey sites along the shelf break. The first of these two studies, conducted from 2016 to 2017, detected Rice's whale vocalizations as frequently as one in every six days at the westernmost survey site ("Flower Garden West") with no obvious evidence of seasonality. The second study, conducted from 2019 to 2020, detected more than twice as many Rice's whale calls at the Flower Garden West site as the first study, detecting Rice's whale long-moan calls on one in every three survey days. Rice's whale long-moan calls were also detected on nearly one in every four survey days at a new survey site in the western Gulf offshore Corpus Christi, Texas. Both studies detected Rice's whale calls in the western Gulf year-round without a strong seasonal cycle, indicating the whale's persistent presence in this area. As further evidence of Rice's whale habitat, the Draft PEIS cites another component of NMFS'	

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		five-year study, which demonstrates that the whale's primary prey favors the same shelf-break habitat throughout the northern Gulf of Mexico where the whales have been shown to persistently occur.	
Earthjustice et.al. - A	BOEM-2025-0022-0034	There have also been visual detections from the government's large vessel surveys conducted from 2003 to 2019, which included one confirmed Rice's whale detection in the western Gulf of Mexico. This data understates the visual evidence of the whale's presence in the western Gulf. Since 2019 there have been additional confirmed sightings of Rice's whales in the western Gulf, including two confirmed sightings by NOAA Fisheries scientists during aerial surveys conducted in April 2024 and one confirmed sighting by NOAA Fisheries scientists in late 2024 during a vessel survey for marine mammal and seabird abundance and distribution. In addition, two fishermen reported seeing a Rice's whale off the coast of Galveston in summer 2023, which they documented in a video. There have also been two recent habitat suitability analyses from NOAA. Both analyses delineate the same shelf-break waters across the northern Gulf between the 100- and 400-meter isobaths as highly suitable habitat for the whale. The first analysis identified habitat in the northwestern Gulf based on three largely independent lines of information: sightings data from the government's large-vessel surveys (described above), acoustic data from NMFS' multi-year monitoring effort (described above), and a habitat suitability model rooted in salient oceanographic features, including water depth, bottom temperature, and primary productivity. The second NOAA analysis developed a model of the whale's distribution based on bathymetric and oceanographic features and predicted suitable habitat for the whale	See response to BOEM-2025-0022-0033.

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		throughout the Gulf in areas between 100 and 400 meters depth. In addition, NMFS has done spatial estimates of Rice's whale distribution and density across the Gulf. These estimates indicate that at least one third (n=33.3 to 38.8%) of the population occurs in the Central and Western Planning Areas in each season of the year. Importantly, an analysis performed in 2023 with the same density information concluded that about 94% of the population is contained within the same strip of habitat located between the 100- and 400-meter isobaths.	
Earthjustice et.al. - A	BOEM-2025-0022-0035	Oil and gas activities in the Gulf pose a serious threat to the continued survival of the Rice's whale. Oil spills can cause physical injury, behavioral changes, or death, depending on the size and duration of the spill. In 2010, the BP Deepwater Horizon oil spill disaster "heavily impacted" the already diminished Rice's whale population. The federally-led Deepwater Horizon Natural Resource Damage Assessment Trustees estimated that the disaster caused a 22% decline in the Rice's whale population. The regular occurrence of Rice's whales in the Western and Central Planning Areas, as detailed above, puts them at greater risk of exposure to a large oil spill. Each one of the blowout scenarios modeled by BOEM in its 2021 analysis of catastrophic spill events—whether they occurred in shallow or deep water, whether near the shelf break or hundreds of kilometers away—would result in contamination of Rice's whale habitat, as illustrated in the figures below.	The 2025 GOA PEIS, from which this SEA tiers, acknowledges that there is always still some level of risk of large oil spills even with rigorous safety regulations in place. However, a low-probability catastrophic spill is, by definition, not reasonably likely to occur. Therefore, impacts to marine mammals from a low-probability catastrophic spill similar in nature to the *Deepwater Horizon* oil spill, are instead considered in the *Gulf of Mexico Catastrophic Spill Event Analysis: High-Volume, Extended-Duration Oil Spill Resulting from Loss of Well Control on Gulf of Mexico Outer Continental Shelf* (BOEM 2021b). Even with the rigorous safety standards in place, operators are required to prepare for the unlikely occurrence of a large oil spill; the regional OSRP prepared by BP, as required by OPA and BSEE regulations, ensures that BP is prepared to respond to a large oil spill, in the extremely unlikely event one occurs.

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		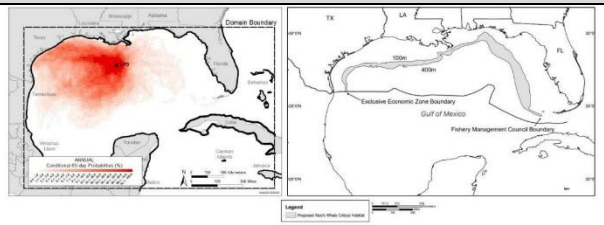 The figure on the left is taken from BOEM's revised model of oil spill trajectories from a catastrophic spill in the northern Gulf of Mexico (Fig. 2-10, Gulf of Mexico Catastrophic Spill Event Analysis: High-Volume, Extended-Duration Oil Spill Resulting from Loss of Well Control on the Gulf of Mexico Outer Continental Shelf, 2nd Revision, 2021), where the triangle marked "LP3" denotes the launch point of the modeled spill. When compared to the figure on the right, which shows NMFS proposed designated critical habitat for Rice's whale, a broad overlap between the projected oil exposure area of Rice's whale habitat can be seen.	
Earthjustice et.al. - A	BOEM-2025-0022-0036	Moreover, a recent and ongoing spill, the Garden Island Bay oil spill, is already seeping into critical habitat for Rice's whale. Last month, an 82-year-old well near Louisiana's coast suffered a blowout and spewed oil for over a week. Below are recent maps showing the sheen has reached critical habitat for the Rice's whale. The cumulative impacts of multiple spills over time is an existential threat to the species.	The Garden Island Bay oil spill occurred in State waters and outside the expected operational footprint of this proposed project. According to USCG, air monitoring did not indicate any immediate concerns and as of May 3, 2025, one oiled bird was observed with no other injuries or wildlife impacts reported (USCG 2025). While the Garden Island incident occurred in State waters, BSEE was a coordinating agency on the response effort as a relevant stakeholder. BOEM considered the potential effects of oil spills in Chapter 3.2.4 of the SEA, and in Chapter 4.8 of the 2025 GOA PEIS, from which this SEA tiers. These chapters discuss the reliable publicly available and

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		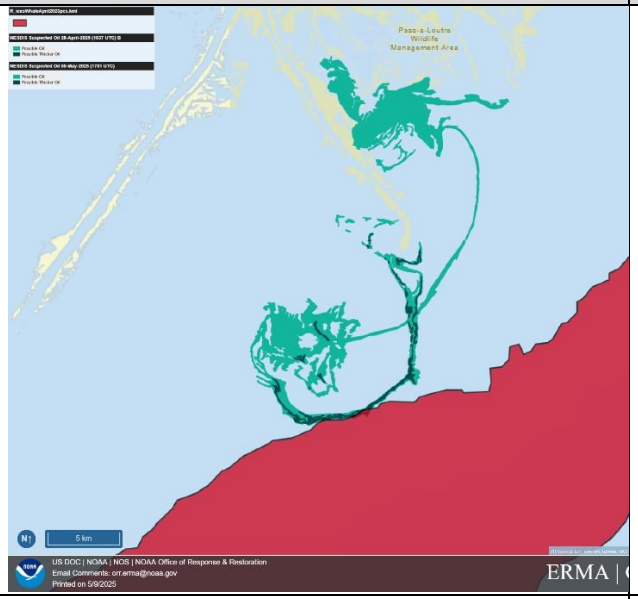	relevant scientific literature on this topic. Given the distance of the Kaskida Project from the proposed critical habitat for the Rice's whale, it is unlikely that a reasonably foreseeable spill less than 1,000 bbl (noting the majority of small spills [>95%] are less than 50 bbl) could reach the proposed critical habitat.
Earthjustice et.al. - A	BOEM-2025-0022-0037	In addition to harm from oil spills, Rice's whales are particularly susceptible to serious injury or death resulting from vessel strikes because they spend most of their time near the water's surface. In general, vessel strikes have been identified as one of the top human threats to large whale populations globally, coinciding with a four-fold increase in marine vessel density from the early 1990s through 2012. While larger ships have long been associated with severe strike-related injury, there is increasing recognition that smaller vessels can also cause mortality, particularly when traveling at faster speeds. The biology of the Rice's whale leaves it particularly vulnerable to harm from vessel strikes, because the whale spends a considerable amount of time at night within the upper 15 meters of the water column, placing it within the draft depths of most commercial vessels. This behavior significantly raises the risk of vessel strikes.	BOEM considered the potential effects of vessel strikes on marine mammals in Chapter 3.2.4 of the SEA for this DOCD, and in Chapter 4.8 of the 2025 GOA PEIS, from which this SEA tiers. These chapters discuss the reliable publicly available and relevant scientific literature on this topic. To prevent or minimize potential impacts from vessel strikes on marine mammals, BOEM applies the NMFS 2025 BiOp A.3 Vessel Strike Avoidance and Injured and/or Dead Aquatic Protected Species Reporting Protocols; and A.6 Vessel Transit within the Rice's Whale Area as identified in the 2020 Biological Opinion's Reasonable and Prudent Alternative (2020 RWA), which require monitoring during transit and maintaining a separation distance while underway if marine mammals are detected.

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		According to NMFS' 2020 analysis, oil and gas vessel traffic accounts for about 35% of the total vessel strike risk within Rice's whale habitat. That total increases to 40% when updated to incorporate NMFS' most recent density estimates for the species. Two studies demonstrate that the behavior of the Rice's whale increases the species' vulnerability to vessel strikes. These studies analyze information on diving, foraging, and resting behavior obtained from two tagged Rice's whales over periods of 25 hours or greater. Both whales were observed within 15 meters of the sea surface for 85% of the time at night, highlighting their vulnerability to vessel strikes.	
Earthjustice et.al. - A	BOEM-2025-0022-0038	In addition to vessel strikes, noise from high-energy seismic surveys used in oil and gas exploration causes behavioral disturbance and physical injury, including permanent hearing impairment and chronic interference with communication and other vital activity. Drilling wells causes harm from deafening pile driving when installing platforms and inevitable oil and fluid spills into the water. Acoustic communication is essential to the life functions of baleen whales like the Rice's whale. Rice's whales require quiet conditions sufficient to "receive and interpret sound for the purposes of navigation, communication, and detection or [sic] prey, predators, and other threats," without significant impediment. For example, masking of the quiet contact calls between baleen whale mothers and their calves, which have been documented in diverse baleen whale species, could lead to separation, with potentially deadly consequences to the calf, or a reduction in calf feeding events leading to energetic consequences. Masking of other calls can result in missed	BOEM considered the potential effects of noise on marine mammals in Chapter 3.2.3 of the SEA, and in Chapter 4.8 of the 2025 GOA PEIS, from which this SEA tiers. These chapters discuss the best publicly available and relevant scientific literature on this topic. Seismic surveys and impact pile driving are not part of the proposed action in this DOCD.

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		breeding opportunities or affect social cohesion, especially in species that, like Rice's whale, do not always vocalize or can go hours or days without vocalizing. Rice's whales produce low-frequency calls (including the long-moan call), leaving them particularly vulnerable to masking by the low-frequency sounds produced by seismic surveys. Rice's whales' long-moan calls are likely to be of significant import to the species (e.g., for breeding or foraging), given their rate of call production, the distances their calls propagate (20 to 75 kilometers), and their association with groups in at least some instances.	
Earthjustice et.al. - A	BOEM-2025-0022-0039	Due to the high energy cost of their foraging strategies, baleen whales are limited in their ability to compensate for impairments in their foraging regimes. Based on the literature concerning right, blue, and humpback whales, it can be assumed that Rice's whales have similar requirements to carefully maintain their energy budgets, and that impairment can lead to energetic and fitness consequences for the species, as documented in other marine mammals. Indeed, avoiding impairment may be of particular concern for Rice's whales given what a tagging study has documented of their foraging behavior: deep, energetically costly dives with comparatively low rates of feeding lunges, undertaken in some cases by individuals in poor body condition. As the authors of that tagging study have stated, "any direct impact on their fitness" could lead to the species' extinction. Rice's whale habitat already experiences persistent elevated levels of ambient noise, particularly in the western and central Gulf of Mexico where seismic activity is the highest. A recent study found that ambient noise levels at Rice's whale call frequencies (i.e., the 60-160 Hz	BOEM considered the potential effects of noise on marine mammals in Chapter 3.2.3 of the SEA for this DOCD, and in Chapter 4.8 of the 2025 GOA PEIS, from which this SEA tiers. These chapters discuss the best publicly available and relevant scientific literature on this topic. Seismic surveys are not part of the proposed action in this DOCD.

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		band) were approximately 7 dB re 1µPa2/Hz higher at a recording location in the Rice's whale habitat in the western Gulf relative to the whale's habitat in DeSoto Canyon in the eastern Gulf. Ambient noise levels were even higher at other recording locations across the whale's habitat in the central Gulf. With these levels of ambient noise, as NMFS' expert status review put it, "whales would be unlikely to hear their nearest neighbors." Similar decreases in communication space, resulting from chronic noise, have raised conservation concerns for other baleen whale species. Seismic surveys for oil and gas exploration contribute significantly to ambient noise levels in the northern Gulf of Mexico. Multiple studies have shown that seismic airguns dominate the soundscape through much of the northern Gulf, including in Rice's whale habitat, with other industrial noise and shipping also contributing. Seismic airgun noise has been demonstrated to propagate long distances in the Gulf of Mexico, over several hundred kilometers. Some individual seismic surveys in the Gulf of Mexico persist for months at a time, operating day and night, and the frequency of activity makes seismic noise a chronic stressor in many parts of the Gulf. It has repeatedly been hypothesized, including by NMFS, that the lower Rice's whale densities detected outside the DeSoto Canyon may be due to higher levels of ambient noise.	
Earthjustice et.al. - A	BOEM-2025-0022-0040	Given the Rice's whale's vulnerability to extinction, even a single death, serious injury, or profound behavior disruption from unmitigated noise impacts stemming from the Proposed Action could undermine the ability of the population to recover. Unmitigated noise impacts may cause these consequences. Even with the currently-applied	BOEM considered the potential effects of noise on marine mammals in Chapter 3.2.3 of the SEA, and in Chapter 4.8 of the 2025 GOA PEIS, from which this SEA tiers. These chapters discuss the best publicly available and relevant scientific literature on this topic. Seismic airgun surveys are not part of the proposed action in this DOCD.

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		mitigation measures aimed at avoiding seismic blasts when a Rice's whale is observed within 500 meters of an airgun array, seismic noise may cause masking, behavioral changes, or other disruptions to the essential life functions of Rice's whales, as detailed above. Recognizing the significance of this evidence, federal wildlife agencies have advised BOEM to completely avoid development activities in Rice's whale habitat in the western and central Gulf. Early in 2022, NMFS recommended that "no offshore wind leasing and/or development occur within the boundaries of the currently known distribution of Rice's whales in the western and central [Gulf]." More recently, the Marine Mammal Commission made similar recommendations for future oil and gas leasing in the Gulf. The Commission cited the Soldevilla (2022) study, noted the species' "precarious conservation status" and its "confirmed presence in the western Gulf," and recommended that BOEM therefore "exclude areas with 100 to 400 m depths from proposed lease sales in the [Gulf]." BOEM has attempted to limit offshore oil and gas activities in Rice's whale habitat. In particular, in March 2023, BOEM's Proposed Notice of Sale for Lease Sale 261 informed bidders that the agency was "considering removing the area comprising the northeastern Gulf of Mexico and continental shelf break between the 100 meters and 400 meters in depth isobaths to protect Rice's Whales that may transit through the area." BOEM issued its Final Notice of Sale in August 2023, offering over 73 million acres of the Gulf for leasing while excluding blocks within Rice's whale's proposed critical habitat. See 88 Fed. Reg. 58,300, 58,303–04 (Aug. 25, 2023). BOEM also updated the lease sale's	Rice's whale critical habitat is currently proposed by NMFS in the northern Gulf from the 100 m (328 ft) to 400-m (1,312 ft) isobath which is not considered ultra-deep waters. As noted in the response at BOEM-0022-0030, the Kaskida Project is located roughly 70 miles from the closest proposed critical habitat for the Rice's whale. BOEM applies the NMFS 2025 BiOp protocol A.6 Vessel Transit within the Rice's Whale Area as identified in the 2020 Biological Opinion's Reasonable and Prudent Alternative (2020 RWA), which requires vessel restrictions in the event any vessel transits the Rice's whale area to get to the project area. BOEM continues to ensure that OCS oil and gas activities do not jeopardize the continued existence of endangered species, including the Rice's whale.

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		Protected Species Stipulation to require certain speed restrictions and other measures between the 100-meter to 400-meter isobaths. As BOEM stated, the exclusion of Rice's whale habitat provides a "reasonable balance between protecting the endangered Rice's whale" and "offering a sizeable area for leasing that will continue to meet national energy needs and provide for the well-being of citizens on the Gulf coast." BOEM also found that a lease sale with these protections would comply with its obligations "under Section 7 of the ESA to prevent jeopardy to listed species or adverse modification of designated critical habitat." Following a challenge by industry groups and the State of Louisiana, the U.S. District Court for the Western District of Louisiana preliminarily enjoined BOEM from implementing the acreage withdrawal for Rice's whale proposed critical habitat and updated species stipulation in conducting Lease Sale 261. Louisiana v. Haaland, No. 2:23-CV-01157, 2023 WL 6450134, at *12 (W.D. La. Sept. 21, 2023), order modified, appeal dismissed in part, 86 F.4th 663 (5th Cir. 2023). BOEM eventually held Lease Sale 261 without these protections on December 20, 2023. However, nothing in the district court's decision precludes BOEM from utilizing its discretion and authority at future steps in the leasing process to protect endangered species. In fact, as the Western District of Louisiana recognized, "if the government finds justification for additional measures to protect Rice's whale, it may pursue these through the Department of the Interior's oversight of lessees' exploration and production	

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		plans." Louisiana v. Haaland, 2023 WL 6450134, at *10 (citing 43 U.S.C. §§ 1340(c)(1), 1351(c) (describing Interior's ability to require modifications of exploration and production plans or cancel them to avoid environmental harm)).	
Earthjustice et.al. - A	BOEM-2025-0022-0041	BOEM's regulations require the EIA to both describe threatened species and their habitats and to analyze impacts as well as describe potential measures to mitigate impacts. 30 C.F.R. § 550.261(b), (c). And, if there is reason to believe that a protected species will be taken, the DOCD "must" include mitigation measures designed to avoid or minimize the take. Id. § 550.254(b). Yet neither the DOCD or the EIA describes the full extent of impacts to the Rice's whale nor include mitigation measures to address the impacts of the project. All the DOCD states is that transit routes will avoid the whale's "core distribution area" in the Eastern Gulf but says nothing about impacts to the population near the drill site, in the Western or Central Gulf or how it will minimize those impacts. At most, the DOCD includes voluntary measures which will not minimize harm. To the extent that the DOCD is relying on earlier NEPA reviews to substitute for an analysis of impacts to the Rice's whale, such an argument fails. The 5-year program and lease sale EIS that preceded this DOCD do not evaluate impacts to the Rice's whale. Even BOEM's most recent NEPA reviews for Gulf oil and gas activities do not account for current science and fail to consider the impacts of DOCD activities on the Rice' whale and its proposed critical habitat in the western and central Gulf. For example, in its latest EIS for Lease Sales 259 and 261, released in January 2023, BOEM only considered the species' "core habitat" in De Soto Canyon, ignoring recent	Regarding protected species and their habitats, BOEM considered the affected environment and potential impacts in Chapters 4.3 through 4.9 of the 2025 GOA PEIS, from which this SEA tiers. Regarding marine mammals and sea turtles, the analyses in Chapters 3.2 and 3.3 of this SEA discuss the publicly available and relevant scientific literature on the affected environment and potential impacts from the proposed action. Existing regulatory requirements and protective measures for protected species prevent or minimize potential impacts. Furthermore, BOEM consults with Federal, tribal, and State agencies responsible for regulatory environmental compliance to assure appropriate environmental mitigating measures are relevant and up to date, as discussed in Chapter 4 of this SEA. Any impact associated to protected species and protocols/mitigations are part of the NMFS 2025 BiOp. BOEM implements the NMFS 2025 BiOp and associated Attachments and Appendices (NMFS 2025a; 2025b) which contain protocols BOEM applies for ESA compliance, and prevents or reduces impacts on listed species. As noted above, the BP Kaskida Project is located roughly 70 miles from the closest proposed critical habitat for the Rice's whale.

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		evidence and potential impacts to this species in the rest of the Gulf. NEPA requires BOEM to use high quality, accurate scientific information in its environmental reviews and to ensure the scientific integrity of its analysis. 42 U.S.C. § 4332(2)(C). Where more recent scientific information is available in the record, the agency may not simply dismiss it and instead rely on outdated data. See Custer Cnty. Action Ass'n v. Garvey, 256 F.3d 1024, 1034 (10th Cir. 2001) (noting "agencies must take a hard look at the environmental consequences of proposed actions utilizing the best available scientific information" (cleaned up)); California v. Bernhardt, 472 F.Supp.3d 573, 624 (N.D. Cal. 2020) ("NEPA mandates that an agency use state of the art science to make sound scientific decisions."). Moreover, courts have turned away legal challenges in the lease sale context with the expectation that site-specific, operational issues "will receive ample review" that "compl[ies] with NEPA at the later exploration and production stages." Friends of the Earth v. Haaland, 583 F.Supp.3d 113, 150 (D.D.C. 2022), vacated, 2023 WL 3144203 (D.C. Cir. 2023).	
Earthjustice et.al. - A	BOEM-2025-0022-0042	The DOCD acknowledges that several threatened and endangered species are in the project area in addition to Rice's whales, including the sperm whale, oceanic whitetip shark, giant manta ray, black capped petrel, and five species of sea turtles: the leatherback turtle, Kemp's ridley turtle, hawksbill turtle, loggerhead turtle, and green turtle. BOEM's regulations require that "[i]f there is reason to believe that" species protected under the ESA "may be incidentally taken by planned development and production activities," the DOCD must "include mitigation measures designed to	Existing regulatory requirements and protective measures for protected species prevent or minimize potential impacts. Furthermore, BOEM consults with Federal, tribal, and State agencies responsible for regulatory environmental compliance to assure appropriate environmental mitigating measures are relevant and up to date, as discussed in Chapter 4 of the SEA associated with this DOCD. BOEM implements the NMFS 2025 BiOp and associated Attachments and Appendices (NMFS 2025a; 2025b) which contain protocols BOEM applies for ESA compliance, and prevents or reduces impacts on listed species.

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		avoid or minimize that incidental take." 30 C.F.R. § 550.254(b). But the DOCD fails to contain such measures for some species, even though the available information indicates that take of these species is possible. For example, the EIA accompanying the DOCD states that the project "may affect the Black-capped Petrel" via the "FPU [floating production unit] and vessel presence, marine sound, and lights, support vessel and helicopter traffic; and two types of accidents (a small fuel spill and a large oil spill)." It further notes that "[b]irds migrating over water have been known to collide with offshore structures, resulting in injury and/or death" and that "Black-capped Petrels may be attracted to lights on the FPU, installation vessels, and drilling rig, which could increase the risk of a collision." Indeed, as nocturnal feeders, black-capped petrels are especially vulnerable to harms from lighting on platforms, vessels, and other infrastructure. Yet the EIA then concludes that "[d]ue to the limited scope and short duration of drilling activities described in this DOCD and the low density of Black-capped Petrels in the Gulf of Mexico, no significant impacts are expected." This answers the wrong question—whether there may be significant impacts on the species as a whole is an issue distinct from whether take of individual members of the species may be taken by development and production activities. The available information indicates that black-capped petrels may be taken during the project, such that BP is required to include mitigation measures to reduce the likelihood of such take during project operations. These mitigation	Due to minimal activities, if any, associated with the proposed project occurring in the areas used by black-capped petrels, the low probability of black-petrels being present in the project area, and the low altitude of flight for black-capped petrels, impacts from helicopter and vessel traffic, lighting, or accidental spills is expected be negligible.

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		measures could include, for example, minimizing the number of exterior lights on the production unit and large vessels; placing down-shields on exterior lights; using black-out curtains on exterior windows; and using green or blue lights instead of white.	
Earthjustice et.al. - A	BOEM-2025-0022-0043	Development and production activities will exacerbate numerous other harms to protected species, such as oil spills that cause death or injury to petrels, turtles, whales, and fish; and more greenhouse gas emissions driving the climate crisis. For example, climate change is causing a loss of sea turtle nesting beaches and nests, changes to incubation temperatures and hatchling sex ratio, and is negatively impacting sargassum habitat, which is critical for juvenile sea turtles. And sea level rise, increased temperatures, and increased storm severity are threatening the nesting habitat of several ESA-protected birds found the Gulf of Mexico region. The DOCD and accompanying environmental analysis must properly account for and minimize these impacts as well.	Regarding protected species and their habitats, BOEM considered potential cumulative effects and non-OCS oil- and gas-related impacts in Chapters 4.3 through 4.9 of the 2025 GOA PEIS, from which this SEA tiers. Existing regulatory requirements and protective measures for protected species prevent or minimize potential impacts. Furthermore, BOEM consults with Federal, tribal, and State agencies responsible for regulatory environmental compliance to assure appropriate environmental mitigating measures are relevant and up to date, as discussed in Chapter 4 of this SEA. BOEM implements the NMFS 2025 BiOp and associated Attachments and Appendices (NMFS 2025a; 2025b) which contain protocols BOEM applies for ESA compliance to prevent or reduce impacts on listed species. BOEM acknowledges and considers that changing weather and patterns may have ongoing impacts to species and their habitats when analyzing impacts from oil and gas activities on the OCS.

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Earthjustice et. al.- B	BOEM-2025-0022-0044	**IV. BOEM MUST CONDUCT STEP-DOWN CONSULTATION UNDER THE ENDANGERED SPECIES ACT DUE TO KASKIDA'S USE OF NEW AND UNUSUAL TECHNOLOGIES.** Pursuant to the Endangered Species Act (ESA), the National Marine Fisheries Service's (NMFS) Biological Opinion (BiOp) for oil and gas activities in the Gulf of Mexico requires BOEM and BSEE to identify any "new and unusual" oil and gas technologies and perform a project-specific, step-down review for a DOCD that would utilize such technologies. "Step- down review involves the action agency [here, BOEM] and/or NMFS conducting a project- specific review of an activity to determine whether it falls under or is consistent with this programmatic opinion." The BiOp also explains that the need for step-down review varies depending on the level of uncertainty and that "[t]he greater the uncertainty, the greater the need for step-down review."[42] BOEM must complete this review before deciding whether to approve BP's DOCD. Given the uncertainty and risks involved, NMFS should conduct a stand-alone consultation before BOEM makes its decision.	BOEM has developed an internal NUT review checklist to facilitate decisions on the appropriate level of engineering and environmental review needed for a proposed technology. BOEM's Office of Environment conducted a NUT Review for this proposed project with the assistance of the engineers in the BSEE Technical Assessment Section and the senior plan coordinator. In close coordination with BSEE's Technical Assessment Section, the technology and activities proposed in this DOCD have been determined not to qualify as a NUT and thus, do not require further Protected Species Step Down review by NMFS. The use of HPHT technology was analyzed in the NMFS 2025 BiOp.

C.6 TOPIC 6: CUMULATIVE ANALYSIS

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Earthjustice et.al. - A	BOEM-2025-0022-0045	**IV. BOEM MUST CONSIDER THE CUMULATIVE EFFECTS OF EXPLORATORY DRILLING IN ITS NEPA DOCUMENT** An agency's EA must describe all of the environmental impacts of a proposed action. Those include not only direct and indirect effects but also cumulative effects. Importantly, cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. The requirement to assess cumulative effects is to ensure that agencies consider their decisions within the larger context: while a particular action can "seem unimportant in isolation," it "may have dire consequences when combined with other actions." This assessment "must be more than perfunctory; it must provide a useful analysis of the cumulative impacts of past, present, and future projects." Yet the EIS take a remarkably cavalier approach to cumulative effects with only references to prior NEPA documents and no analysis whatsoever.	The DOI NEPA implementing procedures, particularly as informed by recent Supreme Court guidance, do not mandate BOEM consider broadly defined "cumulative effects" from separate projects, effects remote in time or place, or effects outside of the agency's regulatory authority, even if they could be linked by a "but for" causal chain. The Supreme Court noted that if an agency "has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant 'cause' of the effect".
Earthjustice et.al. - A	BOEM-2025-0022-0046	BOEM itself has recognized, when it began its 2017 information gathering on marine life in the Gulf, that an "[u]nderstanding of cumulative impacts on protected species in the Gulf from both natural and anthropogenic forcing is required to inform NEPA documents[.]" This is especially true for a species, like Rice's whales, that struggle from the "wide-ranging, combined multiple effects" of stressors that are associated with oil and gas development: vessel strikes, vessel noise, marine debris, oil spills and dispersants, and sound from seismic surveys. Each is estimated to kill or injure	The activities proposed in the N-10256 DOCD would be mostly limited to traversing the 100–400 m water depth zone to and from the proposed activity location in Keathley Canyon Blocks 292 and 293. This location is far removed from the Rice's Whale mitigation area (2020 RWA) and proposed critical habitat as defined in the NMFS 2025 BiOp. As applicable, required protocols found in the NMFS 2025 BiOp Attachments and Appendices (NMFS 2025a) prevent or minimize potential impacts to marine mammals. Please see the NMFS 2025 BiOp A.3 Vessel Strike Avoidance and Injured and/or Dead Aquatic Protected Species

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		individual whales, and serious harm to even a single whale is significant, as “the death of one female . . . would constitute the loss of approximately five percent of the breeding population . . . , making population level effects likely.” As such, any one oil and gas project must consider the activities within the greater scheme: the more than 2,000 current leases that lay claim to over 150 million acres of the federal OCS, in addition to the other industrial activity in the Gulf that affect the Rice’s whale essential functions.	Reporting Protocols; and A.6 Vessel Transit within the Rice’s Whale Area as identified in the 2020 Biological Opinion’s Reasonable and Prudent Alternative (2020 RWA) for additional information.
Earthjustice et.al. - A	BOEM-2025-0022-0047	Finally, an EA must consider the cumulative effects of oil and gas production across the Gulf on the climate and for environmental justice communities. BOEM cannot ignore the fact that exploration drilling is intended to facilitate future development. Although BOEM has attempted in the past to analyze greenhouse gas emissions “from the full life cycle” of oil and gas development for particular lease sales, it has failed to adequately consider key factors such as declining U.S. consumption and failed to appropriately contextualize the massive release of greenhouse gases associated with leasing. Those critical oversights mean that BOEM risks moving forward with production without a complete understanding of the environmental consequences. Even more egregiously, BOEM has utterly failed to examine the harms to environmental justice communities from OCS exploration and development. Onshore residents have long borne the brunt of the Gulf’s industrialization and undergirds and relies upon the continued exploration and extraction of oil and gas.	Concerning climate change and greenhouse gas emissions, the DOI NEPA implementing procedures state "the effects of GHG emissions and global climate change are fundamentally cumulative phenomena; therefore, it is not possible to track the effects of GHG emissions from a proposed action to climate change effects in a localized manner to be able to determine significance one way or the other and they need not be analyzed." However, these issues were considered and evaluated programmatically in the 2025 GOA PEIS. A Finding of No Significant Impact (FONSI) can still be reached for this SEA even if the proposed action would result in an increase in GHG emissions compared to the No Action Alternative. Please see response to BOEM-2025-0022-0080 regarding disproportionate impacts and environmental justice concerns.

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Earthjustice et. al. - B	BOEM-2025-0022-0048	BOEM must evaluate oil spill risks, including impacts, associated with the new pipelines Enbridge will construct for Kaskida (the Gas Export Pipeline and the Oil Export Pipeline), the new Shell pipeline that will transport oil from Kaskida (Rome Pipeline This is especially important given the risks associated with both new and aging pipelines in the Gulf. Failure rates in pipelines are commonly depicted as a "bathtub curve"-i.e., there is a higher rate of failure during an early "burn-in" phase of the pipeline's operation, a lower failure rate during the pipeline's second phase, and then again a higher rate of failure during a later phase of the pipeline, which is due largely to age related failures. Thus, the fact that a combination of new and existing pipelines will transport oil and natural gas from Kaskida warrants analysis as to the particular risks associated with new and aging pipelines as well.	Separate Enbridge pipeline applications will be submitted to BSEE Pipelines for review and permit approval. In the approval process, BOEM's Office of Environment performs environmental reviews on all pipeline applications on behalf of BSEE, who then applies all applicable site-specific mitigations and BiOp protocols. Associated DOCDs for Lease Term infrastructure (pipelines, etc.) are submitted to BOEM Office of Leasing and Plans and contain related information such as Air Quality spreadsheets and proposed activity schedule for evaluation and approval prior to activities taking place. Furthermore, BSEE regulations under 30 CFR § 250.1000 set requirements for how pipelines and associated valves, flanges, and fittings shall be designed, installed, operated, maintained, and abandoned to provide safe and pollution-free transportation of fluids in a manner which does not unduly interfere with other uses in the OCS. 30 CFR § 250.1002 discusses design requirements for DOI pipelines, 30 CFR § 250.1003 discusses installation, testing, and repair requirements, 30 CFR § 250.1004 describes safety requirements, and 30 CFR § 250.1005 discusses inspection requirements.
Earthjustice et. al. - B	BOEM-2025-0022-0049	**BOEM SHOULD DELAY CONSIDERATION OF THE DOCD UNTIL THE PIPELINES THAT WOULD TRANSPORT OIL AND NATURAL GAS FROM THE PROJECT ARE COMPLETE.** …under 30 C.F.R. § 550.202, a DOCD must demonstrate that proposed activities will be safe, not unreasonably interfere with other uses of the OCS, or cause undue or serious harm to the human, marine, or coastal environment. BOEM should, at a minimum, wait until the Bureau of Safety and Environmental Enforcement (BSEE) and the Federal Energy Regulatory Commission (FERC) have approved these new pipelines and deemed them safe to operate before considering approval of the Kaskida Project.	Please see response to BOEM-2025-0022-0048. BOEM and BSEE have distinct but complementary roles in the approval and oversight of development activities on the OCS and their combined efforts help ensure safe operations on the OCS.

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Earthjustice et. al. - B	BOEM-2025-0022-0050	**BOEM MUST ANALYZE IMPACTS TO SENSITIVE AREAS IN THE GULF OF MEXICO.** As discussed in the May 11, 2025, comments, the DOCD fails to properly address harms to imperiled wildlife, including the critically endangered Rice's whale. Relatedly, the DOCD fails to properly address harms from the Kaskida Project to sensitive areas in the Gulf of Mexico. This includes wildlife refuges, wilderness areas, state and national parks, and the Flower Garden Banks National Marine Sanctuary.	Please see responses to BOEM-2025-0022-0008 regarding Rice's whale. BOEM also notes that final action by NMFS on the proposed critical habitat designation for Rice's whale is currently delayed until July 2027. Nevertheless, critical habitat designation would not be expected to warrant project modification since the proposed activities are well outside the spatial extent of the proposed critical habitat area and are not expected to result in any appreciable adverse effects. In addition to the NMFS 2025 BiOp, on March 28, 2025, the FWS sent BOEM a letter with its evaluation of the new information and data, and its determination that nothing considered during the reinitiated consultation changed the conclusions of the FWS 2018 BiOp and that no further ESA consultation for the proposed action is necessary. The FWS 2018 BiOp remains in effect and any future BiOp amendments or associated conditions of approval (COAs) will be binding on subsequent post-lease actions. The proposed operations fall outside of the protective zones for the Flower Garden Banks National Marine Sanctuary and are located approximately 101 statute miles from the sanctuary boundary. Exploration and production would be located away from critical wildlife areas to the maximum extent practicable. The Kaskida proposed development would be located approximately 186 miles from the nearest Louisiana shoreline where coastal habitats are located. BOEM's NTL No. 2009-G40 provides protection to biologically sensitive features in water depths greater than 300 meters. The Kaskida project wells in Keathley Canyon Area Block 292 are proposed in water depths greater than 1820 meters. High-resolution geophysical surveys of the project areas did not identify any sensitive benthic features within the potential impact areas.

C.7 TOPIC 7: OIL SPILLS

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Earthjustice et.al. - A	BOEM-2025-0022-0051	Oil spills, as observed in the aftermath of Deepwater Horizon, can cause long-term contamination to surface waters, deep waters, and bottom sediments. Such impacts can be severe and long-term. The 5 million barrels of oil spilled during Deepwater Horizon, along with the approximately 47 thousand barrels of chemical dispersants that were applied, remained in the marine environment for many months, harming flora and fauna. The cumulative satellite oil slick footprint covered an estimated area of 149,000 km^2 (57,529 mi^2). Large areas of the Gulf, however, were exposed to invisible and toxic oil that extended far beyond the boundaries of the satellite footprint. Indeed, a 2020 study concluded that a substantial portion of the Deepwater Horizon spill was "toxic and invisible." During Deepwater Horizon, hundreds of fish species were exposed to oil, including red snapper, bluefin tuna, and speckled sea trout. The spill killed trillions of larval fish and invertebrates in offshore surface, deep oceanic, and estuarine waters. The number and type of fish species living on the reefs declined significantly, and food in reef systems became less abundant. Oil that reached the shoreline and river water released in response to the spill killed billions of shellfish. Between 56,100 and 102,400 birds, representing dozens of species, died as a direct and indirect result of the spill, and at least 93 different species of birds were injured. Killed and injured birds included federally listed Audubon's shearwater, American oystercatcher, band-rumped storm-petrel, great shearwater, least tern, magnificent frigatebird, masked booby, piping plover, sandwich tern, and Wilson's plover, among others. The population of federally listed sea turtles also declined significantly, with about 4,900 to	The effects from the *Deepwater Horizon* oil spill were factored into existing baseline conditions and the impact analysis for all resources in the SEA considered potential spills associated with the proposed activities in the DOCD. All proposed activities and facilities in the DOCD will be covered by the GoM Regional OSRP filed by BP America Inc. (Operator No. 21372) under cover letter dated October 7, 2024, on behalf of several companies including BP Exploration & Production Inc. (Operator No. 02481). The OSRP was confirmed in compliance and approved by BSEE on January 10, 2025. BSEE personnel reviewed the regional OSRP to verify that the information was current and in compliance with the requirements of 30 CFR part 254. BSEE concluded the regional OSRP, when taken as a whole, adequately demonstrates that the owner/operator is prepared to effectively respond to a spill from their proposed offshore facility(ies). BP must demonstrate that they are prepared to deal with the potential for a blowout and WCD based on the currently accepted standards for well-design, casing, and cementing, and be independently certified by a professional engineer. Furthermore, an acceptable WCD analysis is reviewed prior to completion of NEPA reviews required by BOEM's Office of Environment in advance of any final action, e.g., approval of the DOCD. The WCD submitted by BP was also evaluated by BOEM's Office of Resource Evaluation against BOEM data and the corresponding approved regional OSRP. Wellbore data, geologic data, reservoir data, and fluid data used in modeling and developing the WCD determination for KC 292 DC1 Well A, were provided in Appendix F of the "Proprietary Information" copies of this DOCD submitted to BOEM. Based on

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		7,600 large juvenile and adult sea turtles and about 55,000 to 160,000 small juvenile sea turtles perishing as a result of the spill. Barataria Bay bottlenose dolphins suffered an increased death rate of 35 percent, increased failed reproduction of 46 percent, and increased adverse health impacts, such as adrenal and lung disease and low reproductive success, of 37 percent. The population of Rice's whales declined by about 22 percent, and the population of federally endangered sperm whales declined by about 7 percent. Such losses will have long-term consequences, impairing reproduction and recruitment for multiple generations. Four years after Deepwater Horizon, for example, bottlenose dolphins and sea turtles continued to die in record numbers. This die-off has been attributed to the oil spill. Other studies demonstrate severe lung disease in dolphins, near-record lows of critically endangered Kemp's ridley sea turtle nesting, oil dispersants toxic to corals and jellyfish, and a "bathtub ring" of oil on the seafloor. Further, 8 years after the oil spill, 11 to 30 percent of the spilled oil— approximately 550,000 to 1.5 million barrels—remains unaccounted for and may have been deposited on the seafloor, coastal beaches, and marshes, thereby continuing to threaten water resources. Even projecting forward, it is likely the impacts of the Deepwater Horizon oil spill will continue to impair the Gulf ecosystem.	review of all available data and information, BOEM and BSEE concurred with the WCD determination and response measures submitted by the operator, and any impacts from an accidental spill are expected to be negligible to minor.

Earthjustice et.al. - A	BOEM-2025-0022-0052	Deepwater Horizon is not the only event that has spilled more than 10,000 barrels of oil (bbl). BOEM's reports show that in 2017, there was a 16,152 bbl spill in the OCS caused by damage to a pipeline segment. 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. Those spills released 53,000 bbl, 65,000 bbl, and 80,000 bbl into the Gulf of Mexico. 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, and Taylor Energy, which is the longest-running spill in U.S. history. 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. The Exxon Valdez oil spill in Prince William Sound also caused significant harm to wildlife. Eighty-one percent of harbor seals in Prince William Sound were found to be oiled and unusually disoriented and lethargic, making them easy prey for whales; moreover, four months after the spill, 83 to 100 percent of seals were heavily oiled at several haul-outs around the north end of Knight Island in western Prince William Sound. Killer whale pods, some of which fed on oil-contaminated harbor seals, suffered dramatic population declines. In the year after the spill, one pod lost 33 percent of its population and another pod lost 41 percent. The recovery of these pods in the years following the spill was slow, and some whale pods continued to decline nearly two decades later. Twenty-five years after the 1989 Exxon Valdez oil spill, oil from the spill continued to contaminate beaches in Alaska.	The 2017 spill that was a result of fractured subsea infrastructure at an oil platform has been incorporated into the SEA analysis. The *Ixtoc* spill occurred between 1979 and 1980 in the Bay of Campeche and was not in OCS Federal waters. The Taylor Energy spill was factored into the affected environment and baseline descriptions in the 2025 GOA PEIS, from which this SEA tiers, with additional supporting information in the Oil and Gas SID and BEBR. The 1989 Exxon Valdez oil spill is beyond the scope of this project given its timeframe and occurrence outside the GOA. However, the Exxon Valdez spill, along with *Ixtoc* and other large oil spills, have contributed to the body of knowledge and lessons learned as part of BOEM, BSEE, and other agencies' continual efforts to reduce risks through strengthening regulatory standards, oversight, enforcement and inspection. For example, one key outcome was the passage of the Oil Pollution Act of 1990, which mandated the use of double-hulled tankers for transporting oil and established a phase-out schedule for single-hulled vessels, culminating in a full transition by 2015 (Chapter 2.9 of the Oil and Gas SID). The potential impacts to GOA species, including information known regarding short and long-term impacts from oil exposure, were analyzed in the 2025 GOA PEIS from which this SEA tiers, as well as in the relevant resource sections in this SEA.

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Earthjustice et.al. - A	BOEM-2025-0022-0053	Oil-contaminated sediment can travel long distances, transported by both the accident itself and ocean currents. These contaminated sediments can enter the water column and cause large patches of sheen and oil on the surface. Post-spill mitigation, such as burning, exacerbates these problems by introducing hydrocarbon byproducts into the marine environment; surface currents then may transport these hydrocarbon byproducts long distances. Large quantities of spilled oil may alter the chemistry of the ocean "with unforeseeable results." Volatile organic compounds ("VOCs"), such as benzene, toluene, ethylbenzene, and xylenes, dissolve readily in water and "can have acutely toxic effects." Mid-weight organic compounds, such as polycyclic aromatic hydrocarbons, "tend to pose the greatest risk in the environment" because they persist for longer periods of time. These toxic compounds readily attach to particles that have settled or are suspended in the water column and can be ingested by fish. People who consume large quantities of fish contaminated with polycyclic aromatic hydrocarbons can suffer various health problems, including growth reduction, endocrine alteration, cancer, and birth defects. These toxins are introduced into the marine environment through several pathways, including oil spills and incomplete combustion of fossil fuels. Failing to adequately clean up oil spills, thus, would exacerbate an existing environmental and public health problem. A spill also could release methane into the water column, potentially causing harm to fish. Nearshore and onshore water quality, including water in bays, estuaries, nearshore, and coastal areas, also degrades as a result of oil spills. The impacts of a spill on these waters could be	Comment noted. See response to BOEM-2025-0022-0054 and BOEM-2025-0022-0056 regarding oil spill risk assessment and response. The WCD report submitted by the operator in conjunction with the expected relief well duration allows for the estimate of a total release of spill volume for purposes of evaluating needed oil spill response capabilities. The submitted WCD was verified through the BOEM Resource Evaluation WCD Verification Review.

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		significant, with contamination arising from a host of sources, including oil, gas, and their respective components and from cleanup and mitigation efforts. These well-documented adverse effects of oil spills on communities, species, and the environment highlight the necessity of ensuring that BOEM accurately analyzes oil spill risk of OCS oil and gas activities in the Gulf. In order to assess oil spill risk, BOEM must properly evaluate both the probabilities and/or frequencies of oil spills from oil and gas activities as well as the impacts of the activities. BOEM's regulations require the EIA to assess all potential environmental impacts. 30 C.F.R. § 550.261(a)(1). And the DOCD must, at a minimum calculate the worst case discharge, describe the worst case spill scenario and contain a proper oil spill response plan. Id. § 550.250. Here, the DOCD and the EIA fail to adequately evaluate oil spill risk from the Project. The DOCD and EIA also do not adequately discuss the oil spill response actions to be taken in the event of a spill.	
Earthjustice et.al. - A	BOEM-2025-0022-0054	First, the EIA fails to account for a range of oil spill sizes from the Project. Instead, the EIA looks only at (1) small fuel spills (<1,000 barrels) resulting from a failure related to the storage of oil or diesel fuel and (2) the purported worst case discharge for a large oil spill (4 million barrels (45,000 barrels per day over 90 days)) resulting from a potential blowout of the well which BP estimates has the highest liquid hydrocarbons rate potential in the area). An adequate oil spill analysis must analyze spills from a comprehensive range of spill size classes from the various components of the Project, not just a small spill from storage and the purported worst case discharge from well blowout. This comprehensive analysis is crucial for better understanding the scope and extent of the	Thank you for your comment. BP's regional OSRP supporting the DOCD was reviewed, found in compliance, and approved by BSEE on January 10, 2025, as noted in Section 9.1 of the EIA. Per 30 CFR part 254, the OSRP addresses a range of spill sizes and sources, including the WCD, and includes required response strategies, equipment, and personnel. During BOEM's preparation of this SEA and analysis of the proposed DOCD, BOEM verified BSEE's approval of the OSRP and associated WCD volume. The approved OSRP incorporates lessons learned following Deepwater Horizon and complies with updated BSEE and BOEM regulations and guidance (e.g., NTLs

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		environmental impacts from the spills. Smaller spills than the worst case discharge may impact smaller areas when they occur, but they will have a higher frequency, meaning that they could cause sustained environmental harm that may have cumulative and long-lasting impacts and/or could inhibit recovery from past spills. Moreover, smaller spills than the worst case discharge—here, a spill less than 4 million barrels over 90 days—can have very devastating consequences. Without information regarding the different sizes of spills and corresponding probability of differently-sized spills, as well as information about spills from different components of the Project, it is impossible to adequately evaluate impacts and plan for appropriate mitigation and response plans.	2015-N01, 2012-N06, and 2013-N02), ensuring preparedness for spills of various sizes and durations. Furthermore, the SEA tiers from the 2025 GOA PEIS, with additional supporting information incorporated by reference from the Oil and Gas SID and BEBR. Please see Appendix B.3.2 of the 2025 GOA PEIS for more information on OSRPs and oil spill risks.
Earthjustice et.al. - A	BOEM-2025-0022-0055	Second, in analyzing a large oil spill, the EIA relies on the 2004 OSRA model (which simulates oil spill trajectories) to estimate conditional probabilities that a spill in the lease area could contact shoreline segments within 3, 10, and 30 days. But the OSRA model is outdated. As an initial matter, BOEM has released more recent OSRA models, and it is unclear—and BP does not explain—why the more recent OSRA models were not used for calculating these oil spill probabilities. For example, BOEM's 2023 OSRA publication notes that the OSRA model simulating oil spill transport "was originally developed by Smith et al. (1982) and enhanced by BOEM over the years (Ji et al. 2014; Ji et al. 2011; Ji et al. 2004; Ji et al. 2002; LaBelle and Anderson 1985)." To the extent that BOEM believes that the 2004 OSRA model is nonetheless appropriate for this Project, the agency must explain why. The 2004 OSRA model relies on historical data from more than two decades ago. The EIA's analysis ignores that more current data exists which should at a minimum be considered in	The EIA references the Ji et al. (2004), which is the 2004 OSRA report that provides the contingency planning statistics for the OCS activities in the GOA. Operators are instructed (BSEE NTL 2012-06) to base Oil Spill Response Plan shoreline-contact listings on the conditional-probability tables and the block-to-launch-area lookup provided on BOEM's Oil Spill Risk Analysis Information for Gulf Oil Spill Response Plans webpage at: https://www.boem.gov/environment/environmental-assessment/oil-spill-risk-analysis-publications. These tables are derived from the Gulf contingency-planning OSRA (Ji et al. 2004) or the 2004 OSRA found at: https://www.boem.gov/sites/default/files/uploadedFiles/BOEM/Environmental_Stewardship/Environmental_Assessment/Oil_Spill_Modeling/2004-026.pdf. The tables are organized by launch area and by counties/parishes, with standard timeframes to show how quickly oil could reach shore. The page also includes the Excel tool that maps a lease block to the correct launch area, so operators can list all counties/parishes above the contact-probability threshold in a consistent format used for plan reviews.

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		calculating oil spill probabilities. Past trends from decades ago do not reflect the risk associated with oil and gas development in the Gulf today or in the future. That is particularly true for this Project, which would be set in ultra-deep waters and farther offshore than projects from two decades ago. BOEM should use comprehensive and up-to-date data to properly analyze oil spills from the Project. As the EIA acknowledges, the 2004 OSRA model does not evaluate the fate of a spill over time periods exceeding 30 days or the fate of a release that continues over a period of weeks or months. The EIA thus cannot claim to truly analyze a "worst case discharge," which the EIA itself states would have the duration of 90 days. The EIA also acknowledges that the OSRA model does not consider the chemical composition or biological weathering of oil spills or the spreading and splitting of oil spills. In addition, the OSRA model does not consider critical variables like water depth (i.e., drilling depth) and transportation distance (which is needed for analyzing spills from transporting oil from offshore areas to the mainland). These failures are particularly problematic because the Project would be located in ultra-deep waters. The EIA also recognizes that the OSRA model does not specify a particular spill size. As explained above, consideration of spill size is a key factor in properly and comprehensively evaluating oil spill probability. Spill size will necessarily affect the probability of spills in the lease area contacting shoreline segments.	The Gulf contingency-planning OSRA is a hazard-based analysis, meaning it assumes a spill occurs and reports conditional probabilities of shoreline contact from each hypothetical launch area. So, for the 2004 OSRA, spill volume does not matter. It is designed for contingency planning to determine where spilled oil might reach the shore. The more recent OSRA publications prepared for NEPA serve a different purpose. They are program-level analyses for region-wide lease sales that combine spill-occurrence estimates with contact probabilities to characterize overall risk for environmental decision-making. In other words, the results from the 2017 and 2023 OSRA runs give combined probabilities (expressed as percent chance) of one or more offshore spills greater than or equal to 1,000 bbl, and the number of spills (mean) that could occur and could contact a certain offshore resource, including counties and parishes, within 10 and 30 days, given the estimated volume of oil produced from a proposed action in the given planning area. BOEM applies tools such as the OSRA regional planning area analysis, the Extreme Value Theory (EVT), and historical spill data into programmatic NEPA assessments that evaluate environmental impacts across broad planning areas to assess potential risks. For the latest OSRA reports see https://www.boem.gov/environment/oil-spill-modeling/oil-spill-modeling-program. Site-specific reviews then build on this foundation, incorporating site-specific project details and spill response planning using specific launch areas to get conditional probabilities of oil contact from Ji et al. (2004) and updated regulatory requirements to further tailor the

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			assessment to the actual proposed activities on the lease. The WCD submitted by BP was evaluated by BOEM's Office of Resource Evaluation against BOEM data and the corresponding approved regional OSRP. See responses to BOEM-2025-0022-0054 and BOEM-2025-0022-0056 regarding oil spill risk assessment and OSRP and WCD reviews.
Earthjustice et.al. - A	BOEM-2025-0022-0056	Third, the DOCD and the EIA do not provide an adequate discussion of the appropriate oil spill response actions for the Project. Appendix G to the DOCD (Oil Spill Response Discussion) mischaracterizes the worst case discharge modeled for the Project. The Oil Spill Response Discussion states that the worst case discharge volume is 45,000 barrels, but that is just the volume for one day. The worst case discharge volume modeled by BP is actually 4 million barrels, with the duration being 90 days. Even if a spill of this magnitude is mitigated somewhat by deploying response actions, the Oil Spill Response Discussion does not show that BP's oil spill response actions are appropriate and adequate for a worst case discharge spill. In determining whether the response actions are appropriate, BOEM must also consider spills that are expected to occur with reasonable certainty, including the largest spill expected to occur, from various components of the Project. As explained above, the EIA does not provide an analysis of a range of oil spills from various components of the Project and thus fails to analyze spills expected to occur with reasonable certainty. This means that BOEM cannot, with the information provided in the EIA, evaluate whether the response actions	BOEM's NEPA review is tiered from the 2025 GOA PEIS, which incorporates a detailed OSRA analysis completed in 2023 to evaluate spill trajectory probabilities (Ji and Schiff 2023). It is important to note that OSRA is a probabilistic model designed to estimate the likelihood of oil reaching shoreline segments but does not itself simulate spill fate, volume, duration, or response actions. The probabilities from the 2004 OSRA report "Oil-Spill Risk Analysis: Contingency Planning Statistics for Gulf of Mexico OCS Activities" are one of many components factored into the OSRP and WCD reports. The other variables like volume, duration, and response actions are factored into the OSRP and WCD analyses as well. NTL 2012-N06 guides operators to incorporate OSRA results into the OSRPs submitted as part of their site-specific plans (e.g., DOCD), which are then reviewed by BSEE and BOEM. This NTL specifically directs operators to use BOEM's conditional probability tables derived from OSRA modeling to identify onshore land segments that could be contacted by a WCD. These land segments are identified using OSRA model trajectory results specific to the lease or facility location. Furthermore, operators must provide a list or map identifying any resources of special economic or environmental importance that could be impacted

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		provided in the Oil Spill Response Discussion are adequate for the Project.	within those land segments or nearby marine areas. This includes resources specified in the applicable Area Contingency Plans (ACPs) and should address seasonal variations where relevant. For instance, if the project is located within the Flower Garden Banks Oil Spill Planning Area, operators must identify and map the vulnerable marine resources instead of onshore segment resources. The OSRP must also include protective strategies to mitigate the impact of a potential spill on these sensitive resources. BSEE reviews submitted OSRPs to ensure that response strategies, including equipment, personnel, and mitigation measures, are appropriate and adequate to address the WCD as required by the National Contingency Plan. Together, the NEPA analyses, the OSRA modeling framework, and BSEE's OSRP review process are considered as complementary pieces of information that together provide a comprehensive analytical structure that considers a range of spill sizes and response needs. This framework ensures that oil spill response actions for the Project are thoroughly evaluated and meet applicable standards under NEPA and the Oil Pollution Act. Please see Appendix B.3.2 of the 2025 GOA PEIS for more information on OSRPs. For more information on OSRA and its application in spill response planning, see BOEM's Oil Spill Risk Analysis Information for Gulf Oil Spill Response Plans webpage: https://www.boem.gov/environment/environmental-assessment/oil-spill-risk-analysis-information-gulf-oil-spill-response and BSEE's NTL 2012-N06: https://www.bsee.gov/sites/bsee.gov/files/notices-to-lessees-ntl//ntl2012-n06.pdf.

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Earthjustice et. al. - B	BOEM-2025-0022-0057	**BOEM MUST EVALUATE SPILL RISK FROM THE PIPELINES THAT WOULD TRANSPORT OIL AND NATURAL GAS FROM THE PROJECT.** The DOCD notes that BP has contracted Enbridge Offshore Facilities, LLC to build, own, and operate the Gas Export Pipeline and the Oil Export Pipeline to transport oil and natural gas from the Kaskida floating production unit. The Gas Export Pipeline would tie into Enbridge's existing Magnolia Gas Gathering System, and then into Enbridge's Garden Banks pipeline. The Oil Export Pipeline would tie into a new oil pipeline system, called the Rome Pipeline, from Shell's Boxer platform to onshore. BOEM must assess the risks and impacts associated with the construction and operation of these new pipelines and the operation of the existing pipelines. BOEM must evaluate oil spill risks, including impacts, associated with the new pipelines Enbridge will construct for Kaskida (the Gas Export Pipeline and the Oil Export Pipeline), the new Shell pipeline that will transport oil from Kaskida (Rome Pipeline.	Please see response to BOEM-2025-0022-0048 regarding the review and approval of associated pipelines. Pipeline applications are reviewed separately but not approved by BSEE until any associated DOCDs are approved by BOEM. BOEM analyzes OCS oil and gas infrastructure and potential oil spills from pipelines as part of the SEA. Information about OCS pipeline spills is discussed in Appendix B.3 of the 2025 GOA PEIS and Chapters 2.9, 4.2, and 4.4.6 of the GOM Oil and Gas SID. Information about non-OCS pipeline spills and other impacts to water quality from routine activities like OCS waste disposed onshore, can be found in Chapters 2.9, 4.2, and 4.4 of the GOM Oil and Gas SID. In addition to modeling oil spills, Appendix B.3 of the 2025 GOA PEIS reports the total number and volume of oil spills reported to USCG from various sources, including barges, tankers, pipelines, and platforms. The ABS (2016) report differentiates between spills caused by hurricanes and operational causes. Over the last 20 years, hurricanes have significantly impacted oil and gas production in the GOA through precautionary shut-ins and actual storm damage. The report noted an increase in hurricane-related spills during the 2000s due to major hurricanes like Cindy, Ike, Ivan, Katrina, Lili, and Rita. However, no spills greater than 10,000 bbl were attributed to hurricanes. Historically, loss of well control has been the principal cause of larger spills. Etkin (2009) reports that structural failures such as corrosion account for a significant portion of oil spilled from offshore pipelines. Industry practices to reduce these risks include the use of corrosion-resistant materials and regular inspections. Pipelines protected by rectifiers or sacrificial anodes, where cathodic protection cannot be calculated or is expected to last fewer than 20 years, are inspected annually.

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			Aging infrastructure, including pipelines and umbilicals that are in use, abandoned, or awaiting decommissioning, may pose long-term risks to water quality. Over time, these structures can degrade and increase the chance of releasing residual hydrocarbons, metals, or microplastics. Out-of-service pipelines may also contain treated seawater with corrosion inhibitors and biocides, which could introduce toxic compounds if released (Brandon et al. 1995; Leung 2001). BSEE decommissioning regulations (30 CFR Subpart Q) and USEPA NPDES permits include requirements aimed at addressing these risks, although further research is needed on their long-term effectiveness (Auer 2002). Please see Chapter 4.2 of the 2025 Oil and Gas PEIS for further analysis. Chapters 4.1 through 4.14 and Appendices B and C of the 2025 GOA PEIS address potential environmental hazards and impacts relating to pipelines.
Earthjustice et. al. - B	BOEM-2025-0022-0058	…offshore pipelines may experience more corrosion than onshore pipelines due to offshore pipelines being placed in a saltwater environment, and when products of higher temperatures, higher pressure conditions, or corrosive elements are transported. It is unreasonable to allow the Kaskida Project to move forward without first adequately analyzing the actual risks of spills and accidents from the pipelines constructed and operated by Enbridge. This is especially important given the risks associated with both new and aging pipelines in the Gulf. Failure rates in pipelines are commonly depicted as a "bathtub curve"-i.e., there is a higher rate of failure during an early "burn-in" phase of the pipeline's operation, a lower failure	Please refer to Chapters 3.2.5, 3.3.2, and Appendix C of the 2025 GOA PEIS for information on new and aging pipelines. The typical life span of a pipeline has been estimated to be 20-40 years, but with current preventative measures, including using corrosion resistant or corrosion-inert materials, that lifetime has been substantially increased. Pipeline routes are inspected at time intervals and methods prescribed by BSEE's Regional Supervisor of Field Operations. When pipelines are protected by rectifiers or anodes for which the initial cathodic protection system either cannot be calculated or calculations indicate a life expectancy of less than 20 years, the pipelines are inspected annually (30 CFR § 250.1005(b)). As platforms and sections of pipelines are decommissioned, additional pipeline may be installed to reroute transport to shore. Occasionally, pipeline segments may require replacement, especially on risers near the surface where corrosion potential is the highest due to more conducive environmental conditions including, but not limited to higher oxygen

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		rate during the pipeline's second phase, and then again a higher rate of failure during a later phase of the pipeline, which is due largely to age related failures. Thus, the fact that a combination of new and existing pipelines will transport oil and natural gas from Kaskida warrants analysis as to the particular risks associated with new and aging pipelines as well.	availability, greater wave action and other mechanical forces, warmer temperatures, increased sunlight, and more active microbial communities (Association for Materials Protection and Performance 2020). As new platforms are built on new leases, pipelines are forecasted to be built to attach these new production structures to the existing network of pipelines. While the current capacity of pipelines can be calculated, the future capacity cannot be forecasted as it will depend on the size and location of the reservoirs discovered. If the current network of pipelines has the capacity to transport oil from new leases, BOEM expects industry would choose to tie into the existing network. Please see response to BOEM-2025-0022-0048 regarding the review and approval of associated pipelines. Pipeline applications are reviewed separately but not approved by BSEE until any associated DOCDs are approved by BOEM.
Earthjustice et. Al. - B	BOEM-2025-0022-0059	Although BP's Environmental Impact Assessment (EIA) notes that "[a] large oil spill in the project area could reach coral reefs at the Flower Garden Banks," it suggests that a large oil spill would be "unlikely" to contact the corals or impact corals and other imperiled wildlife in the sanctuary due to distance between the Project area and the sanctuary. But, as explained in the May 11, 2025 comments, the EIA cannot make this claim because the EIA has not analyzed a range of oil spills, the range of weather- related circumstances that could occur and lead to more expansive impacts, or determined which size spills are reasonably expected to occur from the Project. Moreover, while BP performed a (flawed) worst credible discharge scenario analysis, the EIA does not discuss what this analysis revealed in terms of impacts on the Flower Garden Banks National Marine Sanctuary from a worst credible discharge scenario spill.	Comment noted. See responses to BOEM-2025-0022-0054 and BOEM-2025-0022-0055 regarding oil spill risk assessment and response. In analyzing the information provided by BSEE and its own evaluation of the WCD scenario, regional OSRP, and other relevant information including the distance to shore, BOEM determined that risk to the Flower Garden Banks National Marine Sanctuary and other refuges, wilderness areas and parks from an oil spill that could result from the proposed activities is negligible.

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		Second, BP lists around 53 wildlife refuges, wilderness areas, and state or national parks in the Gulf of Mexico coasts that may be impacted after 30 days of an oil spill, per BP's worst case discharge scenario analysis. Yet BP fails to discuss the specific sensitivities and impacts from such an oil spill for each of these areas. Moreover, the EIA does not adequately discuss other unique, sensitive, and environmentally important areas in the Gulf that would be impacted by oil spills from the Kaskida Project.	

C.8 TOPIC 8: DECOMMISSIONING

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Earthjustice et.al. - A	BOEM-2025-0022-0060	BOEM cannot approve BP's DOCD unless and until BP includes information regarding how it intends to decommission all of the infrastructure it intends to use to develop Kaskida, and BOEM guarantees that such decommissioning will actually occur. Indeed, OCSLA's mandate that BOEM reject a development plan "if the lessee fails to demonstrate that [it] can comply with [OCSLA's implementing] regulations," coupled with OCSLA's regulatory requirements regarding decommissioning, means that BOEM must reject the DOCD unless BP can show that it will decommission all infrastructure used to develop the Kaskida project. OCSLA's implementing regulations require oil and gas companies to decommission all infrastructure used to develop a well. These decommissioning obligations accrue from the moment a company drills a well or installs a platform, pipeline, or other facility. These obligations extend to all past and	As part of BSEE's review of the initial conceptual plan, additional mitigations and reminders were provided to BP which stipulated under the decommissioning support section that compliance with the requirements of 30 CFR 250, Subpart Q (Decommissioning Activities) for wells, platforms, and pipelines is required. The mitigation requirement also states that the assets in the development (wells, pipelines, platforms) must be designed and installed such that you are able to properly decommission and abandon them in future per applicable regulatory requirements. Also, any umbilical must be designed such that every fluid tube can be flushed with seawater, or the operator must be prepared to remove the umbilical at end of life. For example, umbilicals with unused spare lines can create a situation where they cannot be flushed and therefore, must be removed at the end of their production life. These additional mitigations and reminders are for the regulatory conceptual plan that must be approved prior to the DWOP approval by BSEE.

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		current operators if the lease or operating right is transferred. BSEE regulations require oil and gas companies to plug wells and remove platforms and pipelines within one year of lease termination. Companies must also decommission idle infrastructure on active leases when it is “no longer useful for operations.” An idle well is “no longer useful for operations” if it has not been used for 5 years and the operator has no future plans to use it. Operators must decommission an idle well within 3 years of determining that it is both no longer useful for operations and no longer capable of producing hydrocarbons in paying quantities. Idle platforms and other facilities are “no longer useful for operations” if they have been toppled, destroyed, or have not been used for 5 years and the operator has no future utility for them. Operators must decommission these facilities within 5 years of determining they are no longer useful for operations. Presumably this is why BOEM’s regulations require a DOCD to include “[a] brief description of how [an oil and gas company] intend[s] to decommission [its] wells, platforms, pipelines, and other facilities, and clear [its] site(s).” Yet BP’s DOCD fails to contain such description. This failure is particularly glaring given new information indicating that timely decommissioning of oil and gas infrastructure often does not occur.	
Earthjustice et.al. - A	BOEM-2025-0022-0061	Indeed, the Gulf is facing an ongoing decommissioning crisis resulting from decades of regulatory failure to implement and enforce strong policies to ensure that the fossil fuel industry promptly removes end-of-life infrastructure from the OCS. As BOEM recently acknowledged, “relatively few major facilities have been decommissioned,” but “[a]s more facilities reach the end of their useful life, … decommissioning will	Please see response to BOEM-2025-0022-0060 for additional information regarding decommissioning requirements for the proposed development. Moreover, wells and platforms are being decommissioned, in accordance with BOEM and BSEE regulations, at much higher rates than installations. In 2000, there were approximately 4,000 platforms in the GOA. By the end of 2024, however, the number of

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		be required on a larger scale." As of 2020, there were total of 10,783 unplugged wells in federal Gulf waters, the majority of which (7,302, or 67.7%) were considered candidates for decommissioning because they were inactive, temporarily abandoned, or located on an inactive lease. According to a 2024 GAO report, "[n]early half of the approximately 8,000 wells and 1,600 platforms remaining offshore are approaching or past the end of their useful life," and over 75% of end-of-lease and idle infrastructure in the Gulf was overdue for decommissioning as of 2023, representing over 2,700 wells and 500 platforms. Troublingly, the number of overdue wells could nearly double by 2030. This delinquent infrastructure creates numerous risks. Unplugged wells, corroded pipelines, and deteriorating platforms all pose a significant and growing threats to the waters of the outer continental shelf and the coastal environment. As BOEM itself has acknowledged: Deteriorated facilities increase safety risks to industry personnel and even BSEE inspectors due to degraded boat landings, gratings, ladder wells, and handrails needed to access and traverse platforms. Firefighting and other safety equipment on idle facilities may not function when needed, and the risk of vessel collisions may also increase if lighting and other navigational aids are not maintained on idle platforms. Similarly, deteriorated tanks, piping, storage units, and other equipment may lead to a loss of integrity and leaking of hydrocarbons and other contaminants into coastal and marine waters, which may lead to acute and chronic impacts to	structures in the GOA dramatically decreased to roughly 1,400 platforms. In 2000, there were about 16,000 active or non-decommissioned wells compared to less than 5,000 by the end of 2024. The removal of infrastructure to date has substantially reduced the potential environmental and safety risks associated with BOEM's ongoing oil and gas program in the GOA.

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		seabirds, fish, and other marine protected species in the vicinity of the structure. Storm-toppled wells and facilities may introduce broad environmental hazards due to hydrocarbon and contaminant leaks from the damaged wells and submerged tanks, piping, and equipment. There are also increased safety risks due to potential impacts to other OCS users from unmarked seabed obstructions and the need for extremely dangerous diving and lifting operations required to gain access to the well conductors for plugging and abandoning activities and to remove the toppled platform decks and jackets, production equipment, and extensive debris fields. Storm systems also have the capacity to unbury and shift pipelines dozens to hundreds of feet outside of their prior routes and several feet up into the water column, making them more susceptible to snagging by anchored vessels and commercial trawlers. These snagged pipelines result in unnecessary space-use conflicts and may lead to potential hydrocarbon leaks and injury to crews.	
Earthjustice et.al. - A	BOEM-2025-0022-0062	The expense associated with decommissioning infrastructure in ultra-deep water exacerbates the risk that such decommissioning will not occur for this particular project, thereby enhancing the risks of oil spills and other harms from delayed decommissioning. Because decommissioning is expensive, fossil fuel companies use various tactics to delay, stall, and ultimately avoid fulfilling their decommissioning obligations. These include transferring low-producing properties to smaller, less-resourced companies, which may in turn sell	Project transfers most often involve smaller, older assets in shallow waters in which case, an independent operator would acquire the asset to perform workovers and increase production. However, the Kaskida project is not a good candidate for this type of scenario due to its large scale. Additionally, the nature of the moored FPU would necessitate decommissioning begin promptly after production ceases. 30 CFR 556.900 et seq. provides BOEM's financial assurance requirements to ensure companies are

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		the wells again to even smaller companies. Operators may also allow infrastructure on active leases to sit idle for years and avoid decommissioning by claiming that it is capable of producing hydrocarbons “in paying quantities” or otherwise still useful for operations. Indeed, BSEE has acknowledged that operators may employ “intentional delay tactics—such as by proposing an alternative use of platforms to BSEE but never submitting the plans to do so.” Companies therefore have a strong financial incentive—and a regulatory pathway—to prolong the idled status of wells indefinitely instead of paying the cost of decommissioning. To prevent this situation for the Kaskida project, if BOEM moves forward with approving this DOCD, BOEM should consider various approval conditions, such as prohibiting the transfer of BP’s leases, permits, or infrastructure for the project; and prohibiting BP from deeming Kaskida wells capable of producing oil and gas “in paying quantities” after it has gone idle.	appropriately bonded and to protect U.S. taxpayers against decommissioning costs. This framework includes the ability to re-evaluate companies’ financial health annually and require supplemental financial assurance if necessary. Furthermore, if in the unlikely event there is a proposed transfer of ownership, BOEM must first review and approve the request and reserves the right to withhold approval of the transfer until the transferee complies with all applicable regulations and orders. See Appendix C of the 2025 GOA PEIS for information on decommissioning and financial assurance requirements. Regarding idle structures, BSEE developed NTL No. 2018-G03 to clarify when the Bureau may deem infrastructure “no longer useful for operations” and “not capable of oil, gas, and sulphur production in paying quantities” and the associated timeframes for decommissioning work. The NTL also includes guidance for the submittal of supporting documentation for review and concurrence. Operators are required to perform pollution and safety system inspections throughout the life of all platforms, including idle platforms. Safety and environmental-compliance inspections are maintained on idle infrastructure, prior to and after issuance of BSEE orders.
Earthjustice et.al. - A	BOEM-2025-0022-0063	BP’s proposed DOCD states that BP drilled exploratory wells elsewhere in Keathley Canyon, on Block 336. The DOCD acknowledges that these wells have not yet been plugged, and states that the wells “will be temporarily abandoned and a well cap will be installed on the wellhead.” BOEM should not approve the DOCD unless and until BP permanently plugs these wells. Unplugged, temporarily abandoned, and improperly plugged wells are also prone to leaking and blowouts. For example, the 2010 Macondo deepwater well blowout, which caused the Deepwater Horizon oil	Operators may request extensions to the regulatory timeframes for decommissioning, which BSEE has authority to grant due to any individual or combination of factors, as discussed in Appendix C.1 of the 2025 GOA PEIS. Even when BSEE concurs that a well may be useful and capable of producing in paying quantities, companies are informed that they may still be required to ensure the well is secured and that producing zones are isolated to prevent potential safety and environmental impacts. Regarding idle structures, BSEE developed NTL No. 2018-G03 to clarify when the Bureau may deem

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		spill—one of the largest marine oil spills in the history of the oil industry—occurred during temporary abandonment activities. Decisions to cut corners in the plugging process (including, inter alia, using only one cement barrier and failing to follow industry standards in cementing the casing) may have contributed to the well's failure. Aging wells are particularly susceptible to oil spills or other accidents. For example, 30 percent of offshore oil wells in the Gulf experienced well casing damage in the first five years after drilling, and damage increased to 50 percent after 20 years. Wells that have been temporarily abandoned for a long period are particularly concerning, as "[e]ntering these wells is difficult due to the uncertainties related to the conditions of the barriers and unanticipated well pressures." Yet the number of temporarily abandoned wells has ballooned in recent years, and "[u]nless this back-log is reduced, the probability of blowouts from these wells will increase." Methane leaks from unplugged and temporarily plugged wells are also of concern. For example, a study from the North Sea found that 65 percent (28 out of 43) of decommissioned offshore wells leaked gas into the water column and represented a major source of methane in the sea.	infrastructure "no longer useful for operations" and "not capable of oil, gas, and sulfur production in paying quantities" and the associated timeframes for decommissioning work. The NTL also includes guidance for the submittal of supporting documentation for review and concurrence. Operators are required to perform pollution and safety system inspections throughout the life of all platforms, including idle platforms. Safety and environmental-compliance inspections are maintained on idle infrastructure, prior to and after issuance of BSEE orders. While there is a potential for delayed decommissioning, the analysis presumes, as is reasonable, that the infrastructure will be decommissioned according to the regulations. See response to BOEM-2025-0022-0061 regarding decommissioning trends. Chapter 3 and Appendix C of the 2025 GOA PEIS highlight the substantial decommissioning of wells and platforms over the last 20 years. Particularly for deepwater, where this project is proposed, it is unlikely that low-level chronic leaks of methane from decommissioned wellheads would reach the surface. However, BOEM has considered the potential risk that methane leakage from abandoned oil and gas wells could pose to marine life and currently has a study underway to examine decommissioned wells to determine if any leaks could be substantial enough to emit air pollution at the sea surface, affect water quality, or have any other potentially notable environmental effects, i.e., NSL GM-22-01, at https://www.boem.gov/sites/default/files/documents/environment/environmental-studies/GM-22-01_1.pdf. Although research is limited, risks to marine organisms could arise from the chemical interactions of methane upon entering the water column, including microbial

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			degradation that leads to localized oxygen depletion (Kessler et al. 2011). However, factors like water depth, pressure, currents, wave action, dissolution, and biodegradation are likely to significantly decrease methane concentrations, thereby reducing the likelihood of acute and secondary effects on exposed marine life. While localized effects on marine organisms would be possible, the combined influence of environmental factors that lower methane concentrations would reduce the likelihood of impacts on individuals, localized communities, and populations.

C.9 Topic 9: Greenhouse Gas Emissions and Climate Change

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Earthjustice et.al. - A	BOEM-2025-0022-0064	BOEM's review of the Kaskida DOCD necessitates a comprehensive analysis of its greenhouse gas emissions and the resulting environmental consequences. The failure to thoroughly quantify and take a hard look at the impacts of greenhouse gas emissions is unacceptable under the law, and it deprives the agency of informed decision making. The analysis should include not only the direct operational emissions from the offshore activities but also the midstream and significant downstream emissions. **A. BOEM must calculate greenhouse gas emissions** BOEM must calculate the greenhouse gas pollution from the Kaskida project. The DOCD and Environmental Impact Analysis (EIA) completely neglect to calculate the estimated emissions of certain categories of air pollution— specifically carbon dioxide (CO_2) and methane (CH_4)— for any stage of the project. Courts have held that an agency must calculate the reasonably foreseeable	As outlined in 30 CFR § 550.261, the EIA focuses on project-specific effects. Climate change effects are inherently programmatic in nature, global in scale and therefore, do not require detailed discussion or analysis in the EIA. The DOI's NEPA implementing procedures state "the effects of GHG emissions and global climate change are fundamentally cumulative phenomena; therefore, it is not possible to track the effects of GHG emissions from a proposed action to climate change effects in a localized manner to be able to determine significance one way or the other and they need not be analyzed." A FONSI can still be reached even if the proposed action would result in an increase in GHG emissions. Nonetheless, climate change and GHG emissions were addressed programmatically in the 2025 GOA PEIS, from which this SEA tiers (see Chapter 4.0.2.1, Chapter 4.1.2, and Appendix K). Additional supporting information is included in the Oil and Gas SID and BEBR, which are incorporated by reference. BOEM has reviewed that information and found that the Kaskida Project's likely emissions based on the activities described in the DOCD are expected to be

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		greenhouse gas emissions from a proposed action, from both direct and indirect emissions. Further, 30 CFR § 550.261(a)(1) requires a discussion of potential environmental impacts of the proposed development and production activities. The EIA's failure to quantify and analyze greenhouse gas emissions, including both direct operational emissions and indirect emissions from mid- and downstream use of the oil and gas, represents a significant deficiency in the EIA. The conclusory greenhouse gas analysis that says the proposed project will have a negligible contribution to overall OCS emissions is insufficient. The proportion is irrelevant, the omission of quantifying the emissions and their associated public health and climate impacts undermine a thorough understanding of the project's environmental footprint.	well within the range of GHGs considered in the 2025 GOA PEIS.
Earthjustice et.al. - A	BOEM-2025-0022-0065	Importantly, BOEM must account for significant methane emissions from Kaskida. One recent study, for example, using methane imaging of oil and gas platforms in shallow areas of the Gulf of Mexico, determined these operations have a "methane loss rate"—a calculation of methane pollution relative to reported extraction—of 23 to 66 percent (far greater than 4 percent in the Permian Basin). Methane's has intensive heating effects and produces ground-level ozone. It is a super-pollutant 87 times more powerful than CO2 at warming the atmosphere over a 20-year period, and is second only to CO2 in driving climate change during the industrial era. The deepwater developments are responsible for massive amounts of greenhouse gas emissions. See the large magenta dots on the map below. Another BP development in the Gulf of Mexico, Argos, that produces a capacity of 140,000	See response to BOEM-2025-0022-0064. The EIA focuses on the site-specific impacts related to the project, rather than providing broad descriptions for programmatic effects like climate change. The DOCD provides estimated emissions for other pollutants as required in 30 CFR § 550.249, which is assessed for compliance with the process established by the regulations.

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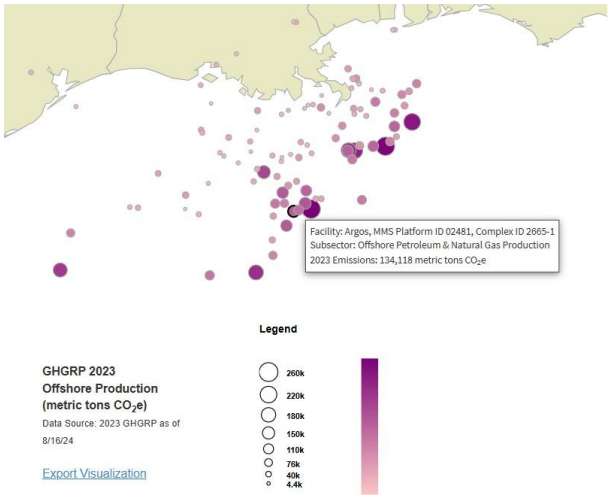
		bbls/day reported emitting 134,118 metric tons of CO2e in 2023. BP's Thunderhorse and Atlantis reported 251,340 and 256,468 metric tons of CO2e that year, respectively. The greenhouse gas emissions are reasonably foreseeable and certainly quantifiable.  *Figure 1 Locations and Reported Emissions (CO2e) for Offshore Production, EPA* According to news reports, the Kaskida development will start production in 2029, with a capacity to produce 80,000 barrels of oil per day. The estimated recoverable resources are currently at 275 million barrels of oil equivalent, and BP tells investors that Kaskida could access up to 10 billion barrels. Nothing in President Trump's Executive Order, Unleashing American Energy, excuses BOEM from the analysis required here by OCSLA and NEPA. The directive to end the use of the social cost of	

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		carbon—which never accurately reflected the true cost—and limit the scope of environmental reviews does not absolve BOEM from its legal and scientific obligations, which demand a hard look at the environmental impacts, including quantifying the emissions and describing the associated impacts, of the Kaskida project.	
Earthjustice et.al. - A	BOEM-2025-0022-0066	The greenhouse gas emissions from operations contribute significantly to the region's total emissions. BOEM must examine the effects of the proposed action's greenhouse gas emissions that range from human mortality and severe storms to habitat loss and wildlife extinctions. **A. Greenhouse gas pollution damages and harm.** Fossil fuel emissions and resulting climate harms are already causing hundreds of thousands of premature deaths each year in the US. The fine particulate pollution from fossil fuel combustion alone causes an estimated one in ten deaths each year in the United States, totaling 355,000 premature deaths in 2018. Compared to limiting temperature rise to 1.5°C, warming of 2°C will cause an estimated 153 million more premature deaths worldwide due to increased exposure to fine particulate matter and ozone. Another recent study estimated that every 4,434 metric tons of CO2 added to the atmosphere in 2020—equivalent to the lifetime emissions of 3.5 average Americans—will cause one excess death globally through 2100. The implications of this finding are that failing to limit temperature rise to 1.5°C and instead allowing 2°C warming will cost 169 million additional lost lives.	See responses to BOEM-2025-0022-0064 and BOEM-2025-0022-0065. Climate-related factors and their influence on human health risks were addressed programmatically in Chapter 4.17, Chapter 4.1.2.5, and Appendix B.4 of the 2025 GOA PEIS, from which this SEA tiers.
Earthjustice et.al. - A	BOEM-2025-0022-0067	Climate change threatens public safety, health and well-being, with particular harms to children, older	Commented noted. See responses to BOEM-2025-0022-0064 and BOEM-2025-0022-0065.

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		adults, communities of color, low-income communities, immigrant groups, and persons with disabilities and pre-existing medical conditions. Many of these same communities are also disproportionately impacted by the impacts from upstream oil and gas production. Health risks from climate change include increased exposure to heat waves, floods, droughts, and other extreme weather events; increases in infectious diseases; decreases in the quality and safety of air, food, and water; displacement; and stresses to mental health and well- being. In the United States, the health costs of air pollution from fossil fuel combustion and climate change are estimated to already exceed $800 billion per year and will become much more expensive without rapid action to curb fossil fuel pollution. The Gulf region is already ground-zero for many of these impacts. For example, in Texas' record-breaking freeze in the winter of 2021 left millions of people without power and water, resulting the deaths of dozens of people.	Climate-related factors and their influence on human health risks were addressed programmatically in Chapter 4.17, Chapter 4.1.2.5, and Appendix B.4 of the 2025 GOA PEIS, from which this SEA tiers.
Earthjustice et.al. - A	BOEM-2025-0022-0068	Climate change has contributed to an increase in North Atlantic hurricane activity since the 1970s. Hurricane-generated storm surge events — the enormous walls of water pushed onto the coast — have also become more frequent and severe. One study found that large storm surge events of Hurricane Katrina magnitude have already doubled in response to warming during the 20th century, and projected that Atlantic hurricane surge events will increase in frequency by twofold to sevenfold for each 1°C in temperature rise. As the climate warms, Atlantic and eastern North Pacific hurricane rainfall and intensity are projected to increase, making hurricanes more destructive. Studies of Hurricane Harvey concluded that	Commented noted. See responses to BOEM-2025-0022-0064 and BOEM-2025-0022-0065. Climate-related factors and hurricanes were addressed programmatically in the Chapter 4.17, Appendix B.4, and Appendix K of the 2025 GOA PEIS, from which this SEA tiers.

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		climate warming made the storm's record rainfall more likely and intense.	
Earthjustice et.al. - A	BOEM-2025-0022-0069	It is inappropriate to assume that not producing US oil results in higher emissions. An analysis of the effects of removing subsidies for U.S. oil and gas production found that decreases in the U.S. oil and gas supply would result in substantial decreases in global oil and gas consumption. Also, modeling results from a BOEM greenhouse gas analysis estimated that leaving U.S. oil and gas undeveloped under the no-leasing alternative would result in a significant decrease in global oil consumption with associated reductions in carbon pollution. BOEM must comprehensively analyze the midstream and downstream greenhouse gas emissions associated with the Kaskida development and production. The agency has previously conducted lifecycle assessments, though they could use improvement. Given this legal obligation and prior agency practice, BOEM cannot now reverse course and exclude these impacts. Transporting, refining, and ultimately combusting the extracted oil are direct and reasonably foreseeable consequences of approving the project.	The consideration of removing subsidies for U.S. oil and gas production is outside the scope of this SEA and BOEM's review and analysis for this project. Chapter 4.0.2.1 and Appendix K of the 2025 GOA PEIS and Chapters 2.5, 4.4.1, and 4.4.6 of the Oil and Gas SID, discuss downstream industries, including complications with tying development activities on the OCS to effects on the onshore infrastructure network. Regarding the connections between offshore and onshore activities, refineries exist within not only an onshore and offshore market context but also an international one, wherein suitable oil and gas products can be imported from across the globe should future market conditions favor such actions. BOEM maintains that potential impacts that may arise from downstream support activities cannot be influenced by BOEM's decision-making given that BOEM has no regulatory authority over any onshore activities, including their location. Many other Federal and State agencies regulate onshore oil- and gas-related infrastructure through air and wastewater discharge permitting and stream and wetland permitting. Through these permitting processes, the agencies are required to consider impacts for their proposed actions.
Earthjustice et.al. - A	BOEM-2025-0022-0070	BOEM also cannot avoid analyzing the cumulative effects of the Kaskida project in conjunction with other past, present, and reasonably foreseeable oil and gas development activities in the Gulf of Mexico. NEPA requires a comprehensive assessment of cumulative impacts, and the incremental contribution of Kaskida's GHG emissions, when added to the broader context of regional fossil fuel development, is a critical	A FONSI can still be reached even if the proposed action would result in an increase in GHG emissions. The DOI NEPA implementing procedures, particularly as informed by the recent Supreme Court ruling, do not mandate BOEM consider broadly defined "cumulative effects" from separate projects, effects remote in time or place, or effects outside of the agency's regulatory authority, even if they could be linked by a "but for" causal chain. Please see responses to

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		environmental consequence that must be thoroughly evaluated.	BOEM-2025-0022-0045 and BOEM-2025-0022-0064 for additional information. Cumulative impacts were nevertheless addressed programmatically in Chapter 4.17 and Appendix K of the 2025 GOA PEIS.
Earthjustice et.al. - A	BOEM-2025-0022-0071	**XIV. THE DOCD AND EIA DO NOT ADEQUATELY ASSESS THE IMPACTS OF METHANE EMISSIONS FROM THE PROJECT.** BOEM's regulations require the DOCD to include information about potential emissions and emission reduction measures. 30 C.F.R. § 550.249. Further, 30 CFR § 550.261(a)(1) requires a discussion of potential environmental impacts of the proposed development and production activities. The DOCD itself fails to discuss greenhouse gas emissions, including methane, that the Project would contribute to the atmosphere. The EIA does not model or otherwise calculate expected methane emissions from the Project. Instead, citing only the outdated BOEM programmatic NEPA analysis from 2016, the EIA claims that "[g]reenhouse gas emissions from this proposed project represent a negligible contribution to the total greenhouse gas emissions from reasonably foreseeable activities in the Gulf of Mexico and are not expected to significantly alter or exceed any of the climate change impacts evaluated in the Programmatic EIS" and that "methane (CH4) emissions from the project would constitute a small incremental contribution to greenhouse gas emissions from all OCS activities." Recent evidence, including BOEM's own findings, shows that the agency's 2016 analysis underestimated methane emissions from OCS oil and gas development. Thus, the EIA cannot rely on these inaccurate analyses to evaluate the impacts of methane emissions from the Project.	Under 30 CFR 550.249, the regulated pollutants include criteria air pollutants, VOCs, and TSP. BOEM's ambient air quality review focuses on the NAAQS-related pollutants carbon monoxide (CO), sulfur dioxide (SOx), nitrogen oxides (NOx), VOCs, and TSPs for purposes of the emission-exemption thresholds and significance-level determinations in 30 CFR part 550. Methane emissions are not regulated by BOEM and are out of scope for this plan. Therefore, calculated methane emissions were not included in the DOCD. However, methane emissions (including as part of the GHG analysis) were evaluated programmatically in the 2025 GOA PEIS, from which this SEA tiers, with additional supporting information provided in the Oil and Gas SID. As explained in NTL 2008-G04 "Information Requirements for Development Operations Coordination Documents", EIAs focus on the impacts associated with the specific project, rather than providing broad programmatic descriptions. Therefore, no request was made for further greenhouse gas emission information. Also, the DOI NEPA implementing procedures state "the effects of GHG emissions and global climate change are fundamentally cumulative phenomena; therefore, it is not possible to track the effects of GHG emissions from a proposed action to climate change effects in a localized manner to be able to determine significance one way or the other and they need not be analyzed."

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Earthjustice et.al. - A	BOEM-2025-0022-0072	Methane is a potent greenhouse gas released into the air during offshore drilling operations through accidental leaks or purposeful venting or flaring. According to the International Energy Agency, "[t]ackling methane emissions from oil and gas operations is one of the most important measures to limit near-term global warming." EPA has estimated that federal offshore oil production in the Gulf resulted in 179,891 metric tons of methane emissions in 2021 (almost 10 percent of total emissions from petroleum systems in the U.S.). BOEM has found that OCS oil and gas operations in the Gulf are "major contributors of anthropogenic methane to the environment at a national level." Recent studies suggest that U.S. agencies' modeled estimates of methane emissions from offshore oil and gas production significantly underestimate real world methane emissions from offshore oil and gas operations. Several published studies have found that methane emissions from Gulf activities are substantially higher than previously assumed. Based on direct aircraft measurements of methane plumes over the Gulf, Gorchov Negron et al. (2023) found that emissions are triple what BOEM estimates. Other reports on methane emissions in the region support this concerning conclusion. Moreover, BOEM itself has acknowledged that this recent evidence suggests that the agency's prior methane emission analyses are inaccurate. For example, in its 2024 draft programmatic environmental impact statement for the Gulf of Mexico regional OCS oil and gas lease sales, BOEM acknowledges that even its emissions analyses after 2016—such as BOEM's 2017 emissions inventory—underestimates methane emissions.	As explained in NTL 2008-G04 "Information Requirements for Development Operations Coordination Documents", EIAs should focus on the impacts associated with the specific project, rather than providing broad programmatic descriptions. Accordingly, the EIA process did not include a request for additional greenhouse gas emission details, which BOEM has already evaluated at a programmatic level in the 2025 GOA PEIS. In accordance with 30 CFR 550.303, the regulated pollutants include criteria air pollutants, VOCs, and TSPs. Calculated methane emissions (or modeling of methane) were not included in the DOCD. Methane emissions were evaluated programmatically in the 2025 GOA PEIS, from which this SEA tiers, with additional supporting information provided in the Oil and Gas SID. Methane associated with accidental releases from pipelines and infrastructure was evaluated in Chapter 4.1 of the 2025 GOA PEIS. Emission factors play a key role in estimating emissions when data is not available. While direct measurements are encouraged, they are not always required or reasonably available. Furthermore, any reported direct measurements must be accompanied by documentation for verification purposes.

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		Because the EIA is based on outdated information, BOEM must reject BP's conclusion in the EIA that the Project will have only negligible impacts to the total greenhouse gas emissions from activities in the Gulf. BOEM must better account for methane emissions before approving the Project. This must include performing accurate modeling and analyses of methane emissions from the Project itself, rather than relying on prior programmatic or lease sale level analyses to assume impacts from the Project. Moreover, to improve future analyses, the agency must update its air quality inventory to rely more on direct measurement rather than its current process of relying almost entirely on emissions factors.	

C.10 TOPIC 10: AIR AND WATER QUALITY

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0073	The DOCD and EIA's discussion of air emissions from the Project is flawed because BP fails to accurately describe the region's baseline air quality and uses outdated formulas to estimate air quality impacts from the Project. BOEM must first update its air quality regulations to properly account for air emissions from this Project and other OCS oil and gas activities. BOEM must also perform its own expert analysis to ensure that BP's modeling and conclusions are accurate.	Under BOEM's regulatory regime, a facility's emissions are compared to the emission-exemption thresholds (EETs) determined by the formulas at 30 CFR §550.303(d). If any criteria pollutant exceeds its EET, the operator must model the ambient concentration and compare the modeled concentration to the significance level in 30 CFR §550.303(e). In the N-10256 DOCD, all criteria pollutants were below the EETs except NO_x. Projected NO_x emissions exceeded the EET in 2028–2035, triggering dispersion modeling. Consistent with BOEM's modeling NTL (2020-N02), which identifies the BOEM Director-approved models and recommends CALPUFF v5.8.5 for overwater long-range (>50 km) assessments, the operator used CALPUFF v5.8.5 with BOEM meteorology. The resulting 1-hr NO_2 modeled ambient concentration was 2.60 µg/m³ (five-year, spatially consistent max) and 3.82 µg/m³ (max single-year).

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			Consistent with EPA's Guideline on Air Quality Models (40 CFR part 51, Appendix W), BOEM evaluated compliance by adding monitored background levels to modeled concentrations. When the modeled ambient concentrations for 1-hr NO_2 were added to the 2021–2023 Galveston coastal monitor design value of 53.56 µg/m³, the totals were 56.16–57.38 µg/m³, well below the 1-hr NO_2 NAAQS (188 µg/m³). A "design value" is an EPA-defined statistic calculated from several years of air-monitor readings used to decide if an area meets a health standard (40 CFR part 50, Appendix S, section 1(c)). For example, for the 1-hour NO_2 standard it's the three-year average of each year's 98th-percentile daily maximum 1-hour concentration. The modeled ambient concentration for the annual NO_2 at the shoreline was 0.03 µg/m³, which is below the 1.0 µg/m³ significance level listed in 30 CFR §550.303(e). BOEM conducts air quality reviews on all plans. The modeled ambient concentrations of NOx at the shoreline are below applicable standards.
Earthjustice et.al. - A	BOEM-2025-0022-0074	First, BPs failure to provide total air emissions from the project means that the DOCD fails to meet regulatory requirements. Appendix E provides emissions estimates for certain criteria pollutants for a ten-year period, but it fails to calculate the total emissions. This violates the requirement to provide total estimated emissions for all relevant pollutants as mandated by 30 C.F.R. § 550.249(a)(1)(v). Moreover, displaying only ten years of a project with up to a 50-year lifespan fails to "describe the emissions over the duration of production activities." Id. This omission prevents a comprehensive understanding of the cumulative air quality impacts.	The operator provided a summary table of all emissions per year in Appendix A of the DOCD, which is consistent with 30 CFR § 550.249(a)(1)(v). Any emissions past the ten-year period would be an increase in emissions and a revised plan would be submitted per 30 CFR §550.283(a)(4).
Earthjustice et.al. - A	BOEM-2025-0022-0075	The DOCD also does not propose any emission reduction measures or describe any monitoring systems, as required by 30 C.F.R. § 550.249(b). It	Under 30 CFR § 550.249(b), the operator is required to describe any emission-reduction measures and any monitoring system the operator proposes. Under 30

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		says only that “BP did not utilize any emission reduction measures in calculating emissions for the project. All emissions were calculated using the default values in the BOEM Form 0139.3.” The monitoring requirement is further noted in 30 C.F.R. § 550.303(k) and should apply even for emissions below the exemption threshold.	CFR § 550.303(k), BOEM periodically requires emission monitoring and reporting as most recently described in BOEM NTL No. 2022-N01.
Earthjustice et.al. - A	BOEM-2025-0022-0076	Moreover, the Regional Supervisor, using their authority in 30 C.F.R. § 550.303(j) should require BP to submit additional information to determine if air quality controls are necessary. Additional air quality controls are necessary because emissions will significantly affect the air quality of onshore areas. BP mischaracterizes the state of air quality in the Gulf of Mexico region. The EIA states that air quality in the Gulf is “relatively good,” which is not accurate. As the EIA acknowledges, several counties in coastal Texas and Louisiana are in nonattainment for different pollutants (the Houston-Galveston-Brazoria area in Texas is in nonattainment for the 8-hour ozone standard, and the St. Bernard Parish area in Louisiana is in nonattainment for the 1- hour sulfur dioxide standard), and there are several areas in the region designated as Class I areas under the Clean Air Act. The EIA ignores air quality implications for the Class II areas in the region, including the Breton National Wildlife Refuge, Padre Island National Seashore, and Gulf Islands National Seashore.	Under 30 CFR § 550.303(j), the Regional Supervisor may require the operator to submit additional information to determine whether emission control measures are necessary. In 550.303(f) an onshore ambient air concentration above the significance level will be deemed to significantly affect the air quality of the onshore area. Emission control measures are required when a criteria pollutant is above the significance level and significantly affects the air quality in a nonattainment area as described in 30 CFR § 550.303(g). In the N-10256 DOCD, the operator shows all pollutants are below the EETs except NO_x and the modeled ambient concentration of NOx at the shoreline is below the significance level. As analyzed and disclosed in the 2025 GOA PEIS and Oil and Gas SID, some areas along the coast, such as the Houston-Galveston-Brazoria area in Texas and St. Bernard Parish in Louisiana, are designed as nonattainment areas because they do not meet the National Ambient Air Quality Standards (NAAQS) for the 8-hour ozone and 1-hour sulfur dioxide. However, all other areas along the coast are designed as attainment areas because they meet the NAAQS. The EIA’s reference to “relatively good” air quality may reflect an attainment designation, however, attainment status is established through the formal process set out in 40 CFR. Regarding protected areas, Breton Wilderness Area is a Class I area, while Padre Island and Gulf Islands National Seashore are Class II. The Breton Wilderness

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			Area is the closest protected area to the project. As described in the EIA (Appendix I), the project is at a large distance-about 468 km-from the Breton Wilderness Area. The proposed project is not expected to cause significant effects to air quality under the NAAQS in the Breton Wilderness Area.
Earthjustice et.al. - A	BOEM-2025-0022-0077	Second, the DOCD and EIA for this Project highlight the urgent need for BOEM to update its outdated air quality regulations. BOEM's air quality regulations have not been substantially updated since the 1980s. In fact, BOEM's air quality regulations are not even consistent with EPA's NAAQS program. For example, BOEM's emission exemption thresholds (EETs) use Total Suspended Particulate (TSP) standard and do not incorporate PM_{10} and $PM_{2.5}$, even though EPA has long replaced TSP with PM_{10} and $PM_{2.5}$. The EETs also utilize annual thresholds, even though EPA recognizes the harmful impacts from short-term exposure to criteria air pollutants and thus has adopted short-term NAAQS. In 2019, BOEM released an air quality study of impacts from 10 Gulf lease sales proposed in the 2017–2022 five year program, which found that the lease sales would contribute to criteria air pollution in the Gulf, including to pollutants in nonattainment areas, such as adding up to 14 parts per billion (ppb) to already elevated ozone levels in the Houston region, and would push at least one site in Texas above the 70 ppb NAAQS attainment threshold for ozone and into nonattainment status. The study also found that this pollution would negatively impact visibility at Breton National Wildlife Refuge. In addition, the study determined that the existing EETs were not sufficiently protective of the short-term NAAQS for any pollutant. In 2019, the National Academies of Sciences, Engineering, and Medicine (NAS) released a review of BOEM's study and found that BOEM "is currently using	BOEM's air quality regulations provide for onshore compliance with the NAAQS and as such, satisfy BOEM's statutory obligations. BOEM's statutory air quality obligations are distinct from and more limited than those of USEPA. BOEM air quality studies have explored several options available for BOEM to consider reformulating the EETs. The National Academy of Sciences, Engineering, and Medicine's review of one such study suggested a need for changes but did not propose a concrete alternative. BOEM chose not to change the EETs in 2020 when revisited its air quality regulations, given the lack of a reliable scientific basis for new EET at the time.

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		EETs that were developed in the 1980s, apparently without detailed air quality modeling nor consideration of any long-term NAAQS … They clearly need to be updated to reflect newly regulated pollutants (i.e., PM2.5 and PM10) and updated (i.e., 8-hour- average ozone, 1-hour-average NO_2 and SO_2) air quality standards as well as state-of-the-science dispersion and photochemical models." The NAS review agreed with BOEM that new EETs for all criteria pollutants and their precursor pollutants should be developed. Despite all this, BOEM's current air quality rules retain the EETs and other aspects that the agency itself has acknowledged are outdated. BOEM must update its air quality regulations—including revising its out-of-date EETs, significance levels (SLs), approved modeling, and more—in order to be able to ensure "compliance with" the NAAQS, as OCSLA requires. This is necessary to accurately assess air emissions from the Project. Indeed, BP's air emissions calculations show that, even using the outdated formulas laid out in the current air quality rule, the Project will emit substantial criteria pollutants. BP estimates that the NO_X emissions from the Project would not only exceed the EET but would also almost double the EET value in 2028. It is possible that, with more accurate EETs and SLs and modeling, the impacts from the Project from not just NO_X but other criteria or precursor pollutants as well would be higher than what BP suggests.	
Earthjustice et.al. - A	BOEM-2025-0022-0078	Third, BOEM must fully perform its own expert analysis of BP's calculations and modeling regarding air emissions from the Project. As discussed, BP's own air emissions calculations show that NO_X emissions from the Project would substantially exceed the EET. The agency must	In the N-10256 DOCD, all criteria pollutants were below the EETs except NO_x. Projected NO_x exceeded the EET in 2028–2035, triggering the requirement for BP to conduct dispersion modeling. Consistent with BOEM's modeling NTL (2020-N02), which identifies the BOEM Director-approved models and recommends CALPUFF

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		take a close, hard look at BP's modeling for NO_X/NO_2 to ensure that the company's conclusions regarding whether it exceeds the SLs and/or contributes to or causes NAAQS violations are accurate. The agency must also take a hard look at BP's calculations for the other pollutants.	v5.8.5 for overwater long-range (>50 km) assessments, the operator used CALPUFF v5.8.5 . with BOEM-provided meteorology. The resulting 1-hr NO_2 modeled ambient concentration was 2.60 µg/m³ (five-year, spatially consistent max) and 3.82 µg/m³ (max single-year). Consistent with EPA's Guideline on Air Quality Models (40 CFR part 51, Appendix W), BOEM evaluated compliance by adding monitored background levels to modeled concentrations. When the modeled ambient concentrations for 1-hr NO_2 were added to the 2021–2023 Galveston coastal monitor design value of 53.56 µg/m³, the totals were 56.16–57.38 µg/m³, well below the 1-hr NO_2 NAAQS (188 µg/m³). A "design value" is an EPA-defined statistic calculated from several years of air-monitor readings used to decide if an area meets a health standard (40 CFR part 50, Appendix S, section 1(c)). For example, for the 1-hour NO_2 standard it's the three-year average of each year's 98th-percentile daily maximum 1-hour concentration. The modeled ambient concentration for the annual NO_2 at the shoreline were 0.03 µg/m³, which is below the 1.0 µg/m³ significance level listed in 30 CFR §550.303(e). The operator used BOEM's approved BOEM-0139 form to calculate the emissions. In BOEM-0139 form, BOEM provides the operator emission factors compiled from the latest USEPA AP-42 references and other sources. BOEM instructions for the BOEM-0139 form explain that if an operator uses any emission factors that are less than the default values in the calculation of the projected emission amounts, the operator must provide documentation supporting the use of the smaller emission factors. Documentation must be submitted with the plan every time for review. If documentation is not provided, verification of these reduced emission factors will be required to prove that the reduced emission factors are being achieved and maintained. In the N-10256 DOCD, the operator did not

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			make any changes to the emission factors provided in BOEM-0139.

C.11 Topic 11: Socioeconomic Effects (including Environmental Justice Concerns)

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Earthjustice et.al. - A	BOEM-2025-0022-0079	BP also ignores that Gulf communities are already overburdened by air pollution from oil and gas infrastructure. Over 48% of total U.S. petroleum refining capacity and 51% of total U.S. natural gas processing plant capacity are located along the Gulf coast. In particular, the petrochemical industry has disproportionately impacted Black, Indigenous, and communities of color. These communities face disproportionate burdens from multiple pollution sources, including toxic air pollution. Additional air pollution from OCS oil and gas sources, including from the Project, will only exacerbate the poor air quality that coastal communities already experience.	No new or expansion of existing shore bases or onshore support infrastructure and facilities is planned or reasonably expected as part of the Proposed Action; therefore, potential impacts would be negligible. However, BOEM does not have authority to regulate any onshore facilities or activities that contribute to air pollution. See the comment response for Earthjustice BOEM-2025-0080 below regarding BOEM's compliance with the requirements of NEPA following the publication of E.O. 14154, *Unleashing American Energy* (Jan. 20, 2025), and a Presidential Memorandum, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025).
Earthjustice et.al. - A	BOEM-2025-0022-0080	Communities along the Gulf Coast have had fossil fuel infrastructure that transports, stores, and processes OCS oil and gas imposed upon them. These facilities include ports, pipelines, processing facilities, and refineries, among others. Within the Gulf of Mexico, effects of this oil and gas industrialization are not evenly distributed, with environmental justice communities in Louisiana and Texas bearing the brunt of the harm. BOEM has previously committed to "advancing meaningful engagement with communities that may potentially be impacted by oil and gas activities" for lease sales from 2024 to 2029, and it has stated that it will consider "community-initiated discussions of potential impacts and community-informed mitigation measures."	BOEM's analyses take into consideration a broader body of relevant literature which includes indirect and reasonably foreseeable impacts, within the context of NEPA and the Proposed Action. Chapter 4.14 and 4.16 of the 2025 GOA PEIS and Chapters 2.5, 4.4.1, and 4.4.6 of the Oil and Gas SID discuss downstream industries in further detail, including complications with correlating potential lease sale activities to effects on the onshore infrastructure network. See Chapter 2.1.2.2 of the Oil and Gas SID for analyses of air pollution from onshore infrastructure. Regarding the connections between offshore and onshore activities, refineries exist within not only an onshore and offshore market context but also an international one wherein suitable oil and gas products can be imported from across the globe should future market conditions favor such actions.

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		Before BOEM proceeds further into approving the Kaskia Project, BOEM must engage meaningfully with vulnerable Gulf communities that suffer the devastating and disproportionate impacts of offshore oil and gas production, including impacts from midstream and downstream oil and gas infrastructure associated with offshore development. Such engagement should include (1) holding in-person meetings with at least 10 to 20 impacted communities in the Gulf of Mexico; (2) collaborating with trusted community-based organizations to help the agency understand community concerns and needs; (3) conducting targeted outreach and disseminating information in a manner that will reach the intended communities; (4) providing translation and interpretation services for materials and meetings in the top languages spoken in the communities; (5) ensuring that materials are in plain language and accessible; and (6) providing incentives for participation in BOEM meetings. BOEM should identify and fully understand all potential impacts to communities as well as community concerns. In particular, BOEM should evaluate how the Kaskida Project will impact Gulf communities through further midstream and downstream oil and gas infrastructure. BOEM should take the results of this assessment into consideration when deciding whether to approve the Project.	BOEM maintains that potential impacts that may arise from downstream support activities cannot be influenced by BOEM's decision-making given that BOEM has no regulatory authority over any onshore activities, including their location. Many other Federal and State agencies regulate onshore oil- and gas-related infrastructure through air and wastewater discharge permitting and stream and wetland permitting. Through these permitting processes, the agencies are required to consider impacts for the proposed actions that are under their jurisdiction. Regarding disproportionate impacts and environmental justice concerns, E.O. 14154, *Unleashing American Energy* (Jan. 20, 2025), and a Presidential Memorandum, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025), require DOI to strictly adhere to NEPA, 42 U.S.C. 4321 et seq. Further, E.O. 14154 and the 2025 Memorandum repeal E.O.s 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023), which had mandated federal agencies to address environmental justice. Because E.O.s 12898 and 14096 have been repealed, agencies are no longer required to consider environmental justice generally in their environmental analyses, among other issues. BOEM has complied with the requirements of NEPA, including DOI's regulations and procedures implementing NEPA at 43 CFR part 46 and the DOI NEPA Handbook in place during the time of the preparation of this SEA, consistent with the President's January 2025 Order and Memorandum. 30 CFR part 550 does not require a detailed analysis of "environmental justice" be included in the DOCD. The DOCD and supporting EIA, however, did consider and evaluate potential impacts to minority and lower income groups in accordance with 30 CFR 550.261(b)(7).

C.12 TOPIC 12: COMMENTS THAT ARE OUT OF SCOPE

Commenter	ID Number	Comment	Response
Earthjustice et.al. - A	BOEM-2025-0022-0081	Communities along the Gulf of Mexico are burdened with some of the worst impacts of the offshore oil and gas industry. Over 48% of total U.S. petroleum refining capacity and 51% of total U.S. natural gas processing plant capacity are located along the Gulf coast. In particular, the petrochemical industry has disproportionately impacted Black, Indigenous, and communities of color. These communities face disproportionate burdens from multiple pollution sources, including toxic air pollution, plastic pollution, and groundwater contamination. In a nationwide study mapping the spread of cancer-causing chemicals from sources of hazardous air pollutants, census tracts where a majority of residents were people of color experienced on average about 40% more cancer-causing industrial air pollution than primarily white census tracts. In census tracts where the majority of residents were Black, the estimated cancer risk from toxic air pollution was found to be more than twice the risk of majority-white tracts. Two areas in the Gulf of Mexico have unduly felt the harms of the oil and gas industry: "Cancer Alley," Louisiana and southeastern Texas. These two regions are highlighted to illustrate the severe impact of the offshore oil and gas industry on communities across the Gulf coast. 1. "Cancer Alley," Louisiana "Cancer Alley," the 85-mile stretch along the Mississippi River between Baton Rouge and New Orleans, gets its name from the high concentration of petrochemical facilities and high cancer risk from toxic pollution. In 2012, the average cumulative cancer risk in Cancer Alley was more than 50% higher than the average cumulative risk in the	BOEM analyzed the impacts of OCS oil and gas-related activities on Social Factors in Chapter 4.16 of the 2025 GOA PEIS; and on Land Use and Coastal Infrastructure in Chapter 4.14 of the 2025 GOA PEIS. Additional supporting analysis of the impacts of OCS oil-and gas-related activities are included in Chapter 4.4.6 (Social Factors) and 4.4.1 (Land Use and Coastal Infrastructure) of the Oil and Gas SID, which is incorporated by reference. Consistent with the conclusions in the 2025 GOA PEIS from which this SEA tiers, no new or expansion of existing shore bases or onshore support infrastructure and facilities is planned as part of the Proposed Action; therefore, potential impacts would be negligible. In addition, with respect to considering an alternative that addresses environmental justice concerns, E.O. 14154, *Unleashing American Energy* (Jan. 20, 2025), and a Presidential Memorandum, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025), require DOI to strictly adhere to NEPA, 42 U.S.C. 4321 et seq. Further, E.O. 14154 and the 2025 Memorandum repeal E.O.s 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023), which had mandated federal agencies to address environmental justice. Because E.O.s 12898 and 14096 have been repealed, agencies are no longer required to consider environmental justice generally in their environmental analyses, among other issues. BOEM has complied with the requirements of NEPA and DOI's regulations and procedures implementing NEPA at 43 CFR 46 and 516 of the Departmental Manual in place during the time of the preparation of this SEA, consistent with the President's January 2025 Order and Memorandum. 30 CFR part 550 does not require a detailed analysis of "environmental justice" be included in the DOCD. The

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		United States. The burden of this toxic air pollution is felt by Black and low-income communities. President Biden has acknowledged the environmental injustices Black, Indigenous, and people of color face, and has explicitly named Cancer Alley as an area that has been disproportionately harmed. Within ten miles of St. Gabriel, Louisiana, a majority-Black community, there are at least thirty large petrochemical facilities; thirteen of those are within three miles. EPA data from 2014 estimated that nationwide cancer risk from air toxics exposure was thirty in one million. In the census tract in which St. Gabriel sits, the total cancer risk in 2017 was 200 in one million, over six times the national average. St. Gabriel is also home to a chemical manufacturing plant that once ranked in the top ten plants in the country in terms of creating high, toxic levels of cancer- causing chemicals in the surrounding air. A plastics facility across the river from St. Gabriel announced a $1.3 billion facility expansion in 2021. Despite the existing health burdens in the region, many new petrochemical facilities or facility expansions are planned in or near communities that already have some of the most dangerous air in the country. In St. John the Baptist Parish, the town of Reserve, a small, predominantly Black and low-income community, has a cancer risk rate fifty times the national average. Residents of Reserve and surrounding towns have been concerned about the health effects of high levels of chloroprene emissions from the Denka Performance Elastomer facility, a synthetic rubber plant in the parish. After a 2015 EPA air toxicity report, the Denka plant was determined to be responsible for the greatest risk of cancer of any manufacturing facility in the United States. Air monitoring around the parish has shown	DOCD and supporting EIA, however, did consider and evaluate potential impacts to minority and lower income groups in accordance with 30 CFR 550.261(b)(7).

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		quantities of chloroprene, a likely carcinogenic chemical, dozens of times above EPA's guidance. EPA has stated that emissions of chloroprene above its recommended limit (0.2 micrograms per cubic meter) are unsafe for humans to breathe over the course of a lifetime. The air monitoring station at a local elementary school, on the fenceline of the Denka plant, recorded at one point levels of chloroprene 755 times above EPA's guidance. Over 500 children attend the elementary school daily. One study of cancer risk in residents living near the Denka plant found that cancer prevalence and non-cancer health conditions associated with chloroprene exposure were unusually high and correlated to proximity to the plant. Cancer prevalence for residents who lived within one-and-a-half kilometers of the plant was 44% higher than the national average. Of survey respondents who lived within one-and-a-half kilometers of the plant, more than half regularly experienced headaches, dizziness or lightheadedness; nearly half regularly experienced eye pain/irritation and/or watery eyes; more than 40% experienced coughing, sneezing, and/or a sore/hoarse throat most of the time; more than one third regularly experienced skin rash/irritation and/or itchy skin; nearly 40% experienced chest pain, heart palpitations or both; one third regularly experienced wheezing and/or difficulty breathing; and nearly 30% experienced fatigue/lethargy most of the time. In surveyed households within one-and-a-half kilometers of the plant, nearly 50% of the children suffered from headaches, nosebleeds, or both. These health effects are consistent with the short- and long-term health effects EPA has found associated with chloroprene exposure. Additional long-term health effects of chloroprene	

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		exposure include cancer, rapid heartbeat and reduced blood pressure, and temporary hair loss. Due to EPA's concern about high levels of chloroprene emissions in St. John the Baptist Parish, EPA, the Louisiana Department of Environmental Quality, and Denka have made efforts to reduce chloroprene emissions from the facility. Yet between January 6, 2022 and September 26, 2024, average chloroprene concentrations from 21 monitoring locations on the fenceline of the Denka facility were all still above EPA's recommended level, and EPA's six monitoring sites continue to report chloroprene concentrations over the recommended level.	
Earthjustice et.al. - A	BOEM-2025-0022-0082	In St. James Parish, as of 2019, at least four new or expanded petrochemical plants had been planned. Formosa Plastics, a plastics and petrochemicals company, plans to establish a new $9.4 billion plastics complex that would nearly double the amount of toxic chemicals released into the air. The plan would create at least fourteen separate production plants and would have the authority to release 1.6 million pounds of toxic chemicals annually, including 15,400 pounds of ethylene oxide and 73,160 pounds of benzene, both known cancer-causing agents. The burden of this toxic pollution would primarily fall on already overburdened Black communities. Sharon Lavigne, founder of RISE St. James, a faith-based grassroots organization fighting for environmental justice, has said that "Formosa Plastics would be a death sentence for St. James Parish." In addition to its harmful health impacts, the Formosa plant would cause significant cultural harm to the parish. The graves of people enslaved on former plantations were found on the land that Formosa plans to develop. An independent archaeologist found that there were possibly as	An analysis of the impacts of the Formosa Plastics Plant is out of scope for this SEA. BOEM is not a consulting party nor a cooperating agency in the review and possible approval of the Formosa Plant as it is outside of BOEM's regulatory mandate and jurisdiction provided by OCSLA. The Louisiana Department of Culture, Recreation and Tourism's Division of Archaeology is the State's representative and authority concerning unmarked human remains. BOEM recommends contacting them with concerns relating to the Louisiana Unmarked Human Burial Sites Preservation Act.

Commenter	ID Number	Comment	Response
		many as five other cemeteries on the land. In the efforts to block the Formosa plant from being constructed, Lavigne stated: “Our ancestors are crying out to us from their graves— they are telling us to not let industry disturb their burial sites.” Even without the Formosa project, there are still twelve petrochemical facilities within a ten-mile radius in St. James Parish; the Formosa plant would be the thirteenth. Residents of the Parish and Cancer Alley generally have long been aware of the unusually high number of people who fall ill with cancer and other diseases. One resident of Reserve recalled her niece saying, just before passing away from cancer: “We’re just sitting here, waiting to die.”	
Earthjustice et.al. - A	BOEM-2025-0022-0083	2. Southeastern Texas Like Cancer Alley, southeastern Texas is heavily burdened with the toxic pollution and adverse health impacts of oil refineries and the petrochemical industry. The impacts of the industry are acutely felt in the greater Port Arthur and Houston areas, the areas with the second and third largest hot spots of cancer-causing air pollution in the country, respectively, after Cancer Alley. Gulf Coast refinery and petrochemical facilities have frequently exceeded EPA limits on benzene pollution—as of December 2024, seven facilities were out of compliance. Benzene is a known human carcinogen with harmful health effects from both short- and long-term exposure, including headaches, dizziness, and irritation of the eyes, skin and respiratory tract, as well as harmful effects to bone marrow, excessive bleeding, and damage to the immune system.	See above comment for BOEM-2025-0082. Regarding the connections between offshore and onshore activities, refineries exist within not only an onshore and offshore market context but also an international one wherein suitable oil and gas products can be imported from across the globe should future market conditions favor such actions. BOEM maintains that potential impacts that may arise from downstream support activities cannot be influenced by BOEM’s decision-making on this project because BOEM has no regulatory authority over onshore activities, including their location. Many other Federal and State agencies regulate onshore oil- and gas-related infrastructure through air and wastewater discharge permitting and stream and wetland permitting. Through these permitting processes, the agencies are required to consider impacts for their proposed actions.

Commenter	ID Number	Comment	Response
		In Jefferson County, in which Port Arthur is situated, 92% of sulfur dioxide emissions come from one petroleum coke plant; the plant is one of the largest sources of sulfur dioxide pollution in Texas. Exposure to sulfur dioxide can also have short-term and chronic effects. Short-term exposure can cause respiratory problems, including shortness of breath and chest tightness, particularly during physical activity. Chronic exposure can increase susceptibility to respiratory infections and reduce the ability of the lungs to function. Additionally, children, older adults, and people with asthma are at increased risk of hospitalization and emergency room visits if exposed to sulfur dioxide. Of the approximately 2,600 residents who live within a three-mile radius of the petroleum coke plant, 98% are people of color and 62% are lower income. The predominantly Black neighborhood of Port Arthur closest to the plant reports a 13.7% asthma rate, above the 10.5% average asthma rate for Port Arthur and the 8% national average. In 2021, EPA recognized the harm that air pollution from the plant was causing the mostly African American community in Port Arthur when it agreed to investigate whether Texas violated the civil rights of residents by allowing the plant to continue emitting harmful air pollution without requiring modern pollution controls.	Regarding disproportionate impact, please refer to the previous comment response for Earthjustice BOEM-2025-0081 for BOEM's compliance with the requirements of NEPA following the publication of E.O. 14154, *Unleashing American Energy* (Jan. 20, 2025), and a Presidential Memorandum, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025).
Earthjustice et.al. - A	BOEM-2025-0022-0084	The greater Houston area is likewise heavily burdened by the oil and gas industry. The area is home to the largest petrochemical manufacturing complex in the western hemisphere as well as 44% of the nation's petrochemical capacity, with 618 chemical manufacturing facilities. Shipping is another major source of pollution for the area: one study found that children living within two miles of the Houston ship channel had a 56% higher risk of developing acute lymphocytic leukemia than	BOEM acknowledges the reasonably foreseeable impacts of changes in temperature and precipitation and worsening air pollution levels to the OCS as well as impacts onshore and elsewhere. Synergistic effects of air pollution on marine and coastal systems were addressed in Chapter 3.4.6 of the Oil and Gas SID (see Figure 3.4.6-1) as well as Chapter 4.3.2 and Appendix B.4.2.9 of the 2025 GOA PEIS. The impacts from air pollution on coastal populations in the Gulf of America are discussed in Chapter 3.4 of this SEA and further

Commenter	ID Number	Comment	Response
		children living more than ten miles from the channel. The toxic pollution from these facilities disproportionately harms people of color, low-income communities, and limited-English speaking households. Some pollutants of concern in the region are emissions of fine particulate matter (PM2.5), coarse particulate matter (PM10), and volatile organic compounds. Exposure to each of these pollutants has been linked to cardiovascular disease, premature death, and damage to bodily systems and organs. A study of the Houston region found that the amount of each of these pollutants emitted per square mile per year was roughly 50% higher for people living in poverty compared to wealthier communities. For communities of color, the burden of these pollutants was twice as much compared to white communities. Within the region, some communities are hit particularly hard—in the Harrisburg/Manchester neighborhood, a predominantly Hispanic/Latino neighborhood, one study found that air pollution exceeded safe levels for seven of the twelve air pollutants deemed“ definite risks.” Particulate matter pollution levels in that neighborhood have been found to be fifty to sixty times higher than in the broader region. Another study of the Houston area compared exposure to toxic air pollution and health risk in Harrisburg/Manchester as well as Galena Park, also a primarily Hispanic and low-income community, with Bellaire and West Oaks/Eldridge, two more affluent communities. The results found that the toxic concentration of 1,3-butadiene, a chemical known to cause cancer and other adverse neurological effects, was 174 times higher in Harrisburg/Manchester and 228 times higher in Galena Park than in West Oaks/Eldridge.	expanded in Chapters 4.1.2 and 4.4.6 of the Oil and Gas SID (including health impacts) as well as Chapters 4.1 and 4.16 of the 2025 GOA PEIS. With respect to the activities contributing to air pollutants, as discussed in Chapter 4.1.2.2.1 of the SID, GHGs (except for methane) for all existing OCS oil and gas sources contribute a small percentage to the total emissions in the GOA in comparison to all of the other contributing sources. An individual project such as this encompasses only a small subset of those emissions and therefore, is a negligible contribution to cumulative air emissions in the GOA. These conclusions are consistent with the prior NEPA analyses, from which this SEA tiers. See response to BOEM-2025-0022-0083 regarding the connections between offshore and onshore oil and gas activities.

Commenter	ID Number	Comment	Response
		The study also looked at cancer risk in these four communities. Residents in Harrisburg/Manchester have a 24% and 30% higher cancer risk than residents of Bellaire and West Oaks/Eldridge, respectively. Similarly, in Galena Park, residents face cancer risks 30% and 36% higher than in Bellaire and West Oaks/Eldridge, respectively. These studies highlight how, within the same region, communities of color and low-income communities are disproportionately burdened with the harmful impacts of the oil and gas industry. In addition to the health risks from exposure to air pollution in southeastern Texas, industrial facility accidents in the oil and gas industry also pose significant risks to surrounding communities. In 2017, Hurricane Harvey damaged two ExxonMobil refineries, resulting in a release of hazardous pollutants, including volatile organic compounds and sulfur dioxide. EPA estimates that approximately 150 catastrophic accidents occur at regulated industrial facilities every year, and less severe accidents happen regularly. As with air pollution, the risk of a chemical spill is higher in BIPOC and low-income communities near the fenceline of these facilities.	

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