BUDGET JUSTIFICATIONS

The United States Department of the Interior

and Performance Information
Fiscal Year 2025

BUREAU OF OCEAN ENERGY MANAGEMENT

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BUREAU OF OCEAN ENERGY MANAGEMENT
FY 2025 BUDGET JUSTIFICATION

Table of Contents

Table of Figures

Table of Tables

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FISCAL YEAR 2025 BUDGET
Bureau of Ocean Energy Management
Director's Preface

"BOEM is helping the Nation transition to a clean and just energy future – one that will combat climate change, create good-paying jobs, and ensure economic opportunities are accessible to all communities. BOEM works with Tribes, underserved communities, ocean users, and all stakeholders to ensure that any future offshore energy and mineral exploration and development is done responsibly and relies on the best available science and knowledge. Together, we can move toward a cleaner, more secure, and more equitable energy future for our Nation."

– Bureau of Ocean Energy Management Director Elizabeth Klein

BOEM's Fiscal Year (FY) 2025 budget reflects its commitment to ongoing efforts and initiatives vital to BOEM's mission to manage development of the Nation's offshore energy and mineral resources in an environmentally and economically responsible way. Proposed funding supports an emphasis on activities identified in legislation, including the Infrastructure Investment and Jobs Act (also known as the Bipartisan Infrastructure Law (BIL)) and the Inflation Reduction Act (IRA), and several Executive Orders (EOs).[1] In support of these EOs and legislation, BOEM's FY 2025 budget will continue to support advancing the Nation's clean energy future; fostering climate change resilience and adaptation; supporting critical mineral science and environmental stewardship; championing environmental justice; utilizing environmental studies and analysis in support of conservation efforts; and fostering diversity and inclusion in the workplace. With this request, BOEM proposes to focus resources in the following areas:

- **Renewable Energy.** BOEM is facilitating the responsible development of renewable energy on the U.S. Outer Continental Shelf (OCS) through conscientious planning; meaningful engagement with government entities, Tribes, and ocean users; comprehensive environmental analysis; and sound technical review. BOEM continues to support the Administration's goals of achieving 30 gigawatts (GW) of offshore wind energy capacity by 2030 and 15 GW of floating offshore wind capacity by 2035. Following the leasing path set by the Secretary of the Interior in FY 2022, BOEM plans to hold offshore wind lease sales in the Gulf of Mexico, Gulf of Maine, and offshore Oregon and the U.S. central Atlantic coast in FY 2024 and 2025. BOEM has approved the Nation's first 6 commercial offshore wind energy projects and is actively reviewing the construction and operations plans (COPs)

[1] Proposed funding supports an emphasis on activities identified within EO 14008, *Tackling the Climate Crisis at Home and Abroad*; EO 13990, *Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis*; EO 14017*, America's Supply Chains;* EO 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*; EO 13988, *Preventing and Combating Discrimination on the Basis of Gender Identity or Sexual Orientation*; and EO 14096, *Revitalizing Our Nation's Commitment to Environmental Justice For All*.

for 11 projects. BOEM expects to receive additional COPs for review between FY 2024 and 2025. As directed in the IRA, BOEM will work with the Governors of U.S. Territories—the Commonwealth of Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands—to determine the feasibility of and interest in issuing calls for information and nomination for potential future offshore wind lease sales. In support of these efforts, BOEM will continue intergovernmental coordination and collaboration through renewable energy task forces; strategies that promote robust and ongoing engagement with Tribal Nations, local communities, ocean users, and industry groups; and environmental studies that advance scientific and technological research.

- **Marine Minerals.** BOEM's marine minerals activities help ensure the responsible management of the Nation's OCS solid mineral resources. BOEM considers environmental impacts and the best available science to improve coastal resilience, enhance natural disaster preparedness, assess the availability of critical minerals, and protect shorelines essential for national security, the economy, and the environment. In FY 2024, BOEM continued to engage with State and local governments and impacted stakeholders to facilitate the procurement of sand and sediment resources for coastal restoration and beach nourishment to preserve infrastructure, defense facilities, and the Nation's coasts. BOEM also continues to collect baseline information about the ecological communities and conditions associated with critical mineral deposits on the OCS. BOEM's FY 2025 budget underscores the importance of increasing current understanding of marine minerals to inform the management of OCS mineral resources and to address environmental harms, particularly those being exacerbated by climate change. In FY 2025, BOEM will continue to avoid potential multiple-use conflicts and impacts by advancing the development of the National Offshore Sand Inventory, Marine Minerals Information System, and National Offshore Critical Mineral Inventory.
- **Conventional Energy.** BOEM ensures the environmentally and economically responsible management of OCS oil and gas resources by administering existing leases, permitting geological and geophysical surveys, evaluating resources, ensuring fair market value, and implementing the National OCS Oil and Leasing Program. In FY 2024, the Secretary of the Interior approved the 2024-2029 National OCS Oil and Gas Leasing Program (Program), which set a proposed schedule for OCS oil and gas lease sales of one per year in 2025, 2027, and 2029. The FY 2025 budget will support the implementation of the Program. As part of its responsibility to provide accurate and accessible ocean data, BOEM's FY 2025 budget will support ongoing digital mapping and geospatial services. These services inform decision-making in a crowded marine space to support ocean energy and economic, security, and environmental interests. As directed by the BIL, BOEM and the Bureau of Safety and Environmental Enforcement (BSEE) plan to publish draft OCS carbon sequestration regulations for comment in FY 2024 and finalize them in FY 2025.
- **Environmental Programs.** BOEM's Environmental Programs budget supports BOEM's mission by ensuring that decisions are guided and supported by the best available science and Indigenous Knowledge. Through environmental studies, environmental reviews, and robust public engagement, BOEM's Environmental Programs play a critical role in providing environmental safeguards for the development of offshore energy and mineral resources and for carbon sequestration. In addition, the Environmental Programs contribute transparent environmental research and data to inform BOEM, the public, ocean users, and other decision-makers about the potential impacts of OCS energy and mineral activities. The Environmental Programs also help develop mitigation strategies to assist with

conservation and protection of environmental and cultural resources and places. BOEM's FY 2025 Environmental Programs budget will continue to support consideration of the potential environmental, social, and cultural impacts of offshore energy and mineral development; achieve sustainable and equitable outcomes for all people impacted by BOEM-authorized activities; and quantify the cumulative effects of BOEM activities on climate change. In support of these efforts, BOEM will update its guidance to more effectively engage in government-to-government consultations with Tribal Nations and with environmental justice communities. BOEM's goal is to promote equity in, access to, and participation in BOEM's decision-making processes.

- **Executive Direction.** The offices performing BOEM's executive functions support Bureau-wide leadership and management activities, communication and outreach strategies, budget and performance activities, international affairs, congressional affairs, Freedom of Information Act activities, and regulatory development. These offices oversee critical Bureau functions to ensure the effective internal and external communication and presentation of BOEM's mission in compliance with the Administration's and Department's national and international initiatives. These offices also oversee the safety and health of BOEM's workforce, continuity of operations, emergency management, information technology, and internal control programs. In FY 2025, the Executive Direction budget will continue vital support for these activities and advance Administration- and Department-wide strategic priorities pertaining to diversity, equity, inclusion, accessibility, and environmental justice.

The FY 2025 budget reflects a careful analysis of the resources needed to advance the Administration's priorities and develop BOEM's capacity to execute its functions responsibly and efficiently in service of the Nation.

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FISCAL YEAR 2025 BUDGET

Bureau of Ocean Energy Management

General Statement

Bureau of Ocean Energy Management Mission

The mission of the Bureau of Ocean Energy Management is to manage development of the Nation's offshore energy, mineral, and geological resources in an environmentally and economically responsible way.

BOEM's core statutory mandate is provided by the Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. § 1331 et seq., in conjunction with the Submerged Lands Act, 43 U.S.C. § 1301 et seq. In OCSLA, the term "Outer Continental Shelf" (OCS) is defined as "(1) all submerged lands lying seaward and outside of the area of lands beneath navigable waters as defined in [the Submerged Lands Act], and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control or within the exclusive economic zone of the United States and adjacent to any territory of the United States; and (2) does not include any area conveyed by Congress to a territorial government for administration" (43 U.S.C. § 1331).

In practice, the OCS generally begins three nautical miles (nm) offshore a State (exceptions to this are Texas, the Gulf coast of Florida, and the Commonwealth of Puerto Rico, where State or Territory jurisdiction extends nine nm from shore) and extends to the outer edge of the continental margin or 200 nm from shore, whichever is greater. The outer limits of the U.S. continental shelf, in areas beyond 200 nm, are established by the U.S. Extended Continental Shelf Project. OCSLA gives the Secretary of the Interior responsibility and policy guidance for the protection and administration of energy and mineral exploration and development of the OCS.

To carry out OCSLA's statutory missions, BOEM manages OCS energy and mineral resources, including: renewable energy leasing and development; OCS oil and gas planning, leasing, and oversight, including inventories of oil and gas reserves, resource and economic evaluation, review and administration of oil and gas exploration and development plans, geological and geophysical (G&G) permitting, and financial assurance and risk management; conveyance of sand and gravel resources; and conducting National Environmental Policy Act (NEPA) analyses and environmental studies. BOEM's work supports Administration efforts to create good paying jobs as the Nation transitions to a clean energy future.

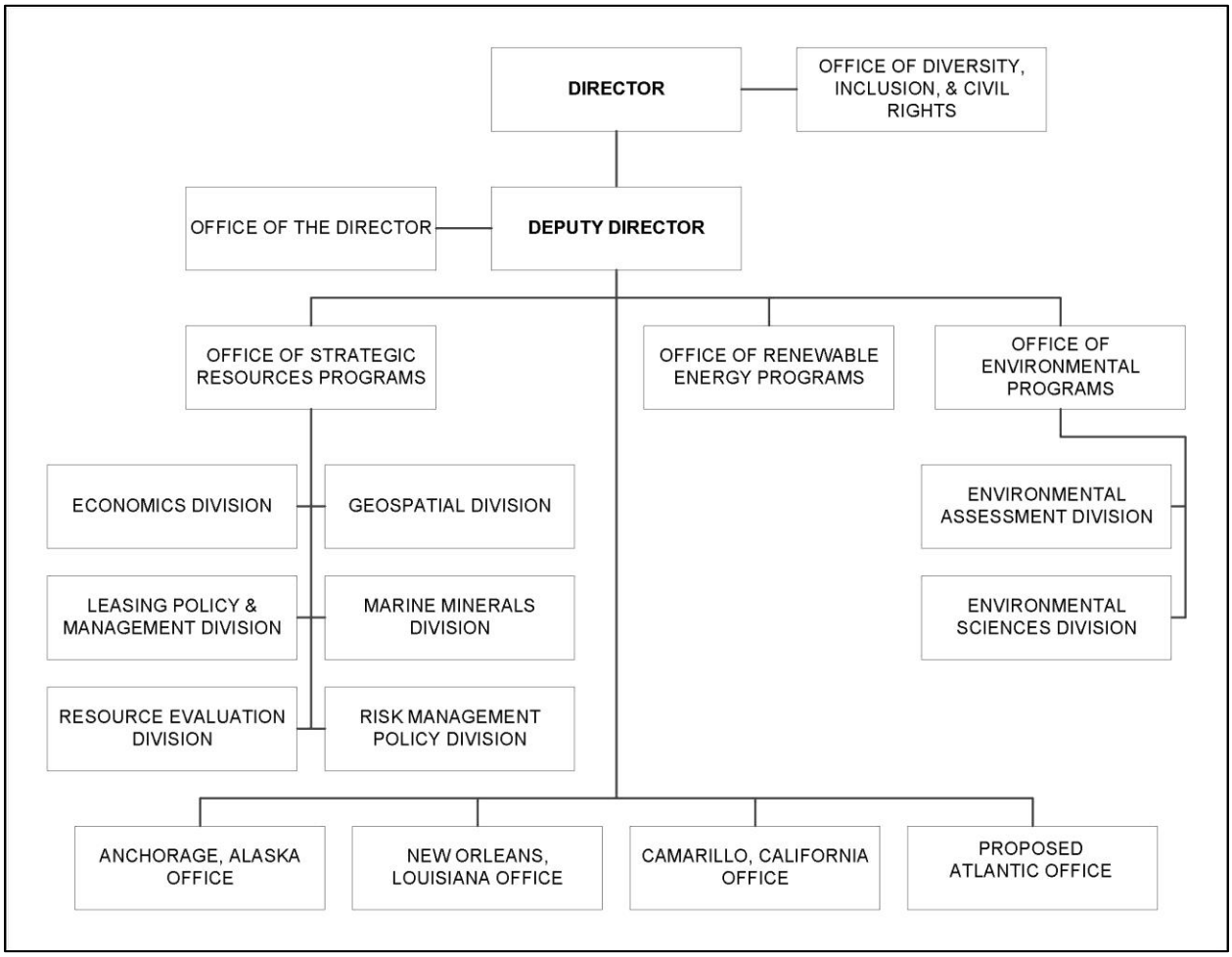
BUDGET AND ORGANIZATIONAL STRUCTURE

Budget activities for BOEM are funded through the Ocean Energy Management (OEM) account and support resource evaluation, planning, and leasing of the Nation's OCS energy and mineral resources in a balanced way that supports economic development, energy security, and environmental protection. The OEM account comprises Renewable Energy, Conventional Energy, Environmental Programs, Marine Minerals, and Executive Direction budget activities.

Functions and funds within these activities are divided among program offices located at headquarters and regional offices, as shown in figure 1 below. Policy and administrative functions for each mission area (renewable energy, conventional energy, marine minerals, and environmental programs) are managed from the greater Washington, D.C., area and focus on national offshore leasing strategy and the development of comprehensive environmental analyses and science. BOEM's regional offices in Anchorage, Alaska; New Orleans, Louisiana; and Camarillo, California, implement Bureau policy, manage regional leasing activity, conduct region-specific analyses, and coordinate stakeholder outreach and engagement.

In response to the rapid growth in demand for offshore wind along the Atlantic coast and the associated need to bring additional focus and presence to BOEM's work on this priority issue, BOEM proposes to establish an Atlantic Regional Office by realigning its existing Atlantic-related energy and minerals functions and reassigning staff from headquarters and other BOEM regional offices. The Atlantic Regional Office would initially be located within the BOEM headquarters in the greater Washington, D.C., area. The headquarters office would continue to oversee and direct national and bureau-level policy, as it does for the other existing regional offices, while the Atlantic Regional Office would be responsible for all operational functions associated with BOEM's program areas—such as renewable energy and marine minerals—in the Atlantic region of the OCS. Creation of the Office will address the increase in requests for engagement with local communities along the Atlantic, by providing additional opportunities for access to and collaboration with BOEM. Supporting Administration renewable energy goals requires dedicated, regionally-focused management and staff that can develop integrated strategies for dealing with issues throughout the Atlantic region, build lasting relationships with regional partners, and provide senior-level access to States, Tribes, communities, and stakeholders.

Figure 1: BOEM Organizational Chart



Headquarters and regional offices work together to implement BOEM's various activities. In addition, BOEM maintains strong partnerships with other Federal agencies, Tribal governments, State and local governments, environmental and other interest groups, the general public, and the oil and gas and renewable energy industries as it fulfills its resource management responsibilities.

FISCAL YEAR (FY) 2025 BUDGET REQUEST

The Administration understands the urgency and magnitude of the climate challenge. The 2025 BOEM budget request reflects the budgetary needs for BOEM to accomplish the priorities of the President and the Department. This includes implementation of multiple EOs designed to restore balance on public lands and waters, create jobs, and provide a path to align the management of America's public lands and waters with our Nation's climate, conservation, and clean energy goals while using the best available science and practices in the decision-making process and strengthening the government-to-government relationship with sovereign Tribal Nations.

Funding for BOEM is requested through the OEM account, which consists of net discretionary appropriations and offsetting collections (comprising a portion of OCS rental receipts and cost recovery fees). In FY 2025, BOEM requests $242.0 million in total budget authority. BOEM's request includes $183.4 million in net current appropriations and $58.6 million in offsetting collections, shown in table 1.

Table 1: Summary of BOEM Budget Request

2025 President's Budget ($000)

Ocean Energy Management	2023 Actual	2024 Annualized CR	2025 Request	Change from 2024 Annualized CR
Net Current Appropriation	183,400	162,992	183,434	+20,442
Offsetting Collections	36,560	56,968	58,611	+1,643
Total Current	**219,960**	**219,960**	**242,045**	**+22,085**
Offsetting Collections				
Rental Receipts	*35,000*	*54,302*	*56,478*	+2,176
Cost Recovery Fees	*1,560*	*2,666*	*2,133*	-533
Ocean Energy Management				
Renewable Energy	*42,818*	*42,818*	*52,005*	+9,187
Conventional Energy	*61,487*	*61,487*	*67,481*	+5,994
Marine Minerals	*14,383*	*14,383*	*14,845*	+462
Environmental Programs	*82,373*	*82,373*	*86,735*	+4,362
Executive Direction	*18,899*	*18,899*	*20,979*	+2,080
Total Current	**219,960**	**219,960**	**242,045**	**+22,085**
FTEs	*599*	*666*	*681*	*+15*

FY 2025 BUDGET HIGHLIGHTS

The FY 2025 budget reflects funding needed for BOEM to carry out its mission and to support Administration priorities. Changes relative to an annualized continuing resolution budget for FY 2024 are shown in table 2.

Table 2: List of Budgetary Changes in FY 2025

Summary of 2025 Program Changes for Bureau of Ocean Energy Management

Activity: Program Changes	($000)	FTE
Renewable: Baseline Capacity	+1,119	+0
Renewable: Renewable Energy Permitting	+797	+2
Renewable: Meaningful Engagement with Tribal Nations	+2,096	+6
Renewable: Territorial Offshore Wind Leasing	+2,096	+2
Renewable: Integrated Renewable Energy Information Management System	+2,244	+1
Conventional: Baseline Capacity	+3,270	+0
Conventional: Offshore Carbon Sequestration	+737	+1
Marine Minerals: Baseline Capacity	+269	+0
Environmental: Baseline Capacity	+1,603	+0
Environmental: Offshore Carbon Sequestration	+263	+0
Environmental: Tribal Co-Stewardship	+500	+1
Environmental: Environmental Studies Program	+890	+0
Executive Direction: Baseline Capacity	+902	+0
Executive Direction: Office of Diversity, Inclusion and Civil Rights	+668	+2
TOTAL Program Changes	**+17,454**	**+15**

* Changes listed in order of budget activity, not priority.

* Excludes fixed costs and offsetting collections.

Technical Internal Transfers (-$1,643,000/+$1,643,000; 0 FTE). Technical adjustments in FY 2025 reflect a decrease in net current appropriations paired with a commensurate increase in offsetting collections. These changes are spread proportionally across budget activities. There are no programmatic changes associated with this shift.

2025 Fixed Costs (+$4,631,000). Fixed Costs are changes in expenses that bureaus must pay regardless of whether there is a change in appropriations funding. Examples of fixed costs are rent, payroll, workers compensation, and the Departmental Working Captial Fund.

Baseline Capacity (+$7,163,000). The 2025 budget includes important investments to maintain a strong, talented workforce and the must-pay requirements needed to continue to fulfill the Bureau's mission. The budget includes $7.2 million, which reflects the incremental amount needed to cover the fixed costs associated with mission operations in FY 2024. This request in combination with the FY 2025 fixed costs amounts will allow the program to meet must-pay requirements without impacting program activities.

Renewable Energy Permitting (+$797,000; +2 FTE). The increase would support the Administration's clean energy goals by making the permitting process for renewable energy projects faster and more efficient. Funds will improve BOEM's service and accountability to stakeholders and the regulated community through enhanced environmental analysis and technical research in support of decisions at all phases of the renewable energy life cycle, while also strengthening the NEPA process Bureau-wide.

Meaningful Engagement with Tribal Nations (+$2,096,000; +6 FTE). Requested funds reflect BOEM's commitment to upholding its Tribal trust responsibilities and fostering working relationships based on trust and meaningful consultation. Resources will enhance and increase engagement and outreach to Tribal Nations. This proposal will improve BOEM's consultation process to engage Tribes in a respectful way, address the limited resources and accessibility of Tribal Nations, and provide for more robust and meaningful involvement of Tribal Nations in all stages of offshore energy and marine mineral leasing and development.

Territorial Offshore Wind Leasing (+$2,096,000; +2 FTE). These funds support implementation of the Department's direction under the Inflation Reduction Act (IRA) to advance wind leasing for areas of the OCS offshore U.S. Territories. Resources will support essential personnel to initiate renewable energy activities within the U.S. Territories and the collection of baseline data needed to advance wind energy development in these areas. Funds will also support environmental studies and assessments, technology research, planning for offshore wind lease sales, and development of protraction diagrams and supplemental official block diagrams.

Integrated Renewable Energy Information Management System (+$2,244,000; +1 FTE). These funds will enable BOEM to develop and implement an Integrated Renewable Energy Information Management System (IREIMS) to automate key portions of the offshore renewable energy planning, leasing, and plan review processes. BOEM currently utilizes multiple software applications to manage and track information related to its Renewable Energy Program. The IREIMS will provide an integrated system capable of managing information and data related to the entire renewable energy leasing process life cycle.

Offshore Carbon Sequestration (+$1,000,000; +1 FTE). BOEM requests resources within the Conventional Energy ($737,000; +1 FTE) and Environmental Programs ($263,000) budget activities to establish a dedicated Offshore Carbon Sequestration Program that will help ensure that offshore geological storage of carbon dioxide is done in a safe and effective manner. This funding request supports the direction in the Bipartisan Infrastructure Law (BIL) for the Department of the Interior to promulgate regulations for carbon sequestration on the OCS. Proposed funding would further BOEM's ability to oversee this new activity in partnership with BSEE. Funds would contribute toward environmental studies and other activities critical to the establishment and implementation of the new program. Additionally, BOEM would utilize funding toward acquiring and maintaining Geological Interpretive Tools and acquiring requisite geological and geophysical data, which will be critical to the development of a model and methodology to provide for a comprehensive, national-level assessment of CO_2 storage capacity across the OCS, and regional subsurface knowledge needed to develop region-specific assessment units.

Tribal Co-Stewardship (+$500,000; +1 FTE). Proposed resources support engagement and informal consultation with federally recognized Indian Tribes and the Native Hawaiian Community. This funding would support one dedicated FTE to serve as a Tribal liaison. BOEM supports Tribal co-stewardship of Federal lands and offshore waters that contain cultural and natural resources of significance and value to Tribes and their members, including sacred religious sites, burial sites, wildlife, and sources of indigenous foods and medicines. The request reflects increased offshore renewable energy leasing interest in new areas.

Environmental Studies Program (+$890,000; 0 FTE). This funding includes resources to advance BOEM's Environmental Studies Program, which provides the science necessary to ensure safe and sound offshore operations, foster conservation of resources, minimize impacts on the environment, and advance environmental justice. All regulatory activities and oversight require associated science for the highly detailed analyses necessary to support Bureau decisions and ensure environmentally responsible exploration and development. With these funds, BOEM will be better equipped to conduct the environmental studies that support clean energy development and inform BOEM's knowledge and policy decisions in support of conservation and climate goals.

Office of Diversity, Inclusion and Civil Rights (+$668,000; +2 FTE). In support of the Administration's priorities, BOEM proposes two FTE to advance the work of its Justice, Equality, Diversity, and Inclusion (JEDI) Committee and to establish an equal employment opportunity program to ensure leadership capacity to holistically advance all aspects of equal opportunity, diversity, inclusion, and accessibility. Combining the Bureau's JEDI Committee with a new equal employment opportunity program, BOEM will also satisfy requirements associated with the Elijah E. Cummings Federal Employee Antidiscrimination Act of 2020.

FY 2025 LEGISLATIVE PROPOSALS

Decommissioning Account

BOEM requires OCS oil and gas and renewable energy lessees to provide financial assurance to cover lease obligations, primarily for decommissioning of facilities when they are no longer supporting production. Through regulations implementing OCSLA, BOEM is authorized to call for the forfeiture of that financial assurance and collect bond proceeds or other security forfeitures from an OCS permittee, lessee, or right-of-way holder that does not fulfill the requirements of its permit, lease, or right-of-way, or does not comply with the regulations or orders of the Secretary. *See* 30 CFR § 556.907. Such forfeitures cover the cost to the United States of any improvement, protection, or rehabilitation work rendered necessary by the action or inaction that led to the forfeiture. The determination to call for the forfeiture of a bond or security is made by the Regional Director for the BOEM regional office where the lease, permit, or right-of-way is managed. Because the statute identifies the Royalty and Offshore Minerals Management account (which is now BOEM's OEM account) as the one in which funds will be collected, forfeited moneys are credited to the OEM account to remain available until expended, and any funds in excess of the amount expended in performing the necessary work are returned to the permittee, lessee, or right-of-way holder. *See* 43 U.S.C. 1338a.

Under OCSLA and Secretarial delegations, BOEM has the authority to collect bankruptcy settlements or disbursements on behalf of BSEE. BSEE may receive distributions in bankruptcy proceedings to reimburse it for actual, necessary costs and expenses incurred in performing decommissioning during the pendency of the bankruptcy that had been the responsibility of a debtor, or in correcting other regulatory violations. Additionally, BSEE may receive a pro rata distribution from the bankruptcy estate based on the proof of claim for the expected future costs of decommissioning. In both instances, the funds are received to remedy a specific problem and not for general governmental purposes. Similar to forfeited bonds or other securities, the bankruptcy settlements and distributions may be credited to BOEM's OEM account until expended.

During the reorganization of the Minerals Management Service into three separate entities, the specific authorities regarding bond forfeitures were not clearly assigned or updated. As a result, BOEM has the authority to call bonds and collect the associated funds, but BSEE receives bankruptcy settlements and distributions. Although BSEE is responsible for ensuring the necessary decommissioning work is done, it has no clear authority to retain funds received in bankruptcy and therefore such funds are placed into BOEM's OEM account, to which BSEE has no access. While BOEM can utilize a reimbursable service agreement to effectively transfer funds—resulting from a bond forfeiture or a bankruptcy distribution—from the OEM account to BSEE, this is neither a practical nor efficient long-term solution.
BOEM proposes to separate collections of forfeitures (of bonds or other securities) and bankruptcy distributions or settlements (associated with failure to perform or noncompliance) from the appropriations in its OEM account and administer them through a new Treasury account. To accomplish this, BOEM requests authority to transfer such funds to this new account and to direct all future such funds to the new account as well. BOEM will work with the Department, the Office of Management and Budget, and the Department of the Treasury to establish the Treasury account in which decommissioning funds can be managed, but in order to utilize this new account for the collection and administration of funds specific to decommissioning activities, the underlying statute will need to be amended. The Budget proposes this be accomplished via a general provision in the FY 2025 Interior Appropriations act.

Contribution Authority
BOEM is requesting to extend its contribution authority through 2029 to accept contributions for environmental and technical work related to the development of OCS resources. BOEM's current contribution authority expires at the end of FY 2024. The authority enables the Bureau to accept and use contributions in a manner that (1) promotes and enhances its programs and activities on the OCS consistent with applicable laws, for example by expanding BOEM's capacity to conduct environmental reviews; (2) does not create a conflict or the appearance of a conflict of interest between BOEM and the entities it regulates or any other prohibited source; and (3) maintains BOEM's high standards for scientific and technical adequacy.

Grant Authority
BOEM proposes to refine its appropriations language to remove the matching requirement for grants and cooperative agreements. Removing the matching requirement improves the ability of Tribes and communities with environmental justice concerns to access potential grants and cooperative agreements, thereby improving the Bureau's ability to provide technical assistance, tools, and resources, and enhancing the capacity of Tribal Nations and other communities to provide vital information to BOEM.

Reception and Representation
BOEM proposes to be given authority to use up to $5,000 of appropriated amounts for courtesy and social responsibilities associated with official duties, including outreach and engagement with Tribal partners to honor traditions. This request would provide the Bureau similar authority provided to other agencies to extend hospitality to official visitors without requiring bureau employees to personally cover expenses.

FY 2025 AREAS OF FOCUS

BOEM's FY 2025 budget reflects BOEM's accomplishments as a steward of America's resources on the OCS, its role as one of the top revenue generators for the United States, and its commitment to ongoing efforts and initiatives that are vital to BOEM's mission and critical to supporting the Administration's priorities, including creating good paying jobs as the Nation transitions to a clean energy future, advancing energy security, supporting economic prosperity, and ensuring the reliability and affordability of domestic clean energy.

Accelerating Clean Energy Development

With the issuance of E.O. 14008 in January 2021, the President made clear that tackling the climate crisis and responsibly accelerating offshore renewable energy production are top priorities of this Administration. As previously noted, in March 2021, the Departments of the Interior, Energy, and Commerce established a goal to deploy 30 GW of offshore wind energy capacity by 2030, and in September 2022, the Department announced a goal to deploy 15 GW of floating offshore wind energy capacity by 2035. Many States have also established renewable energy procurement goals. BOEM is central to implementing the President's clean energy policies and is working to support the 30 GW and 15 GW targets. BOEM continues to advance offshore wind energy by creating greater clarity for Tribal, State, and local governments, industry, ocean users, and other stakeholders. This includes improving the expeditiousness, efficiency, inclusiveness, and effectiveness of its processes for identifying areas for potential future lease sales and reviewing plans to develop existing offshore wind leases. As the prospects for offshore wind energy expand, robust stakeholder and ocean user outreach and scientific integrity will continue to be important components of our Nation's offshore renewable energy program.

BOEM's FY 2025 budget reflects the emphasis on bringing renewable energy projects to fruition through an expeditious and responsible approach. To meet the increase in demand and support its offshore wind goals, BOEM continues to build a robust renewable energy program with adequate capacity to review projects, advance new lease areas, engage ocean users, efficiently permit projects, and invest in developing science as the foundation for decision-making. The FY 2025 budget moves the Nation's clean energy future forward in an informed and environmentally and socially conscientious manner. In FY 2025, BOEM requests funding to automate key portions of the offshore renewable energy planning, leasing, and plan review processes through the development of IREIMS, an integrated system capable of managing information and data related to the renewable energy leasing process through its entire life cycle, from facilitating intergovernmental task force administration to automating the workflow of survey and project plan reviews, and ultimately to compliance monitoring. BOEM also seeks resources in FY 2025 to support the Department's new jurisdiction, authorized under Section 50251 of the IRA, to conduct offshore wind lease sales for areas of the OCS offshore U.S. Territories.

Stakeholder Outreach and Engagement

Stakeholder outreach and engagement are critically important and provide an opportunity for BOEM to strive for inclusion and environmental justice throughout all its activities. Through outreach efforts, BOEM strives to ensure all stakeholder concerns are addressed and local communities have an opportunity to engage in discussions about ongoing and proposed activities that may impact them. Additionally, under OCSLA, BOEM must coordinate and consult with Federal, Tribal, State, and local agencies throughout the offshore energy development process. BOEM's Marine Minerals Program also

coordinates with governmental partners and stakeholders as it facilitates access to and manages the Nation's OCS non-energy marine minerals. Effective stakeholder engagement throughout all activities enables BOEM to obtain additional perspectives and insights into the interaction between OCS energy and mineral development and other offshore activities and resources.

Environmental Stewardship

Environmental assessments and studies are critical to the successful management of offshore energy and mineral resources. Science enables BOEM to manage offshore energy and mineral resources in an environmentally and economically responsible manner. BOEM's Environmental Programs budget activity supports the scientific research needed to inform programmatic decisions and ensure environmental protection. BOEM conducts its environmental analyses in a transparent, coordinated, and efficient fashion to ensure that its decisions are informed by the best available science, address risks, and incorporate mitigations to reduce risk. BOEM's Environmental Studies Program provides the environmental science used as the foundation for sound policy decisions. BOEM's environmental programs also have a leading role in addressing impacts to Tribes and environmental justice communities. BOEM leverages its resources through partnerships, allowing collection of valuable data useful not only to BOEM, but also to other Federal agencies, Tribal, State and local governments, and non-governmental stakeholders. In FY 2025, BOEM's environmental programs will continue to provide robust scientific research, assessment, regulatory measures, products, and services for understanding, mitigating, and avoiding harm to ecosystems from OCS energy and mineral development.

Climate Change Resilience and Restoration

BOEM adopts a comprehensive approach to climate resilience and conservation activities across its programs, incorporating perspectives from stakeholders, scientific studies and assessments, and trends in acute and gradual impacts resulting from climate change. BOEM recognizes the impact of OCS energy and mineral activities on the human and natural environment and actively conducts outreach and engagement with stakeholders to improve data collection, advance mapping and resource stewardship planning, and reduce harm to ecological and human communities. BOEM is guided in this work to enhance environmental adaptation and resilience by the best available science and its legal mandates.

BOEM is contributing to the Administration's goal to reach net-zero carbon emissions by 2050 through its role in establishing an offshore carbon sequestration program, as directed by the BIL. BOEM also assesses greenhouse gas emissions from offshore energy facilities to measure progress toward meeting U.S. greenhouse gas reduction goals and helps plan mitigation strategies to reduce offshore greenhouse gas emissions.

BOEM's marine mineral activities foster climate change resilience and restoration by rebuilding coastal habitats and reducing risk to coastal infrastructure and national security facilities that are vital to the Nation's security, economy, and environment. During FY 2025, BOEM will continue to develop its National Offshore Sand Inventory, which enables BOEM to proactively plan for the increasing demands for OCS sediment resources, especially in emergencies.

Responsible Management of the Nation's Oil and Gas Resources

The Administration is committed to the responsible and sustainable development of Federal offshore energy resources as the Nation transitions to a low-carbon economy. BOEM manages OCS oil and gas development pursuant to its obligations under OCSLA and other statutes. In November 2021, the Department published a review of its oil and gas programs, which identified key reforms necessary to ensure that the programs provide a fair return to taxpayers, discourage speculation, reduce environmental impacts, hold operators responsible for remediation, and create a more inclusive and just approach to managing public lands and offshore waters. BOEM is implementing reforms consistent with the report's findings and recommendations to restore balance to the oil and gas programs, including developing new regulations to ensure offshore operators provide adequate financial assurance to cover decommissioning obligations. BOEM's goal is to better protect American taxpayers from incurring the costs associated with the oil and gas industry's responsibility to decommission offshore wells and infrastructure when no longer in use.

Diversity, Equity, and Inclusion

BOEM activities support diversity, equity, inclusion, and accessibility efforts in alignment with Administration policy. To support BOEM's activities in these critical areas, BOEM's JEDI Committee advises the Bureau's senior leadership team, develops and periodically updates a work plan with specific objectives and timelines, and advances justice, equality, diversity, and inclusion in BOEM and in the effects of BOEM's programs on all people. In FY 2023, BOEM hired a diversity and inclusion officer and created an Office of Diversity, Inclusion, and Civil Rights. Both will work collaboratively with internal and external stakeholders to design, develop, and recommend Bureau-wide equity, diversity, and inclusion strategies, policies, and programs consistent with DOI's goals and Federal law. In FY 2025, BOEM requests funding to support additional personnel resources for the Office of Diversity, Inclusion, and Civil Rights, and will continue championing diversity, equity, and inclusion activities.

Tribal Co-Stewardship

As part of BOEM's commitment to transparency and inclusion, the budget includes additional support for engagement with Tribal Nations and the Native Hawaiian Community. BOEM's commitment is part of a Department-wide effort to incorporate Tribal co-stewardship of Federal lands and offshore waters that contain cultural and natural resources of significance and value to Indian Tribes and their members, including sacred religious sites, burial sites, wildlife, and sources of Indigenous foods and medicines. The FY 2025 budget request includes resources to aid in the implementation of the multi-agency commitment to Tribal co-stewardship announced in the *Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters* by the Departments of the Interior, Agriculture, and Commerce (Secretary's Order 3403, as amended).

Good Accounting Obligation in Government Act Report

The Good Accounting Obligation in Government Act (GAO-IG Act, P.L. 115-414), enacted January 3, 2019, requires that Agencies report the status of each open audit recommendation issued more than one year prior to the submission of the Agency's annual budget justification to Congress. The Act requires Agencies to include the current target completion date, implementation status, and any discrepancies on closure determinations.

The Department of the Interior takes audit follow-up very seriously and considers our external auditors, including the Government Accountability Office (GAO) and the DOI Office of Inspector General, valued partners in not only improving the Department's management and compliance obligations but also enhancing its programmatic and administrative operations. As stewards of taxpayer resources, the Department applies cost-benefit analysis and enterprise risk management principles in implementing recommendation decisions.

The Department's GAO-IG Act Report will be available at the following link: https://www.doi.gov/cj

FISCAL YEAR 2025 BUDGET

Bureau of Ocean Energy Management

Bureau Budget Tables

Table 3: Budget at a Glance

Budget at a Glance Table

Bureau of Ocean Energy Management

(Dollars in Thousands)

Appropriation: Ocean Energy Management	2023 Actual	2024 Annualized CR	2025 Fixed Costs (+/-)	2025 Internal Transfers (+/-)	2025 Program Changes (+/-)	2025 Request
Ocean Energy Management	**219,960**	**219,960**	**+4,631**	**0**	**+17,454**	**242,045**
Renewable Energy	**42,818**	**42,818**	**+835**	**0**	**+8,352**	**52,005**
Updated Offsetting Collections Estimates				*[-242]*		*[-242]*
Updated Rental Receipts Estimates				*[+392]*		*[392]*
Updated Cost Recovery Estimates				*[-150]*		*[-150]*
Baseline Capacity					*[+1,119]*	*[1,119]*
Renewable Energy Permitting					*[+797]*	*[797]*
Meaningful Engagement with Tribal Nations					*[+2,096]*	*[2,096]*
Territorial Offshore Wind Leasing					*[+2,096]*	*[2,096]*
Integrated Renewable Energy Information Management System					*[+2,244]*	*[2,244]*
Conventional Energy	**61,487**	**61,487**	**+1,987**	**0**	**+4,007**	**67,481**
Updated Offsetting Collections Estimates				*[-551]*		*[-551]*
Updated Rental Receipts Estimates				*[+934]*		*[934]*
Updated Cost Recovery Estimates				*[-383]*		*[383]*
Baseline Capacity					*[+3,270]*	*[3,270]*
Offshore Carbon Sequestration					*[+737]*	*[737]*
Marine Minerals	**14,383**	**14,383**	**+193**	**0**	**+269**	**14,845**
Updated Offsetting Collections Estimates				*[-91]*		*[-91]*
Updated Rental Receipts Estimates				*[+91]*		*[91]*
Baseline Capacity					*[+269]*	*[269]*
Environmental Programs	**82,373**	**82,373**	**+1,106**	**0**	**+3,256**	**86,735**

Budget at a Glance Table
Bureau of Ocean Energy Management
(Dollars in Thousands)

Appropriation: Ocean Energy Management	2023 Actual	2024 Annualized CR	2025 Fixed Costs (+/-)	2025 Internal Transfers (+/-)	2025 Program Changes (+/-)	2025 Request
Updated Offsetting Collections Estimates				*[-519]*		*[-519]*
Updated Rental Receipts Estimates				*[+519]*		*[519]*
Baseline Capacity					*[+1,603]*	*[1,603]*
Offshore Carbon Sequestration					*[+263]*	*[263]*
Tribal Co-Stewardship					*[+500]*	*[500]*
Environmental Studies Program					*[+890]*	*[890]*
Executive Direction	**18,899**	**18,899**	**+510**	**0**	**+1,570**	**20,979**
Updated Offsetting Collections Estimates				*[-240]*		*[-240]*
Updated Rental Receipts Estimates				*[+240]*		*[240]*
Baseline Capacity					*[+902]*	*[902]*
Office of Diversity, Inclusion and Civil Rights					*[+668]*	*[668]*
TOTAL, Ocean Energy Management	**219,960**	**219,960**	**+4,631**	**0**	**+17,454**	**242,045**

The order of program changes reflects a numerical order rather than priority.

Table 4: Summary of Requirements

Summary of Requirements
Bureau of Ocean Energy Management
Ocean Energy Management
(Dollars in Thousands)

Ocean Energy Management	**2023 Actual**	***2023 Actual FTE***	**2024 Annual-ized CR**	***2024 Annual-ized CR FTE***	**2025 Request Fixed costs (+/-)**	**2025 Request Internal Transfers (+/-)**	**2025 Request Program Changes ($)**	***2025 Request Program Changes FTE (+/-)***	**2025 Request**	***2025 Request FTE***	**2025 Request TOTAL Change from 2024 (+/-)**
Ocean Energy Management											
Renewable Energy											
Direct Appropriation	38,349	*108*	35,737	*104*	+835	-242	+8,352	*+11*	44,682	*115*	+8,945
Rental Receipts	4,276		6,181	-		+392			6,573	-	+392
Cost Recoveries	193		900	-		-150			750	-	-150
Total, Renewable Energy	**42,818**	***108***	**42,818**	***104***	**+835**	**-**	**+8,352**	***+11***	**52,005**	***115***	**+9,187**
Conventional Energy											
Direct Appropriation	56,420	*257*	50,145	*304*	+1,987	-551	+4,007	*+1*	55,588	*305*	+5,443
Rental Receipts	3,700		9,576	-		+934			10,510	-	+934
Cost Recoveries	1,367		1,766	-		-383			1,383	-	-383
Total, Conventional Energy	**61,487**	***257***	**61,487**	***304***	**+1,987**	**-**	**+4,007**	***+1***	**67,481**	***305***	**+5,994**
Marine Minerals											

Summary of Requirements
Bureau of Ocean Energy Management
Ocean Energy Management
(Dollars in Thousands)

Ocean Energy Management	**2023 Actual**	***2023 Actual FTE***	**2024 Annual-ized CR**	***2024 Annual-ized CR FTE***	**2025 Request Fixed costs (+/-)**	**2025 Request Internal Transfers (+/-)**	**2025 Request Program Changes ($)**	***2025 Request Program Changes FTE (+/-)***	**2025 Request**	***2025 Request FTE***	**2025 Request TOTAL Change from 2024 (+/-)**
Direct											
Appropriation	13,143	*25*	12,636	*25*	+193	-91	+269	-	13,007	*25*	+371
Rental Receipts	1,240		1,747	-		+91			1,838	-	+91
Total, Marine Minerals	**14,383**	***25***	**14,383**	***25***	**+193**	**-**	**+269**	**-**	**14,845**	***25***	**+462**
Environmental Programs											
Direct											
Appropriation	59,438	*143*	50,085	*149*	+1,106	-519	+3,256	*+1*	53,928	*150*	+3,843
Rental Receipts	22,935		32,288	-		+519			32,807	-	+519
Total, Environmental Programs	**82,373**	***143***	**82,373**	***149***	**+1,106**	**-**	**+3,256**	***+1***	**86,735**	***150***	**+4,362**
Executive Direction											
Direct											
Appropriation	16,050	*66*	14,389	*84*	+510	-240	+1,570	*+2*	16,229	*86*	+1,840
Rental Receipts	2,849		4,510	-		+240			4,750	-	+240
Total, Executive Direction	**18,899**	***66***	**18,899**	***84***	**+510**	**-**	**+1,570**	***+2***	**20,979**	***86***	**+2,080**
TOTAL, OCEAN ENERGY MANAGEMENT	**219,960**	***599***	**219,960**	***666***	**+4,631**	**-**	**+17,454**	***+15***	**242,045**	***681***	**+22,085**

Table 5: Fixed Costs

Bureau of Ocean Energy Management
Ocean Energy Management
Justification of Fixed Costs Changes
(Dollars In Thousands)

Fixed Cost Element	2024 Change	2024 Annualized CR to 2025 Request Change	Description
Change in Number of Paid Days	+473	0	Total paid days for FY 2025 is 261 (2088 hours) which is the same number of days as FY 2024.
Pay Raise	+5,959	+3,428	The President's Budget for FY 2025 includes one quarter (October-December 2024) of the 5.2% pay raise for FY 2024 and three quarters (January-September 2025) of the estimated 2.0% pay raise for 2025.
Employer Share of Federal Employee Retirement System (FERS)	0	0	The estimates do not reflect increases to the employer contribution for FERS or Law Enforcement FERS for FY 2025.
Departmental Working Capital Fund (WCF)	+116	+427	The estimates reflect final decisions of the Working Capital Fund Consortium on the FY 2025 Working Capital Fund Central Bill.
Workers' Compensation Payments	+5	+18	The amount reflects final chargeback costs of compensating injured employees and dependents of employees who suffer accidental death while on duty. This amount reflects the final Workers Compensation bill for FY 2025 payable to the Department of Labor, Federal Employees Compensation Fund, pursuant to 5 U.S.C. 8147(b) as amended by Public Law 94-273.
Unemployment Compensation Payments	+4	-3	The amount reflects projected changes in the costs of unemployment compensation claims to be paid to the Department of Labor, Federal Employees Compensation Account, in the Unemployment Trust Fund, pursuant to Public Law 96-499. This estimate reflects an applied annual inflation factor of 3.0% to the 5-year average of actuals between 2018-2022.
GSA and Non-GSA Rents	+676	+761	This estimate reflects the FY 2025 President's Budget Exhibit 54s as submitted. The amounts reflect changes in the costs payable to General Services Administration (GSA) and others for office and non-office space as estimated by GSA, as well as the rental costs of other currently occupied space. These estimates reflect MIB rent, Security, Federal Reserve Parking, and Operations and Maintenance, distributed by bureau and office, based upon OFAS provided MIB occupancy levels. Costs of mandatory office relocations, i.e. relocations in cases where due to external events there is no alternative but to vacate the currently occupied space, are also included.
Baseline Adjustments for O&M Increases	0	0	This adjustment captures the associated increase to baseline operations and maintenance requirements resulting from movement out of GSA or direct-leased (commercial) space into Bureau-owned space. During these transitions, bureaus often encounter an increase to baseline O&M costs not otherwise captured in fixed costs. This category of funding properly adjusts the baseline fixed cost amount to maintain steady-state funding for these requirements.
Total, Account 2025 Fixed Costs	+7,233	+4,631	

Table 6: Internal Realignments

Bureau of Ocean Energy Management

Ocean Energy Management
Justification of Internal Realignments

(Dollars In Thousands)

Internal Realignments and Non-Policy/Program Changes (Net-Zero)	2025 (+/-)	Description
Renewable Energy - direct appropriations/offsetting collections	-242/+242	This is a technical adjustment to reflect a change in the composition of BOEM's budget, due mostly to a shift in the portion of the budget funded through direct appropriations versus offsetting collections.
Conventional Energy - direct appropriations/offsetting collections	-551/+551	This is a technical adjustment to reflect a change in the composition of BOEM's budget, due mostly to a shift in the portion of the budget funded through direct appropriations versus offsetting collections.
Marine Minerals - direct appropriations/offsetting collections	-91/+91	This is a technical adjustment to reflect a change in the composition of BOEM's budget, due mostly to a shift in the portion of the budget funded through direct appropriations versus offsetting collections.
Environmental Programs - direct appropriations/offsetting collections	-519/+519	This is a technical adjustment to reflect a change in the composition of BOEM's budget, due mostly to a shift in the portion of the budget funded through direct appropriations versus offsetting collections.
Executive Direction - direct appropriations/offsetting collections	-240/+240	This is a technical adjustment to reflect a change in the composition of BOEM's budget, due mostly to a shift in the portion of the budget funded through direct appropriations versus offsetting collections.
Net Account Total, Internal Transfers	0	

FISCAL YEAR 2025 BUDGET

Bureau of Ocean Energy Management

Renewable Energy

Table 7: Renewable Energy Budget Summary

Activity: Renewable Energy

Dollars in Thousands ($000)

Renewable Energy	2023 Actual	2024 Annualized CR	2025 Fixed Costs (+/-)	2025 Program Changes (+/-)	2025 President's Budget	Change from 2024 Annualized CR (+/-)
Renewable Energy $	**42,818**	**42,818**	**+835**	**+8,352**	**52,005**	**+9,187**
FTE	*108*	*104*	*0*	*+11*	*115*	*+11*

Renewable energy development activities include the siting and construction of offshore wind energy facilities on the OCS, as well as the development of other forms of offshore renewable energy resources such as wave and current energy. BOEM facilitates the responsible development of renewable energy resources on the OCS through conscientious planning; meaningful engagement with government entities, Tribes, stakeholders, and ocean users; comprehensive environmental analysis; and sound technical review.

Offshore wind has the potential to play a key role in transitioning the Nation to clean renewable energy, establish a new domestic industry, create good-paying jobs, lower energy costs, and strengthen U.S. energy security.[1] The Departments of the Interior, Energy, and Commerce have established a goal to deploy 30 GW of offshore wind energy capacity by 2030, which could support upwards of 77,000 jobs. As the lead agency for offshore wind energy planning and leasing, BOEM plans to advance new lease sales and expects to complete reviews of upwards of 11 COPs between FY 2024 to FY 2026. In 2022, the Department joined with the Department of Energy (DOE) to announce the *Floating Offshore Wind Shot*, which set aggressive targets for floating offshore wind energy development, including a DOI-established goal of deploying 15 GW of floating offshore wind energy capacity by 2035. BOEM carried out its first lease sale with the potential for floating offshore wind in FY 2023 in the Pacific and plans to hold its first floating offshore wind lease sale off the Gulf of Maine in early FY 2025.

As explained below, renewable energy activity on the OCS continues to grow and will involve leasing and development in multiple regions. Therefore, BOEM is requesting additional funding and staff to meet growing industry demand. BOEM's workload also continues to increase as it fulfills the Department's

[1] FACT SHEET: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs

new responsibilities under section 50251 of the IRA to work with the governments of the U.S. Territories to consider the interest in and feasibility of offshore wind off their coasts.

The 2025 budget will support:

- **Advancing Renewable Energy:** As the lead agency for offshore wind energy planning and leasing, BOEM's work is fundamental to efforts to advance the responsible development of renewable energy on the OCS. BOEM activities help build the Nation's clean energy future, address the climate crisis, create good-paying jobs, and strengthen the Nation's energy security.

- **Competitive Lease Auctions/Sales:** In FY 2022, the Secretary of the Interior announced an offshore wind energy leasing schedule for sales through 2025 to create greater certainty for industry. In FY 2023, BOEM held the first offshore wind lease sale offshore California, which generated over $757 million in revenue for the U.S. Treasury, and on August 29, 2023, BOEM held the first offshore wind energy lease sale in the Gulf of Mexico, which received a high bid of $5.6 million. BOEM has held four offshore wind lease sales between 2022 and 2023 and a total of twelve lease sales since 2013. BOEM is planning sales in FY 2024 and FY 2025 for areas located in the Gulfs of Mexico and Maine, offshore the U.S. Central Atlantic coast, and offshore Oregon. In FY 2024, BOEM will continue moving forward with its lease planning process in Puerto Rico and the U.S Virgin Islands. BOEM plans to issue an initial call for information and nominations offshore at least one U.S. Territory by September 30, 2025.

- **Advancing Project Reviews:** Commercial lease holders have approximately 5 years after lease issuance to conduct site assessment activities and submit a COP that describes their proposed wind energy project. BOEM must conduct environmental and technical reviews of the COP and decide whether to approve, approve with modification, or disapprove the COP. In the first half of FY 2024, BOEM approved two COPs, approving the Empire Wind project and the Coastal Virginia Offshore Wind Commercial project, which will be the largest offshore wind project in the Nation. These approvals follow the approval of the Vineyard Wind 1, South Fork Wind, Ocean Wind 1, and Revolution Wind projects, between FY 2021 and FY 2023. This brings the total of approved COPs to six. Two of the projects, Vineyard Wind 1 and South Fork Wind, are currently under construction and started delivering electricity to the grid in early FY 2024. BOEM is actively processing 11 of 13 submitted COPs; two plans are on hold by the lessee; seven plans have environmental impact statements (EISs) underway; two have Notices of Intent (NOIs) to prepare an EIS planned for March 2024; and, two have NOIs to prepare and EIS planned for 2025. As early as FY 2024, BOEM also anticipates receiving additional COPs for the six leases in the New York Bight. In FY 2025, BOEM expects to issue another three RODs for projects along the Atlantic coast and in subsequent fiscal years receive COP submittals for other areas of the Atlantic, Pacific, and Gulf of Mexico. In FY 2023, BOEM initiated an EIS for one project, published draft EISs for six projects, and initiated a programmatic EIS for construction and operation of offshore wind energy projects in the New York Bight. In FY 2024, BOEM plans to issue a total of six RODs, initiate EISs for at least two projects, and begin preparing programmatic EISs for proposed projects offshore California and in the Gulf of Mexico.

- **Ocean User, Tribal Nation, Community, and Stakeholder Engagement:** Stakeholder engagement is integral to BOEM's renewable energy planning and leasing efforts. Through active engagement and consultation with a variety of ocean users, including Tribal Nations, Federal partners, industry groups, environmental justice communities, and other stakeholders, BOEM learns of potential issues and works to resolve them in a timely manner. Through this outreach, the OCS areas most suitable for renewable energy development can be identified while potential impacts and multiple-use conflicts can be minimized and mitigated. BOEM continues to promote environmental justice by implementing best practices in both NEPA analyses and engagement activities. BOEM also continues to work with its Federal partners to identify areas of collaboration in supporting an all-of-government approach to environmental justice through offshore wind energy planning and environmental assessment. On October 6, 2023, BOEM launched its environmental justice website to support outreach and information sharing. Additionally, BOEM is focused on continuing its engagement and consultation with Tribal Nations and requires that, for offshore wind energy leases associated with the New York Bight, Carolina Long Bay, California, and Gulf of Mexico leases, the lessees submit a semi-annual progress report on engagement activities with Tribes and other parties, including underserved communities, potentially affected by proposed projects. These progress reports describe how a project has been informed or altered to address impacts on affected communities. These reports are made available to the public and located on the BOEM website.

  In 2022, BOEM also incorporated lease stipulations requiring lessees to develop and make publicly available Tribal communication plans, fisheries communication plans, and agency communication plans, and to submit semiannual progress updates on these plans. In FY 2023, BOEM partnered with the National Academies of Science, Engineering, and Medicine to establish the Standing Committee on Offshore Wind Energy and Fisheries. This committee serves as an independent, credible forum to discuss the state of science and pressing concerns related to the intersection of offshore wind energy development with fisheries. In FY 2024 and FY 2025, BOEM will continue to implement strategies to better engage all ocean users, including fisheries, and build upon these important outreach efforts.

- **Intergovernmental Coordination and Collaboration:** To help inform BOEM's planning and leasing process, BOEM has established intergovernmental renewable energy task forces along the Atlantic, Pacific, and Gulf of Mexico coasts that consist of Federal agencies and Tribal, State, and local governments. In FY 2023, BOEM hosted meetings with the Gulf of Maine, Gulf of Mexico, and Oregon Intergovernmental Renewable Energy Task Forces. In October 2023, BOEM also hosted a virtual meeting for the Central Atlantic Intergovernmental Renewable Energy Task Force.

  In support of the Administration's all-of-government approach, BOEM co-chairs an interagency permitting workgroup, which ensures a coordinated Federal approach to reviewing project plans. BOEM utilizes memoranda of agreement or understanding (MOAs or MOUs) with multiple Federal and State agencies to further the shared goal of advancing offshore renewable energy. In addition, BOEM partners with State governments to keep them engaged and apprised of potential and upcoming activities off their coasts. Partnerships ensure the inclusion of all appropriate groups when moving through various stages of development.

- **Science and Technology Research:** The Renewable Energy Program is supported by a substantial investment in research. In FY 2023, the Program helped to fund and develop design standards for offshore renewable energy facilities, a regional port assessment for California, and an infrastructure assessment for the Port of Coos Bay in Oregon. Research projects that are expected to begin in FY 2024 include: a regional port assessment for Hawaii; a study to investigate the challenges of offshore wind in ultradeep water; a regional assessment of seabed movement on the Atlantic OCS*;* a study of alternate renewable energy technologies; and a study of methods to detect and remove ghost fishing gear caught on mooring lines of floating turbines, which pose the greatest risk for marine mammal entanglement. BOEM will also be joining a multi-year joint project with industry led by the National Renewable Energy Lab and Cornell University to study downstream wind wake impacts from adjacent wind farms. Potential topics for FY 2024 and beyond include: development of an OCS database for existing unexploded ordinance and other underwater munition hazards; how to incorporate environmental benefits to the ocean through offshore wind energy projects; desktop geophysical and geotechnical studies for U.S. Territories*;* and a study of risk in design and fabrication tolerances that are not defined by current wind turbine generator design standards.

SUMMARY OF 2025 PROGRAM CHANGES

Summary of 2025 Program Changes for Renewable Energy

Program Changes:	**($000)**	**FTE**
Baseline Capacity	+1,119	+0
Renewable Energy Permitting	+797	+2
Meaningful Engagement with Tribal Nations	+2,096	+6
Territorial Offshore Wind Leasing	+2,096	+2
Integrated Renewable Energy Information Management System	+2,244	+1
TOTAL Program Changes	**+8,352**	**+11**

* Changes listed in order of budget activity, not priority.

Maintain Baseline Capacity (+$1,119,000). The 2025 budget includes important investments in programs needed to help strengthen America and be more competitive as the world continues to change. These investments include funding needed to maintain a strong, talented workforce and the core capacity needed to continue to fulfill BOEM's mission. The budget includes $1,119,000 in this budget activity, which reflects the incremental amount needed to cover the fixed costs associated with mission operations in FY 2024. This request in combination with the FY 2025 fixed costs amounts will allow the program to meet sustain core capacity and avoid impacts to ongoing program activities.

Renewable Energy Permitting (+$797,000; +2 FTE). Resources would support the Administration's clean energy goals by making the permitting process for renewable energy projects faster and more efficient. The request includes additional FTE and funding necessary to develop programmatic, Bureau-wide solutions aimed at expediting project reviews across all regions and ensure the best and most up-to-date scientific information is available prior to, and throughout, the BOEM renewable energy leasing process. Requested resources will also enable BOEM to expedite technical plan reviews for renewable

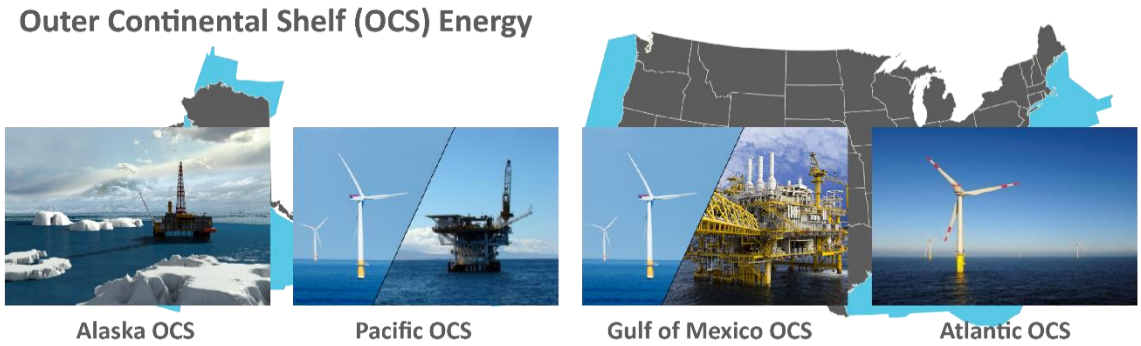
energy by expanding its technical assessment and research capabilities, particularly in areas where BOEM does not have sufficient expertise, such as subsea cables, transmission, aviation, electrical engineering, and facility modeling.

Meaningful Engagement with Tribal Nations (+$2,096,000; +6 FTE). These funds enable BOEM to enhance and increase engagement with and outreach to Tribal Nations. Funding supports BOEM's ability to take coordinated actions to incorporate Indigenous knowledge and Tribal input into decision-making processes and assist Tribes in expanding their capacity to engage in environmental reviews, work with industry, and develop partnerships. Requested resources will support the development of a Center for Tribal Engagement, which will provide funding and additional capacity-building to support Tribal members in more active participation in consultation, coordination, data collection, assessment, and monitoring for renewable activities. Requested personnel will provide BOEM with staff resources to support effective engagements and build capacity.

Territorial Offshore Wind Leasing (+$2,096,000; +2 FTE). These funds support implementation of the direction under the IRA to advance wind leasing for areas of the OCS offshore U.S. Territories. Requested resources would support personnel essential for outreach and communication with Territorial governments and other stakeholders, environmental studies and assessments, technology research, planning for offshore wind energy lease sales, and protraction diagrams and supplemental official block diagrams. BOEM intends to use emerging, innovative, and less costly technologies such as satellite information, drones, uncrewed vehicles, and cutting-edge sensors for eDNA, acoustic, and optical data collection and storage to assess the almost 400 million acres of OCS surrounding the five permanently inhabited Territories (Puerto Rico, U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands). The IRA requires that an initial call for information and nominations be issued no later than September 30, 2025.

Integrated Renewable Energy Information Management System (+$2,244,000; +1 FTE). BOEM requests resources for the development and implementation of IREIMS to automate key portions of the offshore renewable energy planning, leasing, and plan review processes. BOEM currently uses disparate software applications to manage and track information related to its Renewable Energy Program. These tools are not sufficient to handle the complex processing and data needs of executing the program and lack system controls, which would be remedied with an integrated information management system focused on renewable energy processes. This implementation effort follows a multi-year planning effort to document business processes, capture system requirements, and investigate possible technology solutions.

PROGRAM OVERVIEW



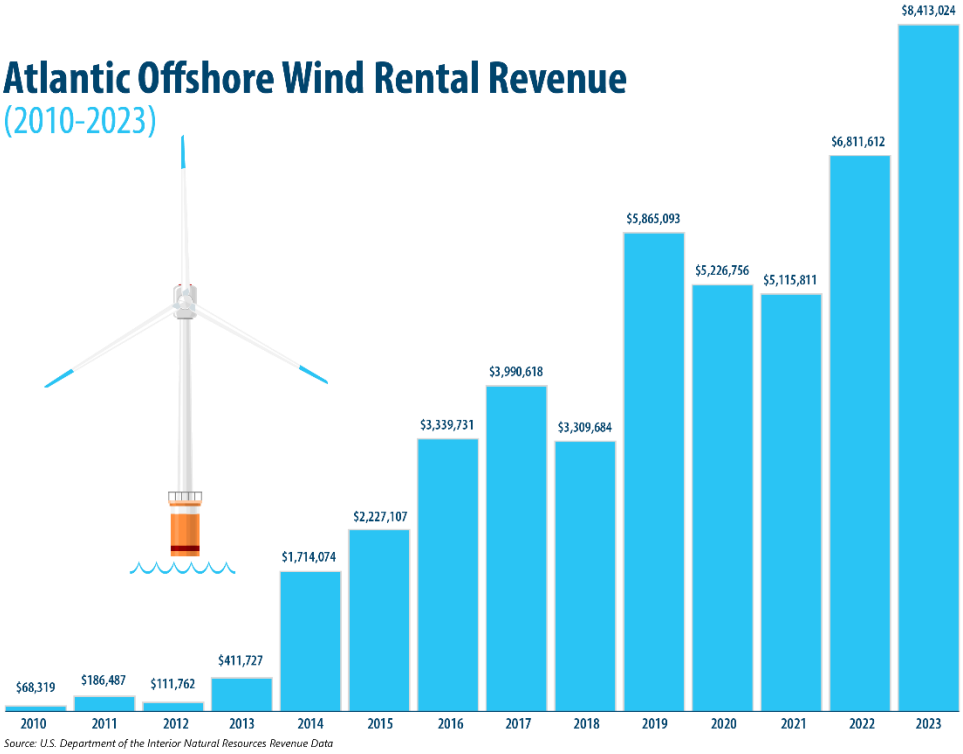
The OCS has significant potential as a source of new domestic energy generation from renewable energy resources. OCSLA authorizes the Secretary of the Interior to issue leases, easements, and rights-of-way on the OCS for activities that produce or support production, transportation, or transmission of energy from sources other than oil and gas, and to permit OCS activities that repurpose facilities currently or previously used for activities authorized under OCSLA. Renewable energy and alternate use projects may include wind, wave, and ocean current energy projects, as well as projects that make alternative use of existing oil and gas or other platforms on the OCS.

Since 2009, when BOEM first published its renewable energy regulations, BOEM has worked diligently to facilitate renewable energy development spurred in part by the renewable energy goals of coastal States. As of November 2023, BOEM had conducted twelve competitive wind energy lease sales for areas offshore the Gulf of Mexico and the Atlantic and Pacific coasts, offering over 2.5 million acres of commercial wind energy lease areas offshore of Delaware, Maryland, Massachusetts, New Jersey, New York, North Carolina, Rhode Island, South Carolina, Virginia, California, and Louisiana. Additionally, in July 2023, BOEM finalized three wind energy areas (WEAs) offshore the Central Atlantic, and in October finalized four additional WEAs in the Gulf of Mexico. BOEM is in the planning stages to identify additional areas in the Gulf of Maine and offshore Oregon. BOEM also received unsolicited lease requests for areas offshore Washington and the Gulf of Mexico and will continue to assess interest in these areas and Hawaii.

BOEM also manages transmission and research projects related to wind energy development on the OCS. In 2015, BOEM executed its first wind energy research lease on the OCS with the Commonwealth of Virginia's Department of Mines, Minerals and Energy, which became fully operational in 2020 and is the first research project installed on the OCS. BOEM is also advancing a potential floating wind research lease in the Gulf of Maine in response to a request by the State of Maine. In FY 2023, BOEM continued to work with DOE and other Federal agencies on transmission and grid connectivity and capacity issues affecting offshore wind development, resulting in the publication of the joint DOE-DOI report, "An Action Plan for Offshore Wind Transmission Development in the U.S. Atlantic Region." The comprehensive action plan outlines immediate actions needed to connect the first generation of Atlantic offshore wind projects onto the electric grid and longer-term efforts to support needed transmission over

the next several decades. Continued implementation of the plan will involve BOEM and other Federal, Tribal, State, and local government initiatives. In FY 2024, BOEM's collaboration with DOE will include West Coast transmission studies and convening efforts.

Figure 2: Revenue Data Compiled by the DOI Office of Natural Resources Revenue



As required by OCSLA, BOEM seeks to ensure the American taxpayer receives a fair return for rights conveyed by OCS renewable energy leases and grants. In FY 2023, OCS renewable energy leases generated $587 million in bonuses and $8.4 million in rent (Figure 2). Revenue data is compiled by the Office of Natural Resources Revenue and can be found at https://revenuedata.doi.gov/.

In FY 2025, BOEM will continue to advance its renewable energy program through identifying new WEAs, pursuing leasing efforts, and improving its permitting and environmental review processes. BOEM will continue reviewing proposals for offshore wind projects spurred by national renewable energy goals and coastal States. Through funding from the IRA, BOEM will be able to close critical resource gaps utilizing a flexible combination of term-positions, inter-agency personnel, and contract staff. These resources will help expedite offshore wind project plan reviews and environmental assessments and enable BOEM to quickly respond to workload spikes and other unplanned requirements.

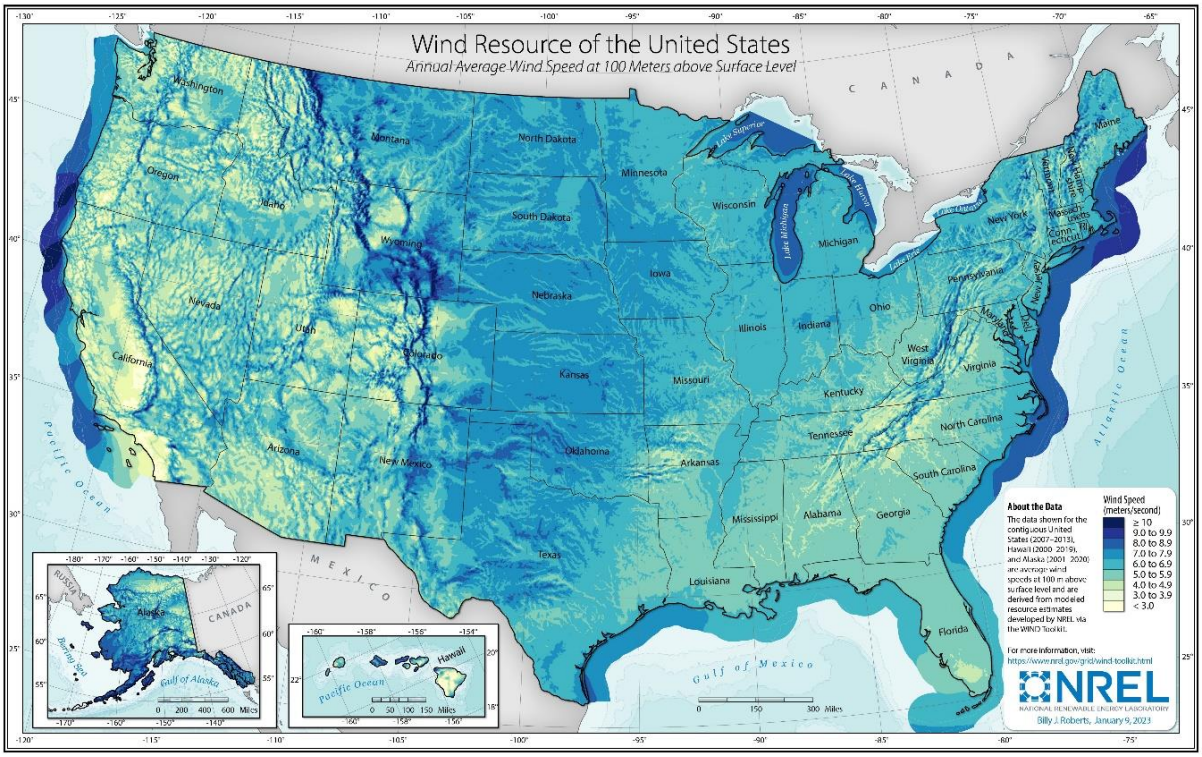
Additionally in FY 2025, BOEM will continue to utilize IRA funding from the Federal Permitting Improvement Steering Council for positions and activities related to facilitating timely and efficient environmental reviews and permitting of FAST-41 covered projects. BOEM will provide additional subject matter expertise for FAST-41 project plan reviews and environmental assessments, develop more

robust environmental review and authorization quality assurance and quality controls, and conduct vital engagements with cooperating agency counterparts, leading to resolution of key FAST-41 project issues in a more effective and timely manner.

➢ Offshore Energy Sources

Wind is the predominant source of offshore renewable energy being developed in the United States. Offshore winds tend to flow at higher sustained speeds than onshore winds, making offshore turbines more efficient than their onshore counterparts. Figure 3 shows areas along the coasts of the Atlantic, Pacific, and Gulf of Mexico that have the greatest technical potential for offshore wind energy production based on wind speeds.

Figure 3: DOE's National Renewable Energy Laboratory Wind Speed Map for the U.S. Technical Resource Area (100m Height)



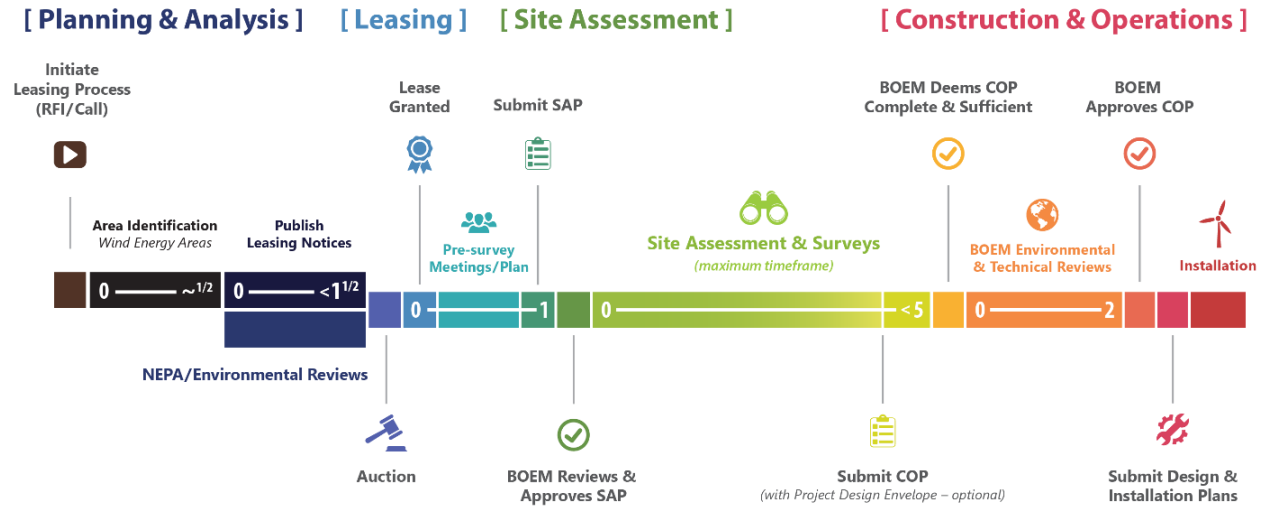
According to DOE's *Offshore Wind Market Report: 2023 Edition*, recent growth in the offshore wind energy project development and operational pipeline has increased the offshore wind project pipeline in the United States to 52.7 GW, a 15 percent increase from the 2022 edition.

In the future, BOEM anticipates development of renewable energy on the OCS could also come from ocean waves and ocean currents, generally known as marine hydrokinetic energy. In 2021, BOEM issued a lease to support the testing of wave energy equipment on the OCS offshore Oregon, which could help advance the development of marine hydrokinetic technologies.

RENEWABLE ENERGY AUTHORIZATION PROCESS

The identification of WEAs, the issuance of leases, and the subsequent review of energy development activities on the OCS is a staged decision-making process comprised of four distinct phases: (1) planning and analysis; (2) issuance of a lease or grant; (3) site assessment; and (4) construction and operations. BOEM involves other Federal agencies (e.g., BSEE, the U.S. Fish and Wildlife Service (FWS), National Oceanic and Atmospheric Administration (NOAA)), and State, local, and Tribal governments throughout all phases of renewable energy development. Figure 4 outlines BOEM's process for authorizing wind energy leases.

Figure 4: Phases of BOEM's Offshore Wind Energy Authorization Process
(numbers in timeline represent years)



The **Planning and Analysis phase** seeks to identify suitable areas for wind energy leasing through collaborative, consultative, and analytical processes that engage ocean users, stakeholders, Tribal governments, and State and Federal agencies. In this phase, BOEM coordinates with stakeholders and ocean users to deconflict potential renewable energy lease areas with existing uses on the OCS. After identifying WEAs, BOEM conducts environmental reviews and consultations with Tribes, States, and natural resource agencies to consider reasonably foreseeable impacts associated with leasing (e.g., site characterization surveys and site assessment activities). Once the environmental review and consultations are completed for a WEA, BOEM may proceed to the leasing phase.

The **Leasing phase** results in the issuance of a commercial wind energy lease or right-of-way grant for energy transmission projects. Leases and grants may be issued either through a competitive or noncompetitive process. BOEM will publish a notice in the *Federal Register* to announce potential future leasing and solicit interest in leasing a specific area of the OCS. If more than one qualified entity is interested in leasing the area identified in the notice, BOEM will move forward with its competitive leasing process, otherwise BOEM may proceed non-competitively. A commercial lease gives the lessee the exclusive right to seek BOEM approval for the development of the leasehold. The lease does not provide the lessee the right to construct facilities; rather, the lease provides the right to use the leased area to conduct surveys and develop its site assessment and construction and operations plans, which must be approved by BOEM before the lessee can move on to the next stage of the process. Leases include stipulations related to rental and operating fees, noncompliance, indemnification, financial assurance requirements, environmental protection operating conditions for conducting surveys, national security and military operations, and other issues. Right-of-way grants authorize the holder to install cables, pipelines, and associated facilities that involve the transportation or transmission of electricity or other energy products from renewable energy projects.

The **Site Assessment phase** includes the submission of a Site Assessment Plan (SAP), which contains the lessee's detailed proposal for the construction and operation of a meteorological tower and/or the installation of meteorological buoys on the leasehold to conduct site assessment and site characterization studies to support the development of a COP. The lessee's SAP must be approved by BOEM before the lessee conducts these activities.

The **Construction and Operations phase** includes the submission of a COP detailing the lessee's proposal to construct and operate a wind energy project on the lease. BOEM requires a general activities plan, similar to a COP, for facilities constructed under a research lease or right of way. BOEM conducts environmental and technical reviews of these plans and decides whether to approve, approve with modification, or disapprove the plan. At the end of the lease or grant term, the developer must decommission facilities in compliance with BOEM and BSEE regulations.

PLANNING AND ANALYSIS

Under OCSLA, BOEM is statutorily required to coordinate and consult with Federal, Tribal, State, and local agencies throughout the renewable energy development process. BOEM establishes intergovernmental renewable energy task forces as a critical component of its planning and outreach activities. The task forces facilitate intergovernmental communications regarding OCS renewable energy activities to ensure that information needs, multiple-use concerns, and associated solutions are identified early in the leasing process.

Gulf of Maine Task Force Meeting

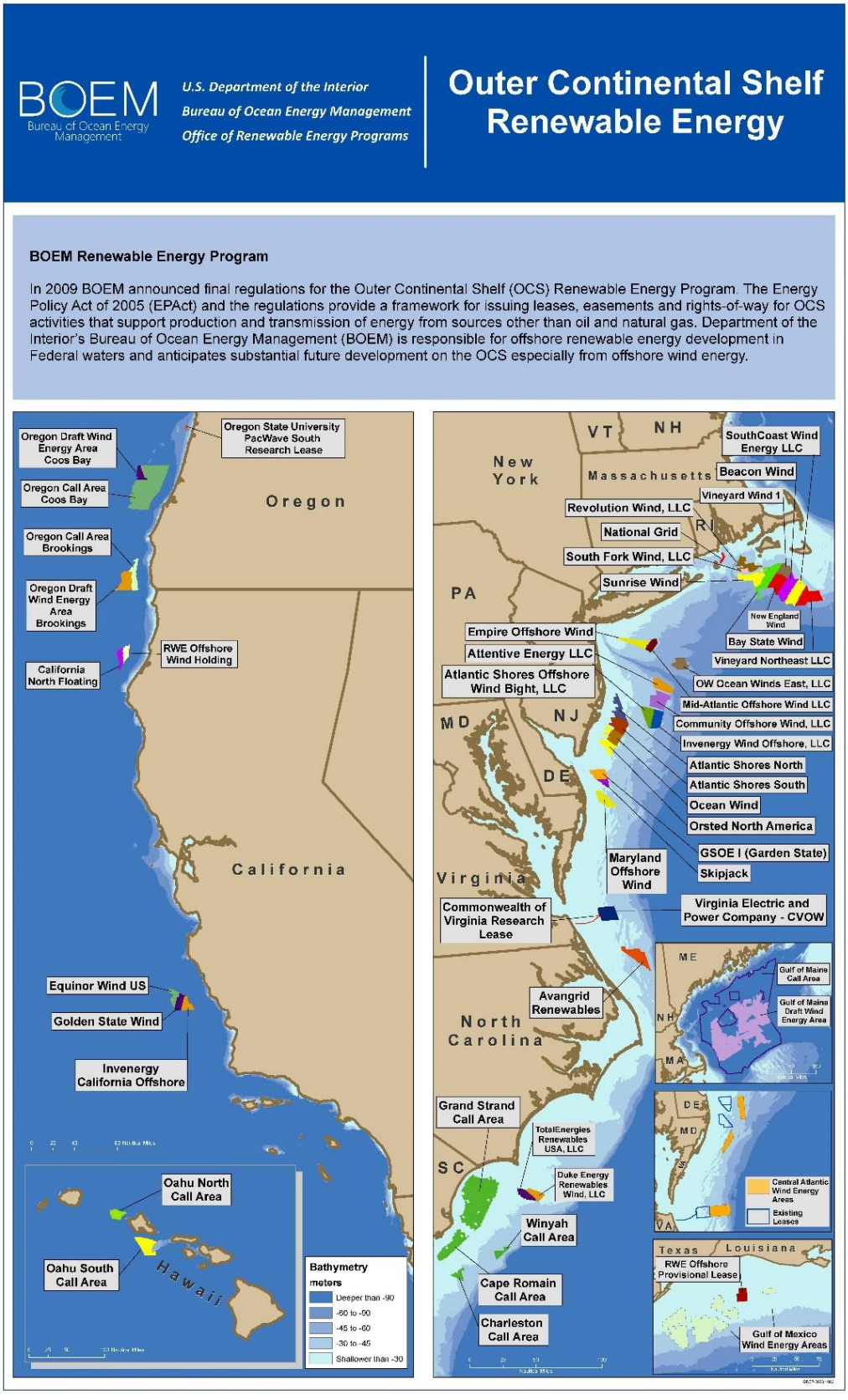
Task forces continue to be a useful tool in helping to inform decision-making as BOEM considers areas of the OCS for renewable energy leasing and development and as BOEM evaluates project plans on existing leases. Such task forces are established in States or regions where the Governor(s) contacted BOEM to express interest in development of offshore renewable energy, or at BOEM's suggestion after receipt of an unsolicited proposal offshore that State. BOEM has established intergovernmental task forces in Maine, Massachusetts, Rhode Island, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Florida, Oregon, Hawaii, and California, and regional task forces for the New York Bight, Carolina Long Bay, the Gulf of Maine, the Gulf of Mexico, and the Central Atlantic. BOEM is combining many of the State task forces into regional task forces to better facilitate coordination on regional issues. With the submission of two unsolicited lease requests offshore Washington, BOEM will continue to work with Tribes and the State to determine whether to form an intergovernmental task force in Washington in FY 2024.

Since the COVID-19 global pandemic, BOEM has increased the use of virtual public meetings and created virtual meeting rooms with targeted information stations, allowing greater access to public meetings and meeting materials. In continuing this practice of holding both in-person and virtual public meetings, BOEM has expanded the potential for added stakeholder involvement in the planning process, while reducing resource and time requirements for the government and stakeholders. Additionally, when input from stakeholders and experts is needed on a specific topic, BOEM hosts workshops to bring together representatives from industry and from academic and government sectors. In FY 2023, BOEM held eight in-person meetings and 22 virtual meetings to solicit public input on environmental reviews for proposed leasing and development on the Atlantic OCS, the Gulf of Mexico Regional Office held four virtual public meetings, and the Pacific Regional Office held one virtual and three in-person public meetings in Oregon. In all regions, additional meetings were held with small groups—more than 30 meetings in the Atlantic region alone. Tribal engagement meetings took place in all regions, and BOEM participated in Fishery Management Council meetings. In FY 2024, BOEM expects to hold more than 80 public engagements program-wide, including official public meetings, Task Force meetings, Tribal engagements, and other engagements with targeted stakeholders.

➢ Identification of WEAs

A key element of the Planning and Analysis phase is the identification and refinement of WEAs, which are areas on the OCS that appear to be most suitable for renewable energy development due to fewer potential multiple-use and environmental conflicts, such as with commercial vessel traffic, fishing or other uses, feeding or calving areas for endangered species, and high concentrations of birds. Through consultation with BOEM's intergovernmental renewable energy task forces, existing ocean users, and other stakeholders, BOEM identifies WEAs through its Area Identification (Area ID) process. The WEAs serve as the basis for further environmental review of where lease areas may be identified for sale. Beginning in FY 2022, BOEM modified the Area ID process to include additional public input opportunities and spatial modeling to ensure greater transparency and the use of the best available science; a Notice to Stakeholders with more detail is available at https://www.boem.gov/newsroom/notes-stakeholders/boem-enhances-its-processes-identify-future-offshore-wind-energy-areas. BOEM built upon its partnership with NOAA's National Centers for Coastal Ocean Science to develop a spatial model that analyzes entire marine ecosystems to identify the best areas for wind energy sites. In FY 2022, this model was used to inform the draft WEAs for the Gulf of Mexico, and in FY 2023, it helped to inform the draft WEAs offshore the Central Atlantic, Oregon, and the Gulf of Maine. The existing leases, WEAs, and Call for Information and Nominations Areas along the Atlantic and Pacific coasts and in the Gulf of Mexico are shown in Figure 5 on the following page.

Figure 5: Renewable Energy Leases and WEAs



LEASE AND GRANT ISSUANCE

➢ BOEM's New Orleans, Louisiana Office

BOEM held the first-ever offshore wind lease auction in the Gulf of Mexico on August 29, 2023. This sale resulted in one lease area, the Lake Charles Area, receiving a high bid of $5.6 million. This lease area has the potential to host up to approximately 1.24 gigawatts of offshore wind energy capacity, which could power nearly 435,400 homes. On October 27, 2023, BOEM published four additional final WEAs in the Gulf of Mexico to support a potential second lease sale in the region. BOEM has also received an unsolicited lease request for the waters offshore Mississippi; the requestor is currently undergoing the BOEM qualification process.

Offshore Platform in the Gulf of Mexico

BOEM continues to work with industry on alternative uses of existing oil and gas infrastructure. OCSLA provides authority for offshore oil and gas structures to remain in place after production activities have ceased so that the structure can be used for other energy and marine-related activities such as research, renewable energy production, and aquaculture. As of November 2023, the Gulf of Mexico OCS contained over 1,477 offshore oil and gas facilities, making this a possible option for the use of this existing infrastructure. BOEM continues to meet with industry on various alternative use ideas and is currently reviewing two right-of-use requests for alternative use of existing platforms. Industry is also working towards providing power to oil and gas production facilities using offshore wind resources.

The Gulf of Mexico has many offshore oil and gas support services companies (boat yards, fabrication yards, etc.) that are utilized or could be utilized to support the U.S. offshore renewable energy industry. The New Orleans Office continues to work with industry to better understand workforce development needs, potential port facility upgrades, and challenges within the supply chain.

➢ BOEM's Anchorage, Alaska Office

In Alaska, BOEM initiated a partnership with DOE's National Renewable Energy Laboratory in FY 2022 for a *Feasibility Study for Renewable Energy Technologies in Alaska Offshore Waters.* The goal is to provide an understanding of the potential to harness offshore wind and marine hydrokinetic renewable energy on the Alaska OCS and in State waters. The partnership will also consider practical methods for

delivering energy from these sources to end users, including the potential for green hydrogen fuel production, distribution, and end use adoption opportunities. The study is on track and scheduled to be completed by September 2024.

➢ **BOEM's Camarillo, California Office**

BOEM's Camarillo Office processes offshore wind requests for California, Oregon, Washington, and Hawaii. In FY 2023 BOEM issued leases for five lease areas offshore California: two on the north coast and three on the central coast. In FY 2024, BOEM initiated development of a programmatic EIS to examine potential avoidance, minimization, mitigation, and monitoring strategies for consideration in forthcoming COP reviews for the California leases.

In FY 2024, BOEM will continue coordination with California State partners to identify additional areas for potential leasing to facilitate California's goal of 25 gigawatts of offshore wind development by 2045. In Oregon, BOEM is also in the initial stages of planning for potential future leasing for offshore wind energy development, having published Oregon Draft WEAs in August 2023. In FY 2024, BOEM continues to coordinate with State partners and Tribes for potential wind energy planning offshore Washington. In FY 2024, BOEM will also continue to work with the State of Hawaii and the Department of Defense (DOD) to identify potential wind lease areas offshore Oahu that are compatible with military uses and may be suitable for possible future offshore wind development. BOEM has funded a Port Assessment for Hawaii to provide information on port capabilities and limitations for offshore wind development.

Coastal Virginia Offshore Wind (CVOW) Project

➢ **Activity on the Atlantic OCS**

Although BOEM has jurisdiction over various types of offshore renewable energy, the major interest offshore the Atlantic coast lies in the development of offshore wind energy. As of November 2023, BOEM is managing 27 commercial wind leases covering over 2.1 million acres along the Atlantic coast, which could support approximately 39 GW of power if fully developed.

In FY 2023, BOEM announced three final WEAs for the Central Atlantic and anticipates a potential lease sale in FY 2024. On October 19, 2023, BOEM identified a draft WEA in the Gulf of Maine that includes consideration of commercial lease areas as well as consideration of an unsolicited research lease application for floating wind filed by the State of Maine. A lease sale in the Gulf of Maine is targeted for calendar year 2024.

- **Leasing for Offshore Transmission**

BOEM is authorized to issue right-of-way grants that allow developers to build electricity transmission lines that connect renewable energy installations to the onshore electrical grid. The first producing offshore wind project in the U.S. is in Rhode Island State waters and includes transmission lines that cross the Federal OCS. BOEM is fostering a coordinated approach to transmission needed in the Atlantic, and in FY 2023 continued to work with Federal and State partners, industry, and stakeholders to obtain additional input on the best way to move forward with transmission for offshore wind development. BOEM will use this planning effort to help inform how it processes existing and future unsolicited right-of-way grant requests proposing the transmission of renewable energy on the Atlantic OCS, as well as transmission solutions proposed for individual facilities by offshore wind lessees. Most notably, this resulted in a joint publication from BOEM and the DOE, titled "An Action Plan for Offshore Wind Transmission Development in the U.S. Atlantic Region," which describes steps to advance the integration of offshore wind into the onshore grid.

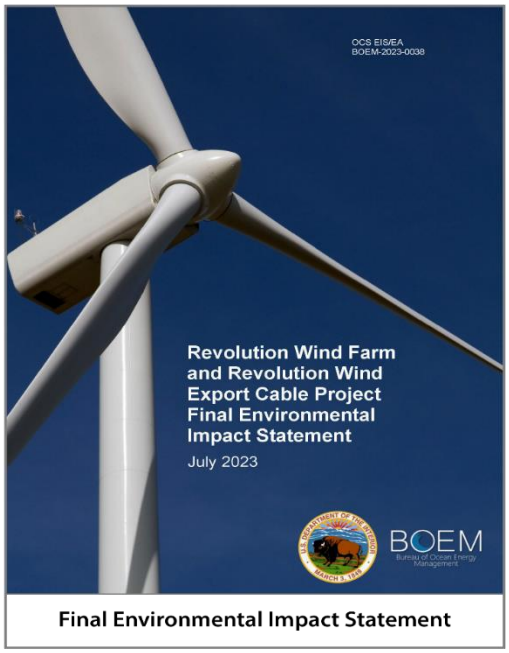
There is growing interest in adopting a planned approach to transmission in the Pacific following the successful lease of five areas offshore California, and BOEM continues to work with DOE to enact a similar approach on the West Coast. DOE and BOEM held an initial scoping call in January 2023, to help guide the process through 2024, which will include engagement with Tribal Nations, Federal and State agencies, industry, utilities, labor and environmental groups, and other ocean co-users and interested parties. In addition, the DOE conducted a West Coast Offshore Transmission Literature Review and Gaps Analysis and began a West Coast Offshore Wind Transmission Study. These combined efforts will allow BOEM to continue a planned approach to transmission that build off the lessons learned in the Atlantic.

SITE ASSESSMENT

Commercial lease holders have up to approximately five years after lease issuance to conduct site assessment activities and submit a COP. When a SAP is submitted, BOEM determines whether the environmental review conducted to inform BOEM's leasing decision also adequately considered the environmental consequences of the activities proposed in the lessee's SAP. If BOEM determines that the previous environmental analysis is inadequate for that purpose, BOEM would prepare an additional NEPA analysis before issuing a decision on the SAP. In some cases, additional consultation may be necessary, such as under Section 106 of the National Historic Preservation Act, for some areas of the OCS.

As of November 1, 2023, BOEM has approved 15 SAPs for areas offshore Massachusetts, Rhode Island, Maryland, Virginia, New Jersey, New York, Delaware, and North Carolina. In FY 2024 and FY 2025, BOEM expects to review SAPs submitted by lessees for projects offshore the Pacific, Gulf of Mexico, and the Atlantic.

CONSTRUCTION AND OPERATIONS PLANS



Before any wind energy facility can be built on an OCS lease, the lessee must submit a detailed plan for the construction and operation of the project, along with supporting data. BOEM then conducts environmental and technical reviews of the COP and mandated consultations before deciding whether to approve, approve with modification, or disapprove the plan. As of November 2023, there are 27 active commercial wind energy leases offshore the Atlantic coast, five offshore the Pacific coast, and one offshore the Gulf of Mexico. Many of these leases are rapidly moving toward the development phase, requiring labor-intensive plan reviews as well as extensive outreach and stakeholder engagement. Each COP review requires as many as 20 to 30 specialists to conduct in-depth environmental and technical assessments and takes approximately two years to complete. As of January 1, 2024, BOEM has issued records of decision approving six COPs, has initiated the environmental review of another seven COPs, has five plans in other stages of review, and expects to receive six new plans over the next 12 months.

The environmental review of these plans typically takes the form of an EIS, which provides additional opportunities for public involvement. EISs consider the reasonably foreseeable impacts on physical, biological, and socioeconomic resources from the construction, operation, maintenance, and decommissioning of these projects. In FY 2023, BOEM initiated an EIS for the Beacon Wind project and continued work on a programmatic EIS considering development in the New York Bight. In FY 2024, BOEM expects to initiate EISs for an additional three projects.

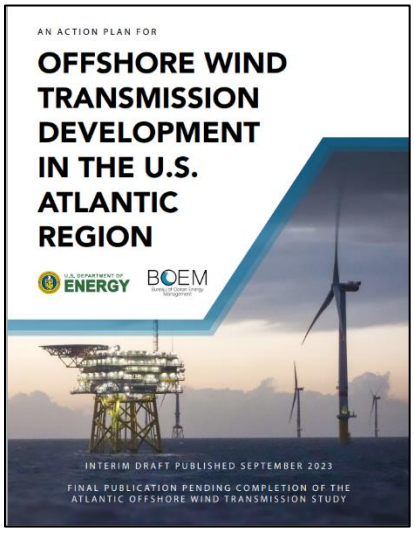
In October 2023, BOEM released the draft EIS for the Maryland Wind project and anticipates releasing the draft EIS for Beacon Wind in FY 2024. In FY 2024, BOEM has already released the final EIS for Sunrise Wind and anticipates releasing final EISs for New England Wind, Atlantic Shores South, and Maryland Wind.

INTERGOVERNMENTAL COORDINATION AND COLLABORATION

The Administration has an ambitious vision for offshore wind as an integral part of our Nation's energy portfolio. It is therefore critical that Federal Government agencies work together, along with Tribal Nations, States, and other key stakeholders, to ensure the responsible development of this technology. In addition to the establishment of BOEM intergovernmental task forces, the Department and BOEM are taking additional steps to ensure efficient and effective coordination. For instance, BOEM has MOAs or MOUs with the DOD, the U.S. Army Corps of Engineers, the U.S. Coast Guard, DOE, the Federal Energy Regulatory Commission (FERC), NOAA, BSEE, and FWS, and the State of California. Additionally, BOEM is developing an MOU with the Federal Aviation Administration. BOEM

collaborated with other Federal partners to implement the Floating Offshore Wind Shot, an initiative to help usher in a clean energy future by driving U.S. leadership in floating offshore wind design, development, and manufacturing. In FY 2023, BOEM, along with nine East Coast States and three other Federal agencies, entered into the *Federal State MOU on East Coast Offshore Wind Supply Chain Collaboration.* This MOU reflects a commitment to continued coordination to address supply chain challenges.

In January 2023, DOI published a final rule transferring existing safety and environmental oversight and enforcement regulations governing OCS renewable energy activities from 30 CFR part 585, under BOEM's purview, to 30 CFR part 285, under BSEE's purview. Further, BOEM and BSEE are preparing to jointly publish the final *Renewable Energy Modernization Rule*. Additionally, BOEM and BSEE continue to coordinate on the selection and review of renewable energy technology research projects, the results of which will be critical in creating design standards for offshore renewable energy facilities based on the unique atmospheric and oceanographic conditions of U.S. offshore areas.



In September 2023, BOEM and DOE released *An Action Plan for Offshore Wind Transmission Development in the U.S. Atlantic Region*. Partially funded by the IRA, this plan outlines immediate actions needed to connect the first generation of Atlantic offshore wind projects to the electric grid, as well as longer-term efforts to increase transmission over the next several decades. The report found that over the mid- to long-term, increased intra-regional coordination, shared transmission lines, and an offshore network of high-voltage direct-current interlinks can more efficiently bring electricity onshore. BOEM and DOE have initiated a similar approach for transmission planning on the West Coast.

BOEM also leads the Offshore Wind Permitting Subgroup, which was established to identify opportunities to improve interagency coordination regarding permitting of offshore wind projects. Information shared in the group allowed BOEM to develop a detailed regulatory roadmap for the development of offshore wind and streamline the review and approval process.

To ensure the Bureau's activities are informed by the latest international developments in the sector, BOEM also coordinates with foreign governments, international organizations, and other U.S. government agencies, in a manner consistent with broader U.S. foreign policy interests. BOEM aligns its international engagement activities with domestic mission needs and carries out objective-driven activities throughout the year by hosting or participating in meetings, knowledge exchanges, and other bilateral and multilateral collaborative initiatives focused on priority topics in the offshore renewable

Intergovernmental Coordination and Collaboration Event

energy sector. In FY 2023, international engagement occurred on topics such as seabed site allocation (e.g., lease sales, tenders), supply chain, offshore wind transmission planning, and emerging technologies (e.g., green hydrogen). FY 2024 and FY 2025 will build on and strengthen these relationships to further inform BOEM's domestic mission. In addition, BOEM serves as the U.S. Government subject-matter lead in the Global Offshore Wind Alliance in coordination with the Department of State and DOE, and manages the Global Offshore Wind Regulators Forum, for which BOEM will continue serving in a lead role and carrying out the responsibilities of Secretariat.

RESEARCH, DATA COLLECTION, AND STAKEHOLDER ENGAGEMENT

BOEM's Renewable Energy Program is supported by investments in research, data collection, and stakeholder engagement. BOEM works closely with a broad spectrum of agencies, universities, and stakeholders to identify critical information needs and fund studies independently, or through partnerships, to increase our knowledge about the marine environment in and around potential and existing renewable energy development locations. BOEM has actively studied the first turbines installed and will continue to assess impacts of commercial projects. To benefit from lessons learned in more mature markets, BOEM has established and maintained strong relationships with several countries in Europe and elsewhere to learn from their years of experience managing offshore wind planning and to stay abreast of the continuing evolution of policies and regulatory schemes in this sector. In addition to the work described in the *Intergovernmental Coordination and Collaboration* section, BOEM has personnel who are appointed members on renewable energy-focused Expert Working Groups in the International Council for Exploration of the Sea, and coordinate with DOE in representing the U.S. in multiple International Energy Agency research tasks pertaining to offshore wind and other forms of marine renewable energy.

➢ Fisheries Engagement

BOEM has continued to engage commercial and recreational fisheries regularly in recent years on a number of matters, including policy and guidance development, and will continue these efforts in FY 2025. Recent guidance documents include the *Fisheries Mitigation Guidance*, which BOEM anticipates finalizing in FY 2024, and the final *Federal Survey Mitigation Strategy*, which was a joint effort with NOAA, published in December 2022 and being implemented in FY 2023-2025.

In FY 2023, BOEM began, in partnership with NOAA's National Centers for Coastal Ocean Science and in collaboration with New England States, engagement with fishing communities regarding the Call Area and draft WEA development in the Gulf of Maine, which continued into FY 2024. In FY 2023, BOEM

contracted with the National Academies of Sciences, Engineering, and Medicine to establish the Standing Committee on Offshore Wind Energy and Fisheries, which is a forum to discuss the state of science and pressing concerns related to the development of offshore wind and its potential impacts to fisheries at the national scale. This Committee has been funded through FY 2024. Additionally, BOEM entered into a service contract in FY 2023 with a commercial smartphone application developer to be able to deliver information and alerts directly to fishing subscribers. The application is being piloted in the Northeast U.S. The Gulf of Mexico office will continue to engage commercial and recreational fisheries to support a potential second lease sale in the region. In the Pacific, in addition to engagement with the fishing industry, BOEM coordinates closely with the Pacific Fishery Management Council, and in FY 2023 participated in 6 meetings with the Council and its ad hoc Marine Planning Committee.

➢ **Tribal Consultation**

BOEM also invites consultation with 130 federally recognized Tribal Nations across the coastal regions, and regularly engages with numerous non-recognized Tribes in California. BOEM's outreach also includes Tribal consultations under Section 106 of the National Historic Preservation Act (NHPA). BOEM consults with Tribes, local governments, States, and other individuals and organizations to identify potential effects to historic and traditional cultural properties, and develop means to avoid, minimize, and mitigate adverse effects to those properties. Tribes are invited to be cooperating agencies for the development of NEPA documents due to their unique knowledge of the natural and historical environment that may be affected by offshore wind development. BOEM invited 11 Tribes to be cooperating agencies for the new programmatic EIS for the six New York Bight leases.

In the Pacific Region, consultation efforts in FY 2023 centered on the following:

- Wind energy leasing activities offshore California;
- Oregon offshore wind energy planning, including identification of draft WEAs and consultation on development of a Programmatic Agreement for NHPA Section 106 activities;
- Unsolicited lease requests for wind energy development offshore Washington;
- The Renewable Energy Modernization Rule; and
- Fisheries Mitigation Guidance.

Efforts in FY 2024 and FY 2025 will also include consultation on additional wind energy development offshore California.

For Atlantic OCS renewable energy activities, BOEM has invited 29 Tribal Nations to participate in formal government-to-government consultation as well as informal coordination on offshore wind activities. BOEM had ten EISs under development along the Atlantic Coast during FY 2023, and BOEM will continue to hold government-to-government meetings at major project milestones or at the request of Tribes. BOEM invited North Atlantic Tribes to the Gulf of Maine Intergovernmental Task Force Meetings to discuss the commercial planning process for wind energy leasing in the Gulf of Maine, and will continue additional Tribal outreach in the region. In FY 2023, BOEM announced three final WEAs

offshore Delaware, Maryland, and Virginia, following extensive engagement and feedback from Tribes, States, local residents, ocean users, Federal Government partners, and other members of the public.

BOEM is also actively working to facilitate and strengthen Tribal capacity for review of offshore wind-related documents. Many Tribes have expressed concern about the limits on personnel and technical expertise to fully participate in providing comments and input in the review of offshore wind leasing and project plans. In FY 2023, BOEM issued an Indefinite Delivery/Indefinite Quantity contract to three Indian Small Business Economic Enterprises, which allows BOEM to provide up to $1 million for up to five years of support to Tribes for Tribal reviews of NEPA, NHPA, COPs, and other environmental documents associated with offshore wind development at all phases of leasing. With this contract in place, Tribes are provided technical expertise and assistance in the review of documents, which amplifies Tribal Nations' ability to have a more meaningful role in the review of projects. Tribes are provided technical support to develop their comments and questions, including on specific topics of concern and interest ranging from natural and cultural resources impacts to economic opportunities, during BOEM's NEPA and Section 106 reviews for the COPs. Several federally recognized Tribes began using this contract support in FY 2023 and are currently using this IDIQ contract for projects with submitted Constructions and Operations Plans (COPs). Tribes have requested continued contract support for future projects and associated COP-specific reviews.

- **Environmental and Scientific Research**

Environmental and scientific research supporting BOEM's renewable energy efforts are funded through both BOEM's Renewable Energy and Environmental Programs budget activities. Renewable energy environmental research – funded through the Renewable Energy budget activity – complements the studies funded through BOEM's Environmental Studies Program.

Deploying Instruments for Acoustic Measurements

BOEM continues to study impacts of offshore wind at the Block Island Wind Farm and the CVOW pilot project, which will be used to inform future COP reviews. BOEM is also studying the propagation of underwater sound during pile driving for the Vineyard Wind 1 and South Fork Wind projects. Through FY 2024, BOEM continues to collect baseline information and study potential impacts to fishing and marine mammals in the Gulf of Maine. BOEM, in collaboration with NOAA's National Centers for Coastal Ocean Science, is employing a spatial model to identify the most optimal locations for WEAs in the Gulf of Mexico, Central Atlantic, Gulf of Maine, and offshore Oregon. The Gulf of Mexico WEAs published in early FY 2023 were informed by this model using data on natural resources, existing ocean industries, wind energy potential, and areas important for national security and conservation. In FY 2023, BOEM funded the deployment of Light Detection and Ranging (a.k.a. LiDAR) buoys off the coast of Oahu in Hawaii, which collected data available to the public at https://a2e.energy.gov/data. BOEM is currently working to

improve our knowledge of and provide protection to the highly endangered North Atlantic right whale, including by compiling a summary of all existing management, research, and monitoring actions related to North Atlantic right whales, and a technical document that describes the pathway toward understanding the cumulative effects of offshore wind on North Atlantic right whales. BOEM also partnered with the National Marine Fisheries Service (NMFS) on the development of a North Atlantic right whale and offshore wind science and management strategy. The final strategy was be published in January.

➢ **Data Collection through Cooperative and Interagency Agreements**

BOEM works cooperatively with States by leveraging funds to collect important information about the offshore environment that meets both the needs of BOEM and the States. In FY 2023 and FY 2024, BOEM continues to work with State partners through cooperative agreements, matching funds, and interagency agreements to inform future planning and decision-making. For example, BOEM and the Commonwealth of Massachusetts are continuing to monitor marine mammals and other marine life off the coast of Massachusetts to establish a pre-construction baseline and to monitor the effects of construction to the environment. Additionally, BOEM is continuing to work with NOAA and FWS to collect necessary baseline information about wildlife and to develop risk assessment tools to inform the consultation process for endangered species.

To help address concerns raised by Tribes in the Pacific Region, BOEM entered into an inter-agency agreement with the Udall Foundation's National Center on Environmental Conflict Resolution to work with interested West Coast Tribes in developing cultural landscape assessments of areas of Tribal concern that could be impacted by offshore wind energy development. The cultural landscape approach recognizes that places and resources can have different or multiple meanings and levels of significance based on how people from different cultures, generations, or backgrounds have interacted with the respective landscapes. BOEM is implementing this holistic approach to enhance future consultations and decision-making processes that take into consideration the importance of these areas to Tribes.

BOEM also entered into a cooperative agreement with Oregon State University to further refine the model for understanding and identifying submerged pre-contact landforms offshore the west coast, areas that may have once been inhabited but now lie buried offshore due to sea-level inundation over the last twenty thousand years. This effort will fill data gaps by integrating industry-standard geophysical survey data with traditional Indigenous knowledge through consultation with coastal Washington Tribes.

Additionally, BOEM is a member of and regularly participates in the West Coast Ocean Alliance, a Regional Ocean Partnership convening of Tribal, Federal, and State leaders in a non-regulatory forum to pursue consensus-driven activities carried out by members in support of the group's regional vision on the West Coast of the U.S. BOEM funds and supports the Alliance's West Coast Ocean Data Portal, which links existing data systems together to provide an easy-to-use gateway to discover ocean and coastal data. The Alliance's West Coast Tribal Caucus meets monthly and regularly invites BOEM to provide updates at its meetings.

➢ Guidelines for Developers and Applicants

BOEM issues guidelines to clarify and provide a general understanding of the information required to adequately address the impacts of offshore renewable energy projects to the environment. In FY 2022, BOEM published a draft *Fisheries Mitigation Guidance* for public comment, and expects to finalize the document in FY 2024. The guidance is intended to provide greater consistency in mitigating impacts to commercial and recreational fisheries regardless of location.

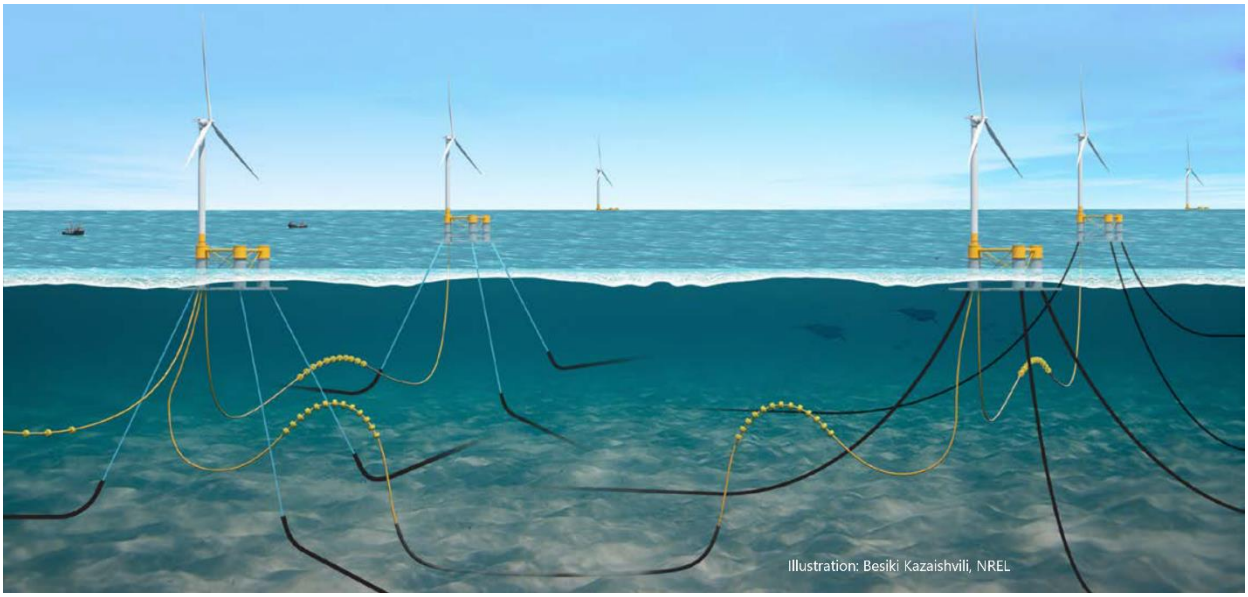
BOEM is revising the draft Project Design Envelope Guidance to incorporate lessons learned since the guidance was first made available to lessees in January 2018. Further clarification on topic areas in the updated guidance includes pre-submittal stakeholder coordination; the size, scope, and reasonableness of the Project Design Envelope; and changes to the Project Design Envelope. Updated guidance will improve the quality of the information provided by lessees in their COP, which will ultimately yield faster sufficiency reviews, fewer comments on the COP, and a more efficient environmental review process.

In order to facilitate the COP review process, in FY 2023, BOEM published two sets of guidelines: *Guidance on Information Needed for Issuance of a Notice of Intent (NOI) under the National Environmental Policy Act (NEPA) for a Construction and Operations Plan (COP) ("NOI Checklist");* and *BOEM Nationwide Recommendations for Impact Pile Driving Sound Exposure Modeling and Sound Field Measurement for Offshore Wind Construction and Operations Plans ("Marine Acoustic Modeling and Measurement Guidelines")*. The NOI Checklist provides clarity to lessees about what components are required before BOEM will begin its environmental and technical review of a COP, and is designed to improve the efficiency of proposed offshore wind project reviews by avoiding delays to the NEPA analysis after the NOI has been published.

The *Marine Acoustic Modeling and Measurement Guidelines* provide recommendations to lessees for developing acoustic and exposure models of impact pile driving as part of their COP submittals, since underwater sounds generated from such activity can impact marine species near the project area. The guidelines also provides recommendations for Sound Field Verfication measurements to verify anticipated sound fields after COP approval.

➢ Technology Assessment and Research Studies

BOEM partners with BSEE to select and fund appropriate research in operational safety and pollution prevention related to offshore renewable energy development through the Technology Assessment Program. Recent projects continue to build on the lessons learned from developers of commercial wind projects offshore Europe, while focusing on the unique operating environment of the U.S. OCS. International structural design standards have been reviewed and research gaps have been identified, such as the anticipated effects of hurricanes and open ocean breaking waves, as well as the structural integrity of floating wind turbines under reasonably foreseeable ocean conditions. Data on meteorological and oceanographic ("metocean") conditions need to be obtained across U.S. regions to ensure that floating turbines are designed to the appropriate parameters.



Potential FY 2024 Technology Assessment Program studies include a study of seabed mobility on the Atlantic OCS and impact on buried cables, a review of anticipated new renewable energy technologies other than offshore wind that may be proposed to be developed on the OCS, and a study of methods to detect and mitigate snaring of ghost fishing gear on floating wind turbine mooring lines and cables that can pose entanglement hazards to marine mammals. Potential topics for future research may include methods to collect and share geologic, geotechnical, and metocean data collected on lease areas; a desktop study of geotechnical and geologic conditions in OCS waters around U.S. territories; structural behavior of turbine towers and foundations to assess fatigue and longevity; improving structural design models; and an assessment of potential conflicts between floating turbine mooring and cable systems and fishing and navigation activities.

Results of BOEM's technology assessment and research projects provide guidance to BOEM subject matter experts and industry regarding data collection activities needed in support of project development, assist the industry in refining engineering designs for offshore structure foundations for the varying geologic and oceanographic conditions that exist offshore the U.S., and ensure greater long-term stability and survivability of wind farm facilities. These projects also provide information and guidance for BOEM and program stakeholders on wind resource measurement, marking and lighting for offshore structures to aid air and vessel navigation, and mitigation of potential impacts on coastal, military, and vessel radar instrumentation.

Metocean studies are necessary to develop a U.S. based standard for wind farm facility design. BOEM works with the National Renewable Energy Laboratory on updating existing recommended practices (American Clean Power Association Offshore Compliance Recommended Practices: 2022 Edition) and establishing new recommended practices for metocean data measurement, geotechnical and geophysical data collection, and floating technologies. This multi-year effort, initiated in October 2017, assembled over 100 experts across the spectrum of the offshore wind industry.

BOEM is also collaborating on a comprehensive set of roadmaps under American National Standards Institute (ANSI) rules that incorporate existing offshore wind energy facility design standards and guidelines. These roadmaps will facilitate the safe design and deployment of offshore wind energy, account for the unique conditions of the U.S. OCS and State waterways, and provide DOI with ANSI-recommended best practices. This effort consists of five modules that will be submitted to ANSI through the American Clean Power Association, an ANSI-approved standard setting organization. BOEM projects this effort will culminate in FY 2024.

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FISCAL YEAR 2025 BUDGET
Bureau of Ocean Energy Management
Conventional Energy

Table 8: Conventional Energy Budget Summary

Activity: Conventional Energy
Dollars in Thousands ($000)

Conventional Energy	2023 Actual	2024 Annualized CR	2025 Fixed Costs (+/-)	2025 Program Changes (+/-)	2025 President's Budget	Change from 2024 Annualized CR (+/-)
Conventional Energy	**61,487**	**61,487**	**+1,987**	**+4,007**	**67,481**	**+5,994**
FTE	*257*	*304*	*0*	*+1*	*305*	*+1*

Management of the oil and gas resources of the OCS is governed by OCSLA (43 U.S.C. § 1331 *et seq.*), which sets forth procedures for OCS oil and gas leasing, exploration, development, and production. BOEM seeks to manage the development of offshore energy resources in an environmentally and economically responsible manner. BOEM's work supports energy security, environmental protection, and economic development through responsible management of these offshore resources informed by the best available science.

Foundational to the conventional energy program is the preparation of the National OCS Oil and Gas Leasing Program (National OCS Program). BOEM's work also includes assessments of the oil and gas resource potential on the OCS, inventories of oil and gas reserves, and economic evaluations of OCS submerged lands to ensure the receipt of fair market value for U.S. taxpayers for any leasing and development activities.

The Administration is committed to addressing the climate challenge while continuing to support the orderly and responsible development of OCS oil and gas resources and the implementation of all applicable laws, including the BIL and IRA.

The 2025 budget will support:

- **Carbon Sequestration:** Section 40307 of the BIL amended OCSLA to authorize the Secretary of the Interior to grant a lease, easement, or right-of-way on the OCS for activities that "provide for, support, or are directly related to the injection of a carbon dioxide stream into sub-seabed geologic formations for the purpose of long-term carbon sequestration." Additionally, the law directs the

Secretary of the Interior to promulgate regulations to carry out this new authority. Implementation of these provisions supports the Administration's broader climate change efforts. BOEM and BSEE are using their significant technical expertise in offshore oil and gas, geology, the environment, and economics to develop joint proposed regulations to allow for carbon sequestration projects on the OCS, with a goal of publishing draft regulations to establish a safe and environmentally sound carbon sequestration program. BOEM also intends to begin preparation of a programmatic environmental analysis to streamline reviews and consultations for future lease sales and project approvals. Program activities currently underway include efforts to generate an assessment of the carbon storage potential on the OCS.

- **Marine Cadastre:** The Energy Policy Act of 2005 (P.L. 109-58), section 388(b), directed the Department to cooperate with other Federal departments and agencies to establish an interagency comprehensive digital mapping initiative for the OCS to assist in decision-making relating to the siting of offshore renewable energy. To accomplish this, BOEM and NOAA jointly manage the MarineCadastre.gov portal, which provides authoritative and regularly updated ocean information such as offshore boundaries, infrastructure, human use, energy potential, and other data. This system is widely used by the public, environmental groups, Federal regulatory agencies, State and regional marine planners, Tribes, intergovernmental task forces, and other government organizations involved in ocean planning issues.

- **Official Offshore Marine Mapping:** Accurate OCS boundary lines and map products are a foundational requirement for all of BOEM's OCS planning and leasing activities. Under OCSLA, BOEM is required to prepare Official Protraction Diagrams, Supplemental Official Block Diagrams, and other map products depicting areas of the OCS. Further, pursuant to the Geospatial Data Act of 2018 and OMB Circular A-16 (*Coordination of Geographic Information and Related Spatial Data Activities*), which provides direction for Federal agencies that produce, maintain, or use geospatial data either directly or indirectly in the fulfillment of their missions, BOEM is responsible for producing and maintaining the official offshore marine cadastre for the OCS of the United States.

- **Geospatial Services Coordination:** Geospatial data, technologies, and services are critical components of our Nation's digital infrastructure, enabling the integration of disparate information from many sources to drive economic growth and support decision-making across broad sectors of the economy. BOEM's Geographic Information System (GIS) is a vital component of BOEM's digital infrastructure for the OCS, and managing this infrastructure is necessary to ensure the organization is equipped for current and future demands. Coordination of mission-critical geospatial data and advanced technologies that inform decision-making brings clarity to the crowded marine space and supports America's most pressing ocean economic, security, and environmental interests.

- **Implementing Recommendations from the November 2021 DOI "Report on the Federal Oil and Gas Leasing Program":** In response to direction in Executive Order 14008 and in light of the Secretary of the Interior's broad stewardship responsibilities, the Department conducted a review of its onshore and offshore oil and gas programs and published a report of its findings in November 2021. The report identified key reforms necessary to ensure that the programs provide a fair return to

taxpayers, discourage speculation, reduce environmental impacts, hold operators responsible for remediation, and create a more inclusive and just approach to managing public lands and waters. The Department's report made specific recommendations to restore balance to the OCS oil and gas program, including adjusting royalty rates, pursuing adequate financial assurance for decommissioning liabilities, partnering with BSEE to refine existing "fitness to operate" standards, and prioritizing leasing in areas with known resource potential while avoiding conflicts with other uses. BOEM is in the process of implementing various administrative changes consistent with some of the report's findings and recommendations, including, where necessary, updating regulations and agency policy guidance documents. In FY 2024, BOEM plans to finalize a rule to modernize financial assurance requirements for the offshore oil and gas industry to better protect American taxpayers from incurring the costs associated with the oil and gas industry's responsibility to decommission offshore wells and infrastructure once they are no longer in use.

- **National OCS Oil and Gas Leasing Program:** As required by section 18 of OCSLA, BOEM prepares the National OCS Leasing Program, which sets forth a schedule for proposed offshore oil and gas lease sales over a 5-year period. The National OCS Program is designed in a manner to best meet the Nation's energy needs while carefully considering factors to balance the potential for accessing oil and gas resources with the potential for adverse impacts from such activity. On December 14, 2023, the Secretary approved the new 2024-2029 National OCS Oil and Gas Leasing Program, which includes three potential oil and gas lease sales in the Gulf of Mexico (GOM) Program Area, which includes the Western GOM Planning Area and the portions of the Central and Eastern GOM planning areas not currently under Presidential withdrawal. BOEM has begun preparation of a programmatic EIS to streamline reviews and consultations for future oil and gas lease sales and activities in the GOM.

- **Lease Administration:** As of February 1, 2024, BOEM manages 2,241 active oil and gas leases covering more than 12.0 million acres of the OCS. Approximately 75 percent of these leases are not yet in production. The producing OCS leases account for about 15 percent of all domestic oil production and two percent of domestic natural gas production.

- **Plan Review:** BOEM conducts a thorough review of all submitted Exploration Plans, Development Operations Coordination Documents, and Development and Production Plans. Exploration Plans describe all exploration activities planned by an operator as well as the timing of these activities. Development Operations Coordination Documents[1] and Development and Production Plans describe the lessee's proposed development and production activities and an analysis of any offshore and onshore impacts that may occur.

- **Geological and Geophysical (G&G) Surveys:** BOEM issues permits for conventional energy G&G surveys, which are conducted to obtain data for oil and gas exploration and production and aid in siting offshore structures. The data are also used in bid evaluation as BOEM seeks to ensure the

[1] Development Operations Coordination Documents are used in the Central and Western Gulf of Mexico in lieu of Development and Production Plans, as allowed by the 1978 amendments to the OCSLA (43 U.S.C. § 1351 (a) and (l)).

receipt of fair market value for the leasing of OCS resources, and to identify and characterize potential carbon sequestration storage sites. G&G surveys will play a critical role in monitoring the migration of any injected carbon dioxide.

- **Resource Evaluation:** The resource evaluation program supports BOEM's conventional energy program through technical and economic analysis. The primary program objectives are to provide an assessment of discovered and undiscovered oil and gas resources on the OCS, assure receipt of fair market value for OCS resources as mandated by OCSLA, and characterize the subsurface of the OCS for the purpose of assessing carbon storage potential and modeling carbon plume movement.

- **Comprehensive Inventory of OCS Resources:** Section 357 of the Energy Policy Act of 2005 directs the Secretary of the Interior to update the "Report to Congress for the Comprehensive Inventory of OCS Resources" at least once every five years. BOEM maintains these up-to-date resource assessments and reserves estimates across the OCS and is responsible for generating this periodic report to Congress, the most recent of which was published in January 2024.

- **Ensuring Fair Market Value:** Once a lease sale is completed and the high bidders for each tract are publicly announced, BOEM follows specific bid adequacy procedures to ensure the government receives fair market value. A determination of bid adequacy is made within 90 days after the lease sale is held.

SUMMARY OF 2025 PROGRAM CHANGES

Summary of 2025 Program Changes for Conventional Energy

Program Changes:	**($000)**	**FTE**
Baseline Capacity	+3,270	+0
Offshore Carbon Sequestration	+737	+1
TOTAL Program Changes	**+4,007**	**+1**

* Changes listed in order of budget activity, not priority.

Maintain Baseline Capacity (+$3,270,000). The 2025 budget includes important investments in programs needed to help strengthen America and be more competitive as the world continues to change. These investments include funding needed to maintain a strong, talented workforce and the core capacity needed to continue to fulfill BOEM's mission. The budget includes $3,270,000 in this budget activity, which reflects the incremental amount needed to cover the fixed costs associated with mission operations in FY 2024. This request in combination with the FY 2025 fixed costs amounts will allow the program to meet sustain core capacity and avoid impacts to ongoing program activities.

Offshore Carbon Sequestration (+$737,000; +1 FTE). BOEM requests resources within the Conventional Energy (+$737,000; +1 FTE) and Environmental Programs (+$263,000) budget activities to establish a dedicated Offshore Carbon Sequestration Program that will help ensure that offshore

geological storage of carbon dioxide is done in a safe and effective manner. BOEM is proposing additional resources to hire specialized staff, train existing and new staff, and conduct outreach and engagement. Data and technology will also be critical to providing employees with the tools they need to ensure that offshore carbon sequestration is done safely and can be adequately monitored over the long term. BOEM proposes funding to contribute toward the acquisition and maintenance of Geological Interpretive Tools and procurement of requisite G&G data. This will be critical to both the development of a model and methodology to provide for a comprehensive, national-level assessment of CO_2 storage capacity across the OCS, as well as regional subsurface knowledge to develop region-specific assessment units. Resources may also be used for areas such as the development of an information technology database architecture for future CO_2 operations and activities and geological research.

PROGRAM OVERVIEW

The Na Kika platform in deepwater Gulf of Mexico.

As the Nation's OCS energy resource manager, BOEM administers a comprehensive national oil and gas leasing program that requires a progressive cycle of resource, economic, and environmental analyses, providing the Secretary of the Interior with the information needed to make informed decisions. This work includes: developing the National OCS Oil and Gas Leasing Program (National OCS Program); identifying and delineating appropriate boundaries and legal descriptions; inventorying and assessing the Nation's OCS energy endowment; developing a proposed schedule for oil and gas lease sale offerings; establishing financial terms that seek to ensure the receipt of fair market value; permitting G&G surveys; reviewing industry plans to explore, develop, and produce oil and gas resources; ensuring lease holders have sufficient financial resources to fulfill lease obligations, such as decommissioning facilities at the end of their productive life; and ensuring that oil and gas activities are conducted in compliance with environmental laws and regulations. These activities support U.S. domestic oil and gas supplies and create a more accessible, efficient, and predictable oil and gas leasing process for government, industry, and other stakeholders.

Offshore Federal oil and gas production in FY 2023 reached approximately 673.4 million barrels of oil and 769.8 million cubic feet of gas, almost all of which was produced in the Gulf of Mexico. Revenues generated from OCS conventional energy leasing and production activities are a significant source of revenue for the Federal Government. In FY 2023, offshore conventional energy generated $434.5 million in bonuses, $120.4 million in rent, and $6.5 billion in royalties from production.

LEASING

BOEM's leasing activities include the development of the National OCS Program; the planning, preparation, and holding of individual lease sales; and the administration of oil and gas leases.

➢ National OCS Oil and Gas Leasing Program

Under OCSLA, the Secretary of the Interior has the responsibility to prepare, periodically revise, and maintain an oil and gas leasing program to "best meet national energy needs" while balancing other important factors. The Department must prepare a national program that indicates "as precisely as possible, the size, timing, and location" of Federal offshore oil and gas leasing activity to be considered for the 5-year period it covers. The National OCS Program identifies program areas, which are delineated areas of leasing interest where leases potentially may be offered and establishes a proposed schedule of lease sales over a 5-year period.

Per section 18(a)(3) of OCSLA, the National OCS Program is designed to achieve a balance of "the potential for environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone." During development of the National OCS Program, BOEM requests comments from intergovernmental partners and stakeholders (including governors, Federal and State agencies, local communities, Federally recognized Tribes, energy and non-energy private industry, public interest groups, and the general public) to help BOEM determine which areas of the OCS have the most potential for oil and gas development and the measures that should be implemented to ensure that development is accomplished in an environmentally responsible manner. This effort ensures that management of the OCS is "conducted in a manner which considers economic, social, and environmental values of the renewable and nonrenewable resources contained in the OCS, and the potential impact of oil and gas exploration on other resource values of the OCS and the marine, coastal, and human environments" (43 U.S.C. § 1344(a)(1)).

BOEM published the 2019-2024 National OCS Oil and Gas Leasing Draft Proposed Program (2019-2024 Draft Proposed Program) on January 4, 2018. The Draft Proposed Program is the first in a series of three analytical documents issued by the Department before the Secretary takes final action to approve a National OCS Program. BOEM considered public comments received on the 2019-2024 Draft Proposed Program as part of the development of the second analytical stage of the National OCS Program: the Proposed Program and the associated Draft Programmatic EIS. BOEM made these documents available for public comment on July 1, 2022. BOEM received approximately 760,000 comments during the 90-day comment period following this announcement; these comments were considered in the development of the Proposed Final Program (PFP) and Final Programmatic EIS. The availability of the 2024-2029 PFP and the corresponding EIS was announced on September 29, 2023. The PFP includes three potential OCS oil and gas lease sales in the Gulf of Mexico Program Area (Table 9), which includes the Western GOM Planning Area and the portions of the Central and Eastern GOM planning areas not currently under Presidential withdrawal. The Secretary approved the National OCS Program on December 14, 2023.

Table 9: 2024–2029 Proposed Final Program Lease Sale Schedule

Sale Number	Sale Year	OCS Region and Program Area
262	2025	Gulf of Mexico: GOM Program Area
263	2027	Gulf of Mexico: GOM Program Area
264	2029	Gulf of Mexico: GOM Program Area

➢ Oil and Gas Lease Sales

Lease Sale 258. BOEM published the Final Notice of Sale (NOS) and the ROD on November 29, 2022, and held Cook Inlet Lease Sale 258 on December 30, 2022, in compliance with the IRA. One bid was received, leading to BOEM issuing one lease as a result of the sale.

Lease Sale 259. BOEM published the Final NOS and ROD on February 27, 2023, and held Gulf of Mexico Lease Sale 259 on March 29, 2023, in compliance with the IRA. BOEM issued 295 leases as a result of the sale.

Lease Sale 261. BOEM announced the publication of the Proposed NOS and Final Supplemental EIS for Gulf of Mexico Lease Sale 261 in January 2023 and March 2023, respectively. The Final NOS and ROD published in the *Federal Register* on August 25, 2023, with Lease Sale 261 scheduled to be held on September 27, 2023. Two lawsuits then challenged the Final NOS in the U.S. District Court for the Western District of Louisiana, and plaintiffs in those cases sought preliminary injunctions to force BOEM to (1) include lease blocks previously excluded to protect the Rice's whale and (2) remove provisions in Stipulation No. 4, ''Protected Species,'' that BOEM had added to protect the Rice's whale from certain oil and gas activities while BOEM engaged in a reinitiated consultation under the Endangered Species Act. As a result of multiple subsequent court rulings, BOEM published a revised Final NOS on November 20, 2023, announcing Lease Sale 261. BOEM held Lease Sale 261 on December 20, 2023, and received 352 bids on 311 tracts covering 1.7 million acres. High bids totaled $382 million.

2024-2029 GOM Call for Information and Nominations. On October 2, 2023, BOEM issued a Call for Information and Nominations (Call) covering three proposed GOM oil and gas lease sales described in the 2024-2029 National OCS Program. Issuing a Call is the first step in BOEM's conventional energy leasing process (see "Lease Sale Planning Process" below). The purpose of the Call is to solicit industry nominations of acreage for possible inclusion in future sales and request information from the public on the Call Area for lease sale planning. BOEM anticipates completing the leasing, environmental review, and consultation steps for the proposed GOM Lease Sale 262, which is the first lease sale listed in the 2024-2029 National OCS Program, in a timeframe that will support a possible sale in FY 2025.

2017-2022 National OCS Oil and Gas Leasing Program. The following table includes information on lease sales held under the 2017-2022 National OCS Oil and Gas Leasing Program. Information on sales in Past Programs can be found on BOEM's website at https://www.boem.gov/oil-gas-energy/national-program/national-ocs-oil-and-gas-leasing-program by selecting the Past Programs tab.

Table 10: Lease Sales Completed to Date Under the 2017-2022 National OCS Program

Sale #	Date of Sale	Area	Number of Leases Issued	Number of Acres Leased	Total Bonus for Leased Tracts
249	8/16/2017	Gulf of Mexico	81	456,256	$110,878,165
250	3/21/2018	Gulf of Mexico	139	764,924	$115,329,139
251	8/15/2018	Gulf of Mexico	141	784,009	$175,489,464
252	3/20/2019	Gulf of Mexico	211	1,171,260	$231,790,063
253	8/21/2019	Gulf of Mexico	147	811,967	$154,994,527
254	3/18/2020	Gulf of Mexico	63	351,206	$86,240,453
256	11/18/2020	Gulf of Mexico	86	477,413	$111,559,312
257	11/17/2021	Gulf of Mexico	306	1,711,301	$187,031,781
258*	12/30/2022	Cook Inlet, Alaska	1	5,693	$63,983
259*	3/29/2023	Gulf of Mexico	295	1,576,409	$248,614,236
261*	12/20/2023	Gulf of Mexico	TBD**	TBD**	TBD**

***Cook Inlet Lease Sale 258, GOM Lease Sale 259, and GOM Lease Sale 261 were cancelled by the Department in 2022. Subsequently, BOEM was directed under the Inflation Reduction Act of 2022 to hold the sales despite the expiration of the 2017-2022 National OCS Program.**

**** Final statistics for Lease Sale 261 are not yet available. BOEM estimates completing its bid adequacy review in March 2024.**

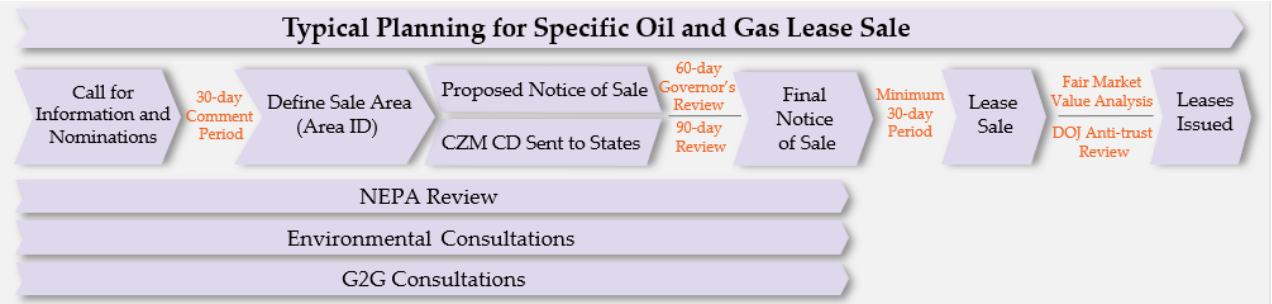
➢ Lease Sale Planning Process

Each lease sale in an approved National OCS Program is subject to an established pre-lease evaluation and decision-making process during which interested and affected parties have opportunities to comment and provide input. Each approved lease sale is considered on a case-by-case basis over the course of required *Federal Register* publications, sale notices, comment periods, environmental reviews, and consultations. Through this extensive planning process, a proposed sale undergoes evaluations that consider reasonable alternatives, modifications, and/or restrictions to the area under leasing consideration. The Final NOS, which BOEM publishes at least 30 days prior to holding the sale, documents the Department's final decision on a sale's size, timing, and location, as well as decisions on environmental mitigation measures and lease sale fiscal terms.

The pre-leasing process takes approximately a year and a half to two years to complete, depending on the nature of the lease sale and the complexities encountered during the planning process.

The following figure and narrative provide an overview of the major steps and decision points in planning for a typical oil and gas lease sale.

Figure 6: Typical Planning for a Specific Oil and Gas Lease Sale



1. **Call for Information and Nominations:** BOEM requests comments from the public on the area being considered for leasing and solicits information on environmental issues that should be analyzed. In addition, potential bidders are invited to nominate areas of interest within those areas identified for leasing consideration.

2. **Area Identification:** Based on information received in response to the Call for Information and Nominations, BOEM identifies an area for further leasing consideration and environmental analysis. BOEM is required to announce its Area Identification decision publicly in the *Federal Register*.

3. **Notice of Intent:** If applicable, BOEM issues a Notice of Intent to alert the public that it will prepare an EIS pursuant to NEPA. The notice provides a description of the Proposed Action and possible alternatives, as well as a description of the scoping process and any scheduled meetings for the scoping of the NEPA document. A Notice of Intent may not be issued if BOEM determines that another form of NEPA review is sufficient (i.e., environmental assessment or Determination of NEPA Adequacy/Memorandum for the Record).

4. **NEPA Review:** BOEM may prepare a Determination of NEPA Adequacy based on existing NEPA documents or prepare a new NEPA document, either an EIS or environmental assessment, to evaluate the potential environmental impacts of the Proposed Action, alternatives, and the potential effectiveness of mitigation measures.

5. **Public Comment on Draft NEPA Document:** For lease sale environmental assessments, BOEM typically solicits public comments for 30 days. For an EIS, the draft document is available for public comment for 45 days.

6. **Government-to-Government Consultations:** BOEM consults with federally recognized Tribes and, in Alaska, with Alaska Native Claims Settlement Act Corporations. These consultations are conducted throughout the stages of the OCS oil and gas leasing process or anytime upon request.

7. **Environmental Consultations:** BOEM conducts required consultations with Federal agencies, such as FWS and NMFS, to comply with environmental laws such as the Endangered Species Act, the Marine Mammal Protection Act, the Magnuson-Stevens Fishery Conservation and Management Act, and others. BOEM also consults with State and Tribal historic preservation officers under the NHPA.

8. **Final NEPA Document:** BOEM addresses substantive Tribal and public comments and, if necessary, updates its analysis prior to issuing a final NEPA document.

9. **Proposed NOS:** BOEM publishes a Notice of Availability of the Proposed NOS in the *Federal Register*. This notice includes information on the sale's proposed size, timing, and location, as well as a description of proposed blocks being offered, environmental mitigations being considered, and proposed fiscal terms and conditions of the sale.

10. **Letters to the Governors:** BOEM sends copies of the Proposed NOS to governors of affected States for their review. Pursuant to section 19 of OCSLA, BOEM requests their comment on the proposed sale's size, timing, and location.

11. **Consistency Determination:** As required by the Coastal Zone Management Act, BOEM will provide affected States that have a Federally approved State Coastal Zone Management Plan with a determination on whether the proposed lease sale is consistent, to the maximum extent practicable, with the enforceable policies of their respective Coastal Zone Management Act Plans.

12. **ROD (for an environmental impact statement) or Finding of No Significant Impact (for an environmental assessment):** This is the final step in the NEPA process regarding BOEM's decision to hold a lease sale. The ROD, or the Finding of No Significant Impact, is signed in conjunction with the Final NOS and published in the *Federal Register* at least 30 days prior to the lease sale date.

13. **Final Notice of Sale:** BOEM publishes a Final NOS in the *Federal Register* at least 30 days before the sale is held. This notice includes information on the sale's size, timing, and location, bid opening, a description of the blocks being offered, applicable environmental mitigations, and fiscal terms and conditions of the sale. Pursuant to section 19 of OCSLA, BOEM also sends letters to governors of affected States providing written reasons for accepting or rejecting each governor's recommendations and/or implementing any alternative means to provide for a reasonable balance between the National interest and the well-being of the citizens of the State.

14. **Lease Sale:** BOEM opens and publicly reads sealed bids submitted by qualified bidders on the day of the sale. The bids are read aloud and broadcast on the internet via live-stream. Companies include a $1/5^{th}$ bonus deposit with their bonus bids.

15. **Fair Market Value Analysis:** Ensuring the receipt of fair market value for OCS resources is mandated by OCSLA and is one of BOEM's core responsibilities. Under its bid adequacy procedures for oil and gas leases, BOEM reviews all high bids received as it seeks to ensure a bid on a specific OCS block meets fair market value criteria prior to lease issuance.

16. **Lease Issuance:** BOEM issues a lease to the highest qualified bidder if the high bid meets BOEM's fair market value criteria following required antitrust review by the Department of Justice and the Federal Trade Commission. Upon receipt of the awarded leases, companies have eleven business days to execute the lease and pay the balance of the bonus and first year rental.

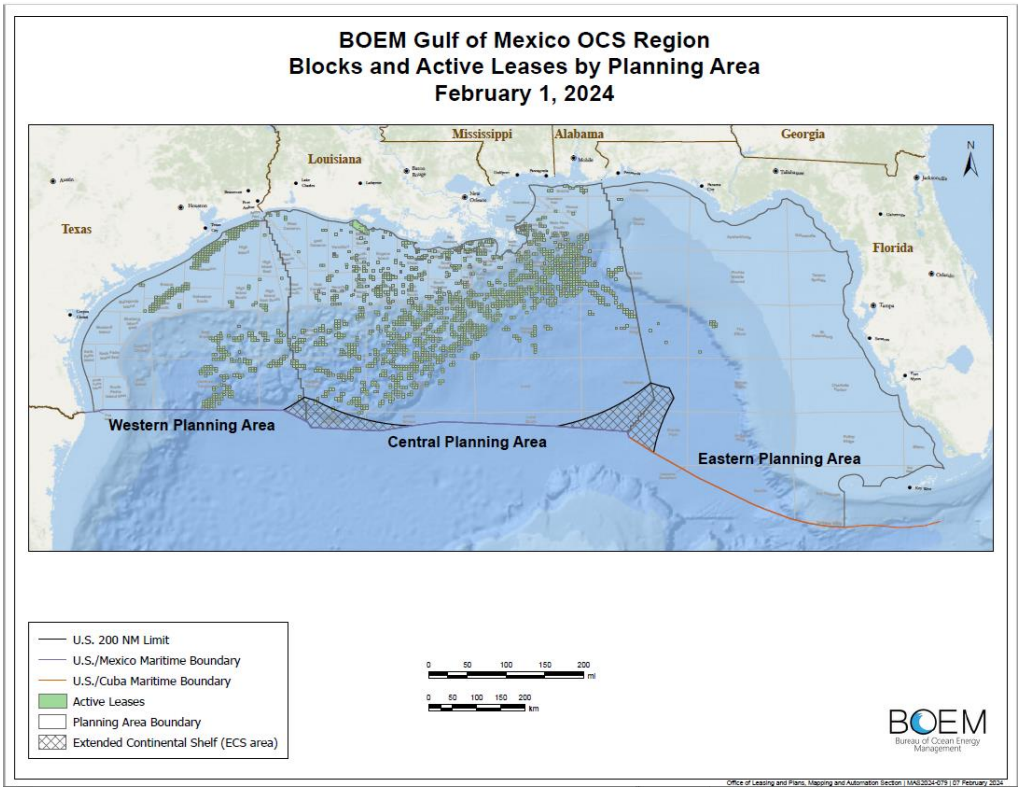
Failure to comply with these requirements will result in the forfeiture of the 1/5th bonus deposit and rights to acquire the lease.

➢ Lease Administration

The lease administration process encompasses a set of discrete business processes, which manage a lease from issuance to relinquishment, termination, cancellation, or expiration. Prior to lease issuance, the Department of Justice and Federal Trade Commission confirm that the awarding of the tracts would neither create nor maintain a situation inconsistent with the antitrust laws. Once the lease has been awarded, lease administration covers the legal modification of the lease contract, its supporting analysis, and services provided by BOEM under the lease contract. Lease administration also includes qualification of corporate entities and individuals before they can acquire properties or do business on the OCS; the review and acceptance of corporate mergers, corporate changes-of-name, and business conversions; and the assignment of lease interests among qualified entities.

BOEM's New Orleans, Louisiana Office (New Orleans Office): BOEM oversees 29,186 blocks in the Gulf of Mexico. As of February 1, 2024, there are 2,187 active leases, including 384 in the Western Planning Area, 1,790 in the Central Planning Area, and 13 in the Eastern Planning Area. The following figure provides a snapshot of the blocks and active leases within the Gulf of Mexico.

Figure 7: Gulf of Mexico Blocks and Active Leases by Planning Area



BOEM's Anchorage, Alaska Office (Anchorage Office): As of February 1, 2024, the Alaska OCS has 21 active oil and gas leases encompassing approximately 103,565 acres, including six leases in the Beaufort Sea and 15 in Cook Inlet.

Figure 8: Cook Inlet Sea Active Leases

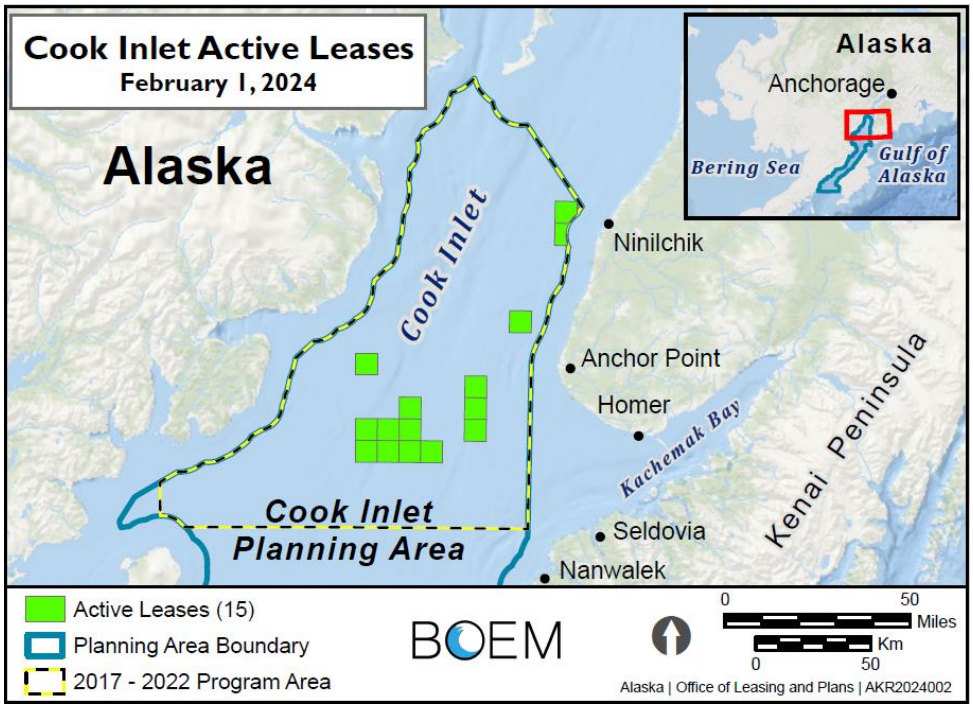
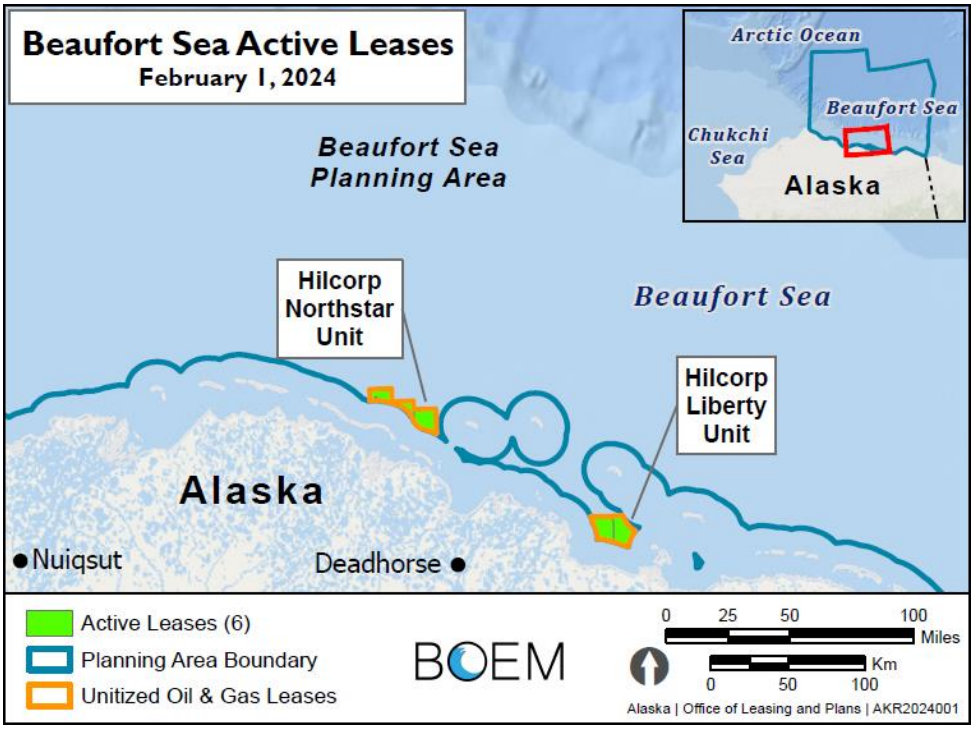


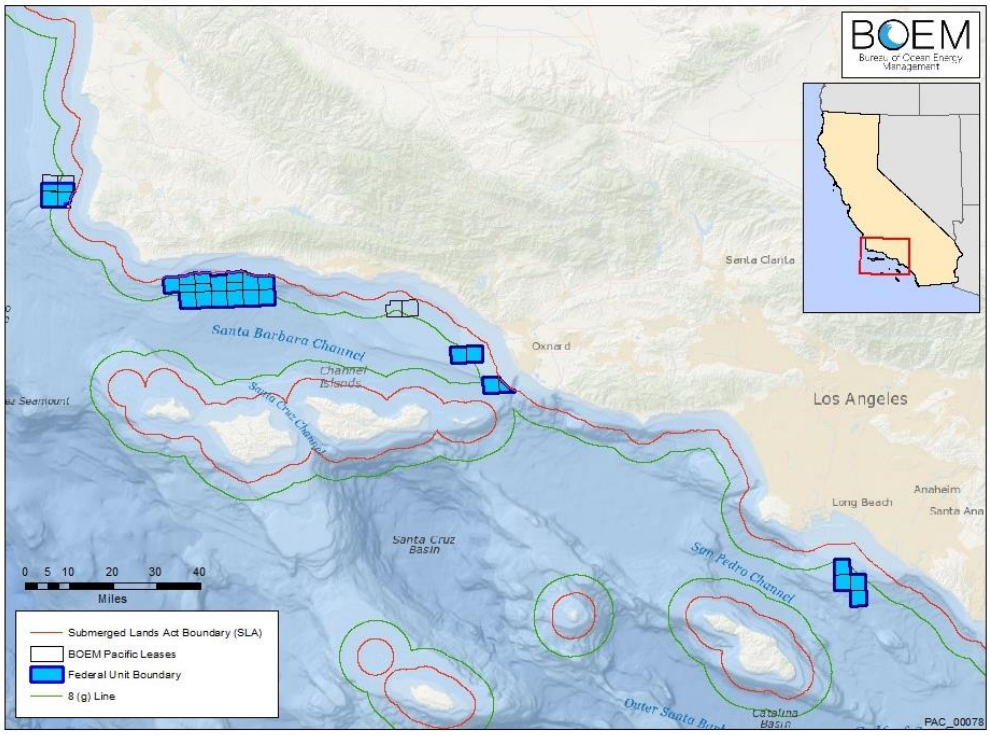
Figure 9: Beaufort Sea Active Leases



The Beaufort Sea leases include three leases in the Liberty Unit and three leases in the Northstar Unit (a joint State/Federal unit that is currently in production).

BOEM's Camarillo, California Office (Camarillo Office): As of February 1, 2024, BOEM manages activity on 30 active leases covering 152,578 acres offshore California. The following map shows the location of the leases off the coast of Southern California.

Figure 10: Camarillo Office Active Leases



- **Official Boundaries**

The development and maintenance of accurate OCS boundary lines are a foundational requirement for all BOEM OCS leasing activities. Various court decisions, treaties, laws, policies, and procedures guide the boundary making process on the OCS. The submerged lands of the OCS are subdivided into parcels referred to as OCS blocks. No submerged lands may be offered for lease that are not under the jurisdiction of the Federal Government, and no such submerged Federal lands may be offered for lease or sale by either a foreign country or a U.S. State. Through its mapping and boundary functions, both in headquarters and in the regional offices, BOEM is responsible for producing and maintaining the official offshore cadastre for the OCS of the United States.

BOEM's mapping activities are subject to the Foundations for Evidence-Based Policymaking Act of 2018, which requires information-driven decisions with transparency back to the underlying data; the OPEN Government Data Act of 2018, which makes open data a key part of every agency's Information

Resources Management Plan; and the Geospatial Data Act of 2018, which ensures geospatial data from multiple sources is available and easily integrated to enhance physical and cultural world understanding.

Using GIS software tools, block and boundary data previously stored in BOEM's Technical Information Management System is now contained within BOEM's centralized geodatabase, the Boundary Delineation System (BDS). Using BDS allows BOEM to produce the geospatial cadastral information for the Offshore Marine Cadastre (OMC) database in a consistent and standardized manner for all regions and for the Nation. BDS is also used to perform mathematical offshore boundary computations in preparation of OCS maps, official protraction diagrams, and supplemental official OCS block diagrams depicting OCS block information, the Submerged Lands Act boundary, limits of the "8(g) and 8(p) Zones," and corresponding area measurements.

The current focus of this work is maintaining existing tools to support renewable energy and marine mineral planning in the territories and extended continental shelf and to develop plans to support future datum conversion projects. BOEM created a Gulf of Mexico NAD83 cadastre that was used for the Gulf of Mexico Region renewable energy lease sale. The NAD83 Protractions, Blocks, and Aliquots were finalized on April 21, 2023, and can also be viewed on BOEM's webpage at https://www.boem.gov/gom83-cadastral-data. In FY 2024, BOEM is preparing a submission to the Federal Geographic Data Committee (FGDC) to request recognition of OMC data and mapping products (e.g., Index maps, OCS leasing maps, official protraction diagrams, and supplemental official block diagrams) as a National Geospatial Data Asset. This effort supports the FGDC framework and processes for managing Federal National Geospatial Data Assets as a single Federal Geospatial Portfolio in accordance with OMB policy and Administration direction.

- **Geospatial Services Coordination**

To engage in effective planning, leasing, and permitting activities that result in sound ocean management decisions, BOEM programs need geospatial data that describe ocean uses and resources. U.S. coastal zones and offshore areas are used for a wide spectrum of activities including mining sand for beach nourishment, facilitating aquaculture projects, military training, protection of important species, vessel transit, commercial fishing and fisheries management, and energy development. Ocean users and activities have the potential to affect each other, and these interactions need to be understood and considered. Coordination of mission-critical geospatial data that informs decision-making brings clarity to the crowded marine space and supports America's most pressing ocean economic, security, and environmental interests. Ocean-based geospatial data has thus emerged as a Federal priority in recent years, while at the same time BOEM is experiencing rapid changes in technology and a growing demand for data of all types.

On April 23, 2022, BOEM completed Phase 2 of a comprehensive information technology business planning effort, meeting a critical milestone for the Department to assess and potentially develop a consolidated Federal geographic mapping service that facilitates public access to climate-related information to assist Federal, State, local, and Tribal governments in climate planning and resilience activities. The Bureau rebranded the project as BOEM's Geospatial Shared Enterprise Architecture & Services (GeoSEAS), and it is part of BOEM's support for EO 14008 section 211, "Climate Action Plans

and Data and Information Products to Improve Adaptation and Increase Resilience." This project further positions BOEM to leverage data from all BOEM mission areas to fuel increasingly sophisticated analytical tools to support the Administration in solving new ocean management and conservation problems. GeoSEAS is now in full operation and is focused on supporting requirements of robust program adoption, including expanded processing capabilities, storage needs, custom application support, staffing, and improved support to Federal partners such as NOAA for consuming BOEM data shared on the MarineCadastre.gov portal. For example, on May 1, 2023, BOEM's Office of Environmental Programs announced the availability of its Environmental Studies Program Hub, which now leverages the GeoSEAS platform to improve public access to BOEM's collection of ocean science research. Other examples include BOEM's Marine Mineral Information System, which is scheduled to transition to GeoSEAS by the end of FY 2024 as the new cloud hosting solution for the program. GeoSEAS is also currently being used to make Gulf of Maine and Oregon offshore wind planning data publicly available and shareable with ocean data portals with a regional focus in a timely fashion.

Modern enterprise geospatial information technology will function as the backbone of how BOEM more effectively supports mission operations, serves the public in the digital age, ensures accountability and transparency, and partners with other agencies such as NOAA in the deployment of MarineCadastre.gov. Further, this ensures the adequacy of supporting technologies and infrastructures, developing and implementing appropriate mapping/data/metadata standards, and ensuring compliance with applicable Federal directives and requirements, including provisions of the OPEN Government Data Act, the Foundations for Evidence-Based Policymaking Act, the Information Quality Act, and the Geospatial Data Act. Implementing the terms of the OPEN Government Data Act and Federal Data Strategy, the BOEM geospatial program treats data as an asset, requiring and prioritizing new data for public disclosure, machine readability, open licensing, and discoverability through data.gov and MarineCadastre.gov. As prescribed by the Geospatial Data Act, BOEM promotes greater access and use of government data, establishing enforceable standards for geospatial data, and working to better coordinate among Federal, State, local, and Tribal governments, the private sector, and institutions of higher learning.

- **Marine Cadastre**

The Marine Cadastre project, a joint initiative between BOEM and NOAA, is a web-based, integrated marine information system that provides an authoritative source of ocean information, including offshore boundaries, infrastructure, ocean uses, habitat distribution data, energy potential, and other data sets important to both large regional ocean planning efforts and project-specific planning. While originally created to comply with section 388 of the Energy Policy Act of 2005, which mandated a comprehensive digital mapping initiative for decision-making on the OCS, the Marine Cadastre now provides the geospatial framework needed for broader ocean planning. BOEM's Marine Cadastre program has been recognized repeatedly for its collaborative stewardship efforts and is evolving and expanding to include relevant issue-driven data and tools.

In particular, the Marine Cadastre's OceanReports tool has become a go-to information source, providing instant access to more than 100 ocean and coastal datasets. Ocean professionals, as well as the conservation community and others, can use this information to find the best location for an aquaculture site, identify suitable areas for offshore wind development, support port expansion efforts, and much

more. By providing ocean intelligence to achieve both renewable energy and conservation goals, OceanReports provides a path forward to support Administration climate priorities.

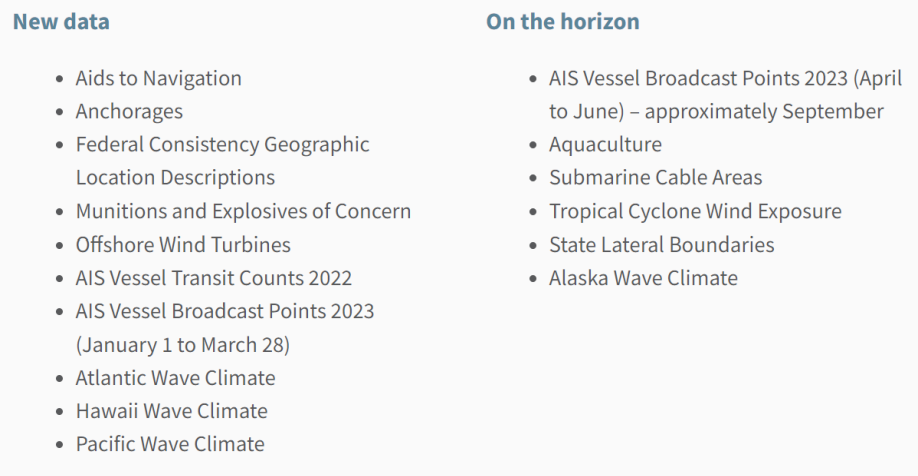
Renewable energy siting is a focus of OceanReports. Data provided include offshore wind resource potential, offshore wind planning areas, offshore wind energy leases, and the proximity of electric power facilities, which helps to determine if a facility can handle new sources of offshore electricity. Other available data include seafloor depth, elevation, information about potential conflicts such as endangered species and protected areas, as well as other ocean uses, such as shipping and fishing, which are important to the ocean economy.

In FY 2023, new data and infographics were added to OceanReports. The Marine Cadastre team also updated the vessel traffic data and added more years of data for visualization, added an Ocean Observing Assets infographic, and developed separate data and infographics for NOAA Fisheries and FWS.

Marine Cadastre content is also provided as immediately viewable map data, downloadable GIS formatted data, and as map services. In addition to the data provided by other authoritative providers – such as NOAA, FWS, the U.S. Geological Survey, and the U.S. Coast Guard – the MarineCadastre.gov site includes a variety of BOEM and BSEE data sets. Users inside and outside of BOEM have access to the most up-to-date versions of lease maps, protraction diagrams, leased blocks, OCS blocks, boundaries, pipelines, wells, and other BOEM/BSEE generated GIS data important to stakeholders for marine and energy development planning purposes. Several regional ocean portal projects use the data and services provided through MarineCadastre.gov, fulfilling BOEM's vision for the project to be the first place to find authoritative coastal and marine data.

The Marine Cadastre also collects Automatic Identification System (AIS) data quarterly for all areas monitored by the U.S. Coast Guard and U.S. Army Corps of Engineers and provides historical AIS data from 2009-2023. In FY 2023, three billon AIS records through June 2023 were added to the AccessAIS tool, which provides information on vessel traffic densities and patterns and allows users to select and quickly download data for their areas of interest and time periods. The access limit for individual orders was also increased from two times to five times, to help alleviate user inquiries about expiration notices.

In FY 2023, another focus of the project was on creating and delivering the most up-to-date data and removing data sets that are outdated, superseded, or hosted by local or regional portals. The project is seeking partnerships to deliver high value datasets that have been requested by stakeholders. The following graphic displays a listing of new or updated data layers and those planned for FY 2024.



New data layers added or updated during FY 2023 and those planned for FY 2024 for Marine Cadastre.

Most significantly, however, MarineCadastre.gov was updated in FY 2023 to modernize its data registry and mapping tools using the ArcGIS Hub platform. This update enhances cross-sector collaboration by providing direct access to web services and applications, all from one location. Specialized web maps can now be built, stylized, and shared within the platform. These changes will greatly increase data sharing and collaboration among Federal, regional, State, and private sector entities as demands for ocean space increase.

PLANS

Each of BOEM's regional offices manages the review and approval process for all Exploration Plans (EPs), Development and Production Plans (DPPs), or Development Operations Coordination Documents (DOCDs) within their respective OCS waters. In conducting plan reviews, BOEM examines the proposed exploration, development, and production activities to ensure they conform to regulatory performance standards; comply with Federal laws, regulations, and lease terms; can be conducted safely; adhere to sound conservation practices; protect the rights of the U.S. Government; do not unreasonably interfere with other OCS uses; and do not cause undue harm to the human, marine, or coastal environments. This oversight ensures that industry follows all applicable laws, regulations, and lease terms when exploring for and developing oil and gas resources on the OCS.

BOEM works to ensure the plan review process is rigorous, efficient, and predictable. BOEM designates specific plan coordinators to ensure consistency throughout the review process. During plan review, BOEM evaluates the potential environmental impacts of the proposed activities pursuant to OCSLA and NEPA. Analyses include reviews of shallow hazards and seafloor features, resource conservation, financial assurance, worst-case discharge scenarios, air quality, water quality, archaeological concerns, environmental resource concerns, subsistence use concerns, and military and security issues. The analyses provide information to support plan decisions and the development of approval conditions to help protect the environment and facilitate multiple uses of the OCS.

The following figures illustrate typical plan review and approval processes for exploration and development of OCS oil and gas resources.

Figure 11: Processes for Oil and Gas Exploration Activities

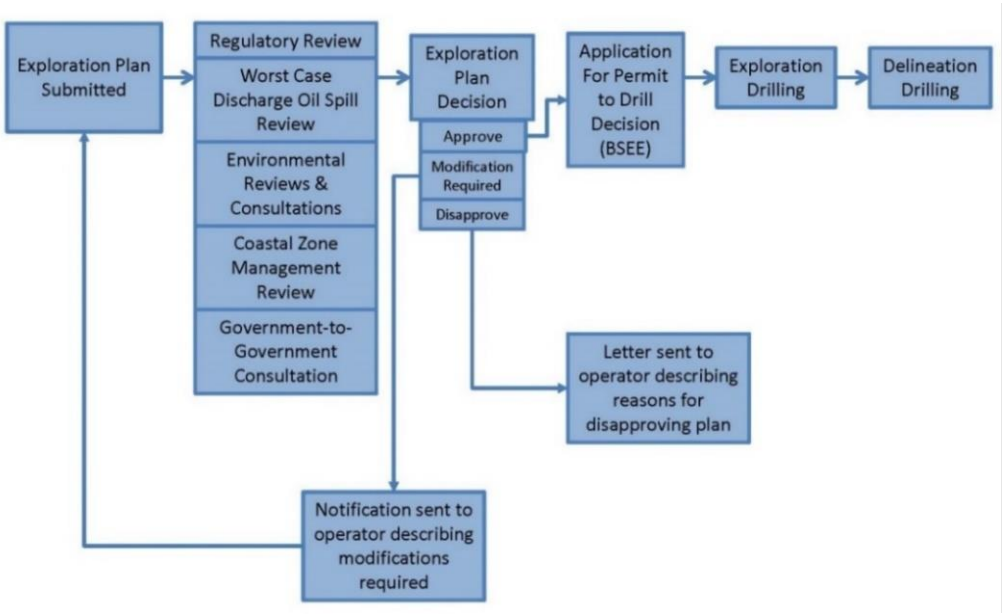
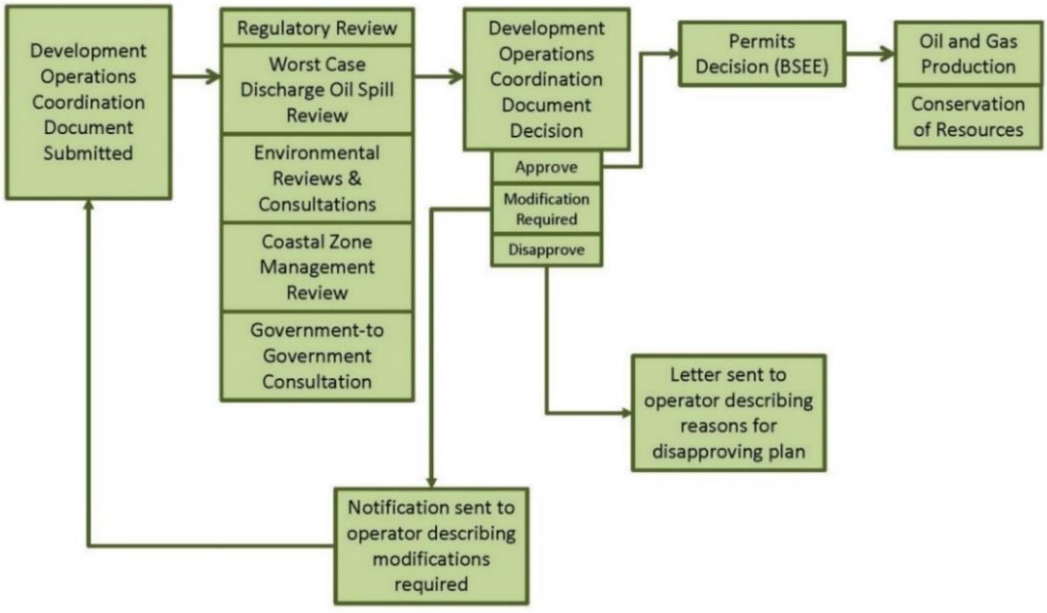


Figure 12: Processes for Oil and Gas Development Activities



Note: This figure reflects the process for DOCDs in the New Orleans Office. The Anchorage Office and the Camarillo Office follow a similar process, but receive DPPs rather than DOCDs.

New Orleans Office: The number of total plans reviewed in calendar year 2023 was lower than in 2022, with a decrease in EPs (23 percent) and DOCDs (17 percent). Table 10 shows all plan submittals – initial,

supplemental, revised, modifications, amendments, and post-approval – received from 2014 through 2023, as well as BOEM's estimates for the number of plan submittals in 2024 and 2025.

Table 11: Recent and Projected Plan Review Activities in the Gulf of Mexico

Calendar Year	# EPs	# DOCDs
2014	509	601
2015	542	473
2016	336	248
2017	305	423
2018	293	448
2019	336	401
2020	325	407
2021	237	343
2022	269	286
2023	206	237
2024*	275	350
2025*	275	350

*** The number of plans noted in 2024 and 2025 are estimated.**

BOEM also reviews and processes applications for rights-of-use and easement. Rights-of-use and easement are granted to operators to construct or maintain platforms and other installations at OCS sites on which the operator does not have an OCS lease, if the proposed activities would facilitate the development of leased resources. Prior to granting a right-of-use and easement request, BOEM must ensure the proposed activities conform to sound conservation practices and will be carried out in a safe and environmentally sound manner to prevent harm or damage to any natural resource or the human, marine, or coastal environments. In FY 2023, BOEM received nine right-of-use and easement requests and completed 21 reviews. BOEM anticipates receiving approximately 20 such requests based on current trends and historical data in both FY 2024 and FY 2025.

Anchorage Office: In FY 2020, BOEM received an EP for Lower Cook Inlet and initiated a plan completeness review. After review, BOEM determined additional information was needed to deem the EP submitted. The review of the EP will proceed once the requested information is provided to BOEM.

In October 2018, BOEM approved the DPP for the Liberty Prospect, located in the Beaufort Sea in the OCS waters northeast of Prudhoe Bay. The Ninth Circuit's ruling in *Center for Biological Diversity v. Bernhardt*, 982 F.3d 723 (2020), vacated the DPP approval and remanded the action to BOEM. In FY 2022, Hilcorp—the current owner of the Liberty Prospect—informed BOEM that it would provide an amendment to its DPP after it updates its oil spill response plan.

Northstar is a joint Federal/State of Alaska unit located in the Beaufort Sea about 12 miles northwest of Prudhoe Bay that has been producing since 2001. BP was the original lessee and operator of Northstar. Hilcorp has operated the field since 2014, which produces about 3,091 barrels of oil per day and 2,223

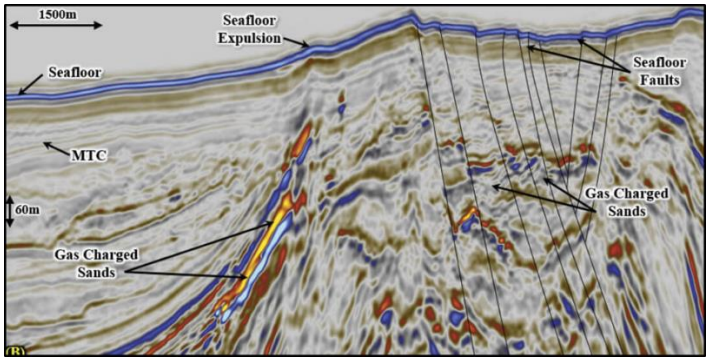
barrels of natural gas liquids per day. BOEM will continue to review and monitor Federal production activities at Northstar and may need to conduct additional NEPA analysis if operations expand.

The BOEM Anchorage office initiates and engages in government-to-government consultations with Federally recognized Tribes and government-to-Alaska Native Claims Settlement Act corporations in planning activities that may have a substantial direct effect on those entities.

Camarillo Office: Proposed activities on active leases periodically require updates or revisions to approved DPPs. BOEM did not have any plan activity offshore California in FY 2023. In FY 2024, BOEM expects to receive one revised or supplemental DPP and plans to conduct a periodic review of the DPPs for the platforms in the Beta Unit. BOEM assists BSEE in the preparation of environmental analyses and supports compliance reviews associated with conventional energy leases, and has worked with BSEE in the development of a programmatic EIS on decommissioning activities on the Pacific OCS. On October 27, 2023, the Notice of Availability of the final programmatic EIS for oil and gas decommissioning activities on the Pacific OCS was published.

➢ Geological & Geophysical Reviews

BOEM is responsible for reviewing all oil and gas exploration and development plans for potential hazards that may be encountered during drilling activities. BOEM geoscientists identify and evaluate the potential risks of surface and subsurface geologic hazards (e.g., shallow faults, shallow gas pockets, shallow water flows, abnormal pressure zones, etc.) and man-made obstructions (e.g., pipelines, cables, shipwrecks, etc.). Geophysical reviews are performed to evaluate shallow hazards (seafloor and near seafloor) associated with operators' applications for pipeline rights-of-way and associated permits. To analyze these applications and requests, BOEM uses G&G data (e.g., 2D and 3D seismic data, and high-resolution side scan sonar data) to understand the geologic and geophysical environment in the area, evaluate and verify operators' submissions and interpretations, evaluate the potential risk of encountering hydrogen sulfide, and determine mitigations to be applied to plan and permit approvals. BOEM's G&G reviews provide a detailed evaluation of operators' geohazards analyses, shallow hazards assessment, and archaeological resource findings.



Seismic Data Showing Shallow Geohazards
Source: https://ncs-subsea.com/seismic/applications/

BOEM provides BSEE, upon request, with subsurface expertise and assistance with regulatory review of applications for drilling permits. For example, if BSEE determines that a well may fail at a certain casing

point, BOEM geoscientists conduct a broaching analysis to determine if escaping hydrocarbons from a failed casing shoe (a short steel sleeve attached to the bottom of a string of casing to help guide and protect the casing) will be trapped in the formations, or potentially reach the seafloor. A typical broaching analysis takes one to two weeks, depending on the complexity of the geology, and involves the evaluation of subsurface stratigraphic and structural conditions.

New Orleans Office: In FY 2023, BOEM conducted 85 geological and 83 geophysical reviews in support of EP and DOCD reviews; four high-resolution survey reviews; 81 reviews of applications for permits to drill; and 15 pipeline reviews for BSEE. In the future, increasingly complex analyses will need to be conducted to identify potential geohazards because of the higher resolution data that is being collected for complex projects, especially those occurring in deep water. BOEM anticipates the number of reviews to remain the same in FY 2024 and increase by ten to 20 percent in FY 2025. In FY 2023, BOEM completed broaching analyses on three proposed wells to help support BSEE's reviews. BOEM anticipates approximately five broaching analyses in each of FY 2024 and FY 2025.

Anchorage Office: In FY 2023, BOEM received and reprocessed seismic lines from one legacy survey for Cook Inlet Assessment.

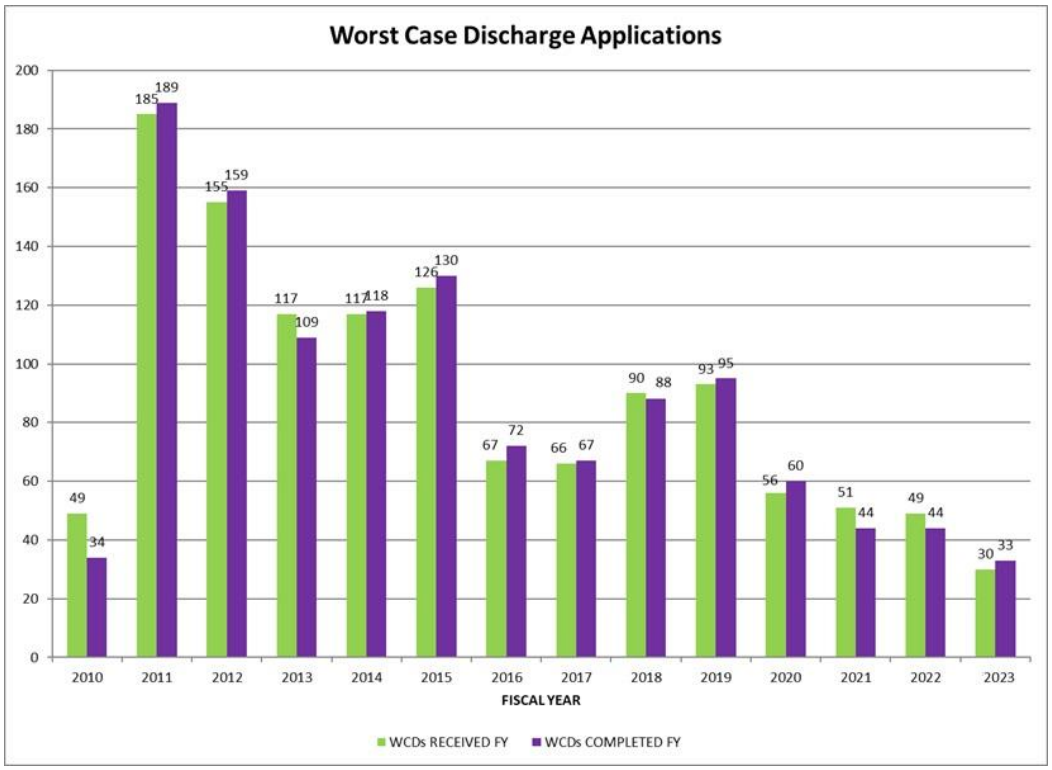
➢ **Worst-Case Discharge**

Operators and lessees are required to submit worst-case discharge calculated volumes and associated data as part of every EP, DPP, and DOCD. BOEM defines a worst-case discharge for exploratory and development drilling operations as the daily rate of an uncontrolled flow of oil and gas from all producible reservoirs that are simultaneously exposed to an open wellbore.

Each regional office is responsible for worst-case discharge verifications and decision documentation associated with plans in their respective regional areas. BOEM geoscientists and engineers independently verify the validity of the volume calculations, assumptions, and analogs used by the operator for the worst-case discharge. BOEM's worst-case discharge model outputs are used by BSEE in reviewing oil spill response plans and making decisions on applications for permits to drill.

New Orleans Office: BOEM made determinations on 33 worst-case discharge verifications in FY 2023. During FY 2024 and FY 2025, BOEM anticipates the number of worst-case discharge analyses to increase to 35 and 40, respectively, although the workload will largely depend on the level of deepwater drilling activity in the Gulf of Mexico. The following figure depicts the number of worst-case discharge determination requests received and reviewed for completeness, and the number of analyses completed in each year since the program's inception in 2010.

Figure 13: Worst-Case Discharge Analyses Completed in the New Orleans Office



BOEM continues to develop trend parameters for deepwater exploration and development drilling for critical reservoir and fluid properties for the worst-case discharge analysis to enhance the efficiency of the process while maintaining the regulatory oversight needed to ensure an adequate response to an uncontrolled blowout.

Anchorage Office: BOEM regularly works with operators to clarify the various input parameters and assumptions in reservoir flow simulation models used to produce their worst-case discharge estimates. In FY 2024 and FY 2025, BOEM anticipates completing at least one worst-case-discharge analysis for proposed exploratory drilling of active leases in the Cook Inlet OCS.

Camarillo Office: With no new recent leasing in the Pacific region, the worst-case discharge analyses are conducted over mature fields only. BOEM made six worst-case discharge verifications in FY 2023. BOEM anticipates a similar level of activity in FY 2024.

➢ Oil Spill Financial Responsibility Program

The financial responsibilities associated with the development of OCS resources are enormous. Just as BOEM must protect the U.S. taxpayer from entities that fail to meet their lease, grant, or permit obligations, BOEM must also ensure that these same entities have the financial resources to pay for cleanup and damages that could be caused by oil discharges from their OCS facilities.

Under the Oil Pollution Act, BOEM is authorized to adjust for inflation the limit of liability for OCS facilities, including pipelines, which BOEM did in FY 2023. Currently, the limit of liability for damages from OCS facility spills under the Oil Pollution Act is capped at $167.81 million for each incident plus the total of all removal costs. BOEM performs a thorough review of industry oil spill financial responsibility filings, which are required before any drilling activities are approved. BOEM uses the information to (1) ensure Oil Pollution Act compliance by lessees and owners and operators of covered facilities, (2) establish eligibility of designated applicants for oil spill financial responsibility certification, and (3) establish reference and contact information for potentially responsible parties and their designated agents and guarantors. The program currently oversees approximately 88 companies covering 3,514 facilities with financial coverage in excess of $6.2 billion.

RISK MANAGEMENT PROGRAM

Characteristics of the companies operating on the OCS have changed over the years, with large companies frequently transferring older properties to small companies. Since 2009, there have been 38 bankruptcies of corporations that conducted OCS activities. When a company becomes financially insolvent, there is the risk taxpayers will be forced to cover the costs for decommissioning a facility.

BOEM continues to work to strengthen its financial risk management capabilities to address changing market conditions by tracking the financial profiles of companies in distress and obtaining financial assurance on specific leases as necessary. To enhance its comprehensive risk management and financial assurance regulatory framework with the goal of ensuring U.S. taxpayers will not have to pay for liabilities related to noncompliance by lessees and grant holders, BOEM published its proposed rule, "Risk Management, Financial Assurance and Loss Prevention," in June of 2023, and is currently working to finalize the rule.

The cost of decommissioning a facility is based on the type and number of various components (e.g., pipelines, structures, wells), water depth, location (e.g., remoteness, climate, presence of sea ice), the condition of the facility, market conditions (e.g., rig availability and cost), and other factors. Contingent liabilities associated with the decommissioning of all facilities on the OCS are currently estimated to be approximately $35.4 billion to $50.1 billion. BOEM performs robust, continuous risk monitoring to help mitigate impacts of financial uncertainty, credit risk, project failures, legal liability, accidents, and natural disasters.

RESOURCE EVALUATION

BOEM conducts analyses to identify areas of the OCS that are the most likely to support conventional energy development based on technical and economic factors. To accomplish this, BOEM:

- Acquires G&G data and information through the regulation of off-lease permitted exploration of the OCS;

- Delineates and develops estimates of the quantities of undiscovered technically and economically recoverable resources that may exist and the volume of reserves discovered and likely to be produced;
- Tracks the volume of discovered reserves, produced reserves, and the remaining reserves by field;
- Forecasts future industry activity levels and develops scenarios for the leasing program; and,
- Determines the adequacy of high bids received for individual tracts offered for lease as it seeks to ensure the Nation receives fair market value for the tracts.

BOEM's evaluation of geological, engineering, and geophysical data and information provides the inputs to economic and statistical analyses that inform leasing policies and program decisions, such as the design of financial terms for lease sales. Program analyses assist in exploration and development plan decisions and help reduce the risk of safety and environmental concerns in OCS development decision-making.

The Resource Evaluation office is engaged in BOEM's efforts to implement an offshore carbon sequestration program by evaluating carbon storage potential on the Gulf of Mexico and across the OCS. Efforts are being conducted in key areas such as CO_2 storage regional assessment, site characterization, and plume modeling. The office is also participating in numerous outreach opportunities to collaborate, share, and develop BOEM expertise in carbon sequestration.

➢ **Resource Assessment**

BOEM identifies resources associated with geologic plays and areas on the OCS that offer the highest potential for oil and gas development and production. Following the identification of hydrocarbon plays, BOEM assesses each play's hydrocarbon potential and its economic viability with complex computer modeling and methodologies. The assessment process incorporates specific geologic, petroleum engineering, and economic data and information. In addition to helping BOEM estimate undiscovered hydrocarbon resources, these studies help BOEM identify environmental and operational constraints, assisting in lease sale decision-making. BOEM also estimates the amounts of oil and gas likely to be discovered and produced and generates potential scenarios of future exploration, development, and production activities. BOEM tracks the resources and acres offered annually, compared to what was planned for the year, and analyzes the results to inform the National OCS Program and individual lease sale decisions. Resource estimates support analyses of potential impacts of policy decisions, legislative proposals, and industry activities, as well as informing NEPA analyses.

The scale of the assessment activities ranges from large (i.e., regional or OCS-wide) to small (i.e., lease sale specific, such as individual prospects and lease tracts). In the early stages of this process, the focus is on regional areas. As more data and information are acquired, the focus shifts to lease sales and prospect-specific areas to be offered for lease, or that are related to a specific issue (e.g., moratoria). Once a lease sale area has been identified, BOEM's geologists and geophysicists perform detailed subsurface mapping and analyses to estimate the resource potential of individual prospects within that area. These prospect-specific data, maps, and analyses are also used to determine parameters for post-sale bid analyses in support of fair market value evaluations.

BOEM provides a comprehensive national assessment of undiscovered oil and gas resources in five-year intervals. BOEM's most recent National Assessment, the *2021 National Assessment of Undiscovered Oil and Gas Resources of the U.S. Outer Continental Shelf* (2021 National Assessment), represents a thorough appraisal that considers relevant data and the best available information and builds upon previous assessment efforts on the OCS. In its 2021 Assessment, BOEM estimated that the United States OCS contains a mean of 68.79 billion barrels of undiscovered technically recoverable oil and a mean of 229.03 trillion cubic feet of undiscovered technically recoverable natural gas. Additional information is available online at: https://www.boem.gov/oil-gas-energy/resource-evaluation/undiscovered-resources. In FY 2024, BOEM will initiate the effort to identify and assess the individual geologic plays that support development of the 2026 National Assessment. In FY 2025, BOEM anticipates that new geologic play resource estimates will be reviewed and aggregated for publication in FY 2026. In FY 2025, BOEM will also initiate a new process of regional peer review for the assessment of success probability for each geologic play.

Section 357 of the Energy Policy Act of 2005 (EPAct) directs the Secretary of the Interior to conduct an inventory and analysis of oil and natural gas resources contained within the submerged lands of the U.S. OCS. The Secretary was required to submit a report to Congress within six months of the date of enactment (i.e., by August 8, 2005), and must update the report at least every five years. In FY 2024 BOEM finalized the Comprehensive Inventory of Outer Continental Shelf Oil and Natural Gas Resources: 2023 Update, a report which provides the required updates to the previous 2018 inventory report. The report was delivered to Congressional leadership and a copy is available on the BOEM website. The report includes oil and gas information derived from existing assessments of both undiscovered resources and discovered reserves volumes.

New Orleans Office: To support the development of the 2026 National Assessment, the Gulf of Mexico Regional Office will establish teams of geoscientists and engineers to develop a standardized methodology and begin the reassessment of resources located in the Atlantic and Gulf of Mexico OCS.

Anchorage Office: In FY 2023, staff began evaluating the geologic plays of OCS planning areas in Southwest Alaska to integrate plays across planning area boundaries. This analysis will be informed by reprocessed legacy seismic data and newly acquired geophysical data. This update will be the first major, regionally extensive geologically focused update since the last comprehensive assessment of Alaska OCS resources in 1995. In FY 2024 and FY 2025, BOEM will also prioritize a series of data management initiatives to create, populate, and maintain an authoritative database of key geologic parameters vital to resource assessment activities to ensure assessors have efficient access to these valuable datasets.

Camarillo Office: In FY 2023, BOEM Pacific conducted two pilot studies for conventional energy and carbon sequestration. The objective of these studies was to refine reserve estimates and simulate the fate and transport of injected CO_2. These pilot studies help captured field scale geologic uncertainties using probabilistic approaches, which will be further refined for use in the 2026 National Assessment. In FY 2024, this work will be extended to capture regional scale uncertainties using its G&G and engineering database. BOEM Pacific expects to augment this workflow with newly reprocessed 2D seismic data. The regional scale models may necessitate alternate computational approaches given the size and complexity of the model. BOEM Pacific will explore regional scale modelling alternatives in FY 2025.

➢ Reserves Inventory Program

The OCSLA requires the Department to "conduct a continuing investigation… for the purpose of determining the availability of all oil and gas produced or located on the Outer Continental Shelf." To meet this requirement, BOEM develops independent estimates of economically recoverable amounts of oil and gas contained within discovered fields by conducting field reserve studies. The reserve estimates undergo continuous revisions to reflect new information obtained from development and production activities. BOEM is responsible for continually updating volumetric estimates on over 1,300 fields in the Gulf of Mexico. During FY 2023, approximately 4,241 reservoirs were interpreted, revised, or added to the inventory. The increase was due to the reservoir data conversion from deterministic to probabilistic, and the challenges that follow launching a new program. BOEM expects a similar level of reserves inventory updates in FY 2024 and FY 2025.

Reserve studies are critical inputs to determining the Nation's OCS oil and gas endowment, conducting resource assessments and carbon sequestration capacity assessments, generating analog information for bid adequacy determinations, and informing the review of industry plans and requests. The geologic and engineering information supports other program activities within the Department, including development and preparation of the National OCS Program and cooperative efforts with DOE and the Energy Information Administration. For example, BOEM's reserves inventory and resource assessment information support the Energy Information Administration's National Energy Modeling System, which is used to prepare forecasts within its Annual Energy Outlook.

New Orleans Office: Reserves inventory personnel review conservation information document submissions, which BOEM requires to ensure operators exploit all economic reservoir accumulations discovered rather than producing only the most prolific zones and bypassing marginally economic zones. The review and analysis of conservation information documents allows for the maximum ultimate recovery and full development of economic reserves and resources, while ensuring fair monetary compensation for the Federal Government. In FY 2023, BOEM evaluated 23 initial and supplemental conservation information documents and five revised conservation information documents, resulting in a commitment to develop an additional 30.27 billion cubic feet of gas and 11.15 million barrels of oil, amounting to approximately $137.3 million dollars in royalties. During FY 2024 and FY 2025, BOEM anticipates evaluating approximately 15 initial and supplemental conservation information documents and seven revised conservation information documents annually.

Anchorage Office: BOEM continues to support BSEE in the oversight of production allocation issues for the Northstar field production unit, which produces oil from both State of Alaska and Federal OCS leases. During FY 2022, BOEM engineers and geoscientists began an inventory of Alaska OCS contingent resources. This inventory will provide decision-makers and the public with an assessment of oil and gas resources previously discovered but no longer leased. This initial effort is expected to be completed in FY 2024 with updates continuing into FY 2025.

Camarillo Office: BOEM's annual Field Reservoir and Reserve Estimates report, which breaks down the area's reserves and known resources by field and productive zones, provides a brief update on reserves and production between releases of the more comprehensive Estimated Oil and Gas Reserves report.

Reported production data needed for the reserve evaluation is typically lagging by one year. BOEM Pacific completed the calendar year 2022 Field Reservoir and Reserve Estimates report in FY 2023 and expects the calendar year 2023 reserves report will be completed and published in FY 2024. In FY 2023, the Pacific region reported $34.4 million in total royalty receipts for calendar year 2023. The Camarillo Office also provides the Pacific OCS Region 10-year Oil and Gas Production forecast, which is used to estimate 10-year Federal OCS royalty receipts for budget submissions.

➢ **Permitting of Prelease/Off-Lease Exploration**

BOEM works to ensure that OCS energy-related prelease exploration, prospecting, and scientific research operations do not interfere with other ocean users, lease operations, or other permitted uses. Permits to acquire pre-lease G&G data identify specific parameters for each activity, including the area of interest, the timing of acquisition, the use of approved equipment and methods, and required environmental compliance measures. Adherence to BOEM's processes and regulations ensures exploration and research activities are conducted in a safe and environmentally sound manner.

New Orleans Office: During FY 2023, BOEM evaluated and issued 40 permits. Over the course of FY 2024, BOEM anticipates evaluating and issuing approximately 39 permits and various permit modifications, with most of the permits issued for high-resolution and deep penetration seismic surveys. BOEM estimates it will also evaluate and issue approximately 39 permits during FY 2025.

Anchorage Office: BOEM will continue to process permits for oil and gas exploration activities as needed, but most of the work in FY 2023 focused on proactively releasing permitted G&G data to the public, after holding it proprietary for 25 years as directed by BOEM's regulations. Such data may be used by the public or other agencies for renewable site-work assessment, earthquake hazards mapping, or scientific research.

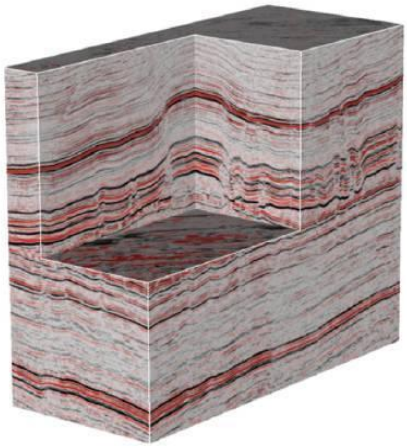
In FY 2023, BOEM began creation of a SQL database to capture metadata about historic G&G permits issued since the mid-1960s. Upon completion in FY 2025, the database will enable lifecycle tracking of G&G permits, from the application to the public release of selected data. This G&G permit and data database will provide the framework for additional functionality to automate identification of public release-eligible data and display of all permitted data in GIS, ESRI Portal, and geologic interpretive tools (GIT). As of end of FY 2023, information from 291 of 1100 permits had been captured.

In FY 2023, BOEM released data from eight permitted seismic surveys (5,550 line miles) in Cook Inlet Planning Area via National Archive of Marine Seismic Surveys and also released roughly 650,000 gravity and magnetic data points in response to a FOIA request.

Camarillo Office: There was no permitting activity in FY 2023, and none is anticipated for FY 2024 and FY 2025.

➢ G&G Data Acquisition and Analysis

The acquisition and analysis of G&G data are critical to identifying potential resources on the OCS. This enables BOEM to identify areas favorable for the accumulation of hydrocarbons and develop estimates of resource volumes and economic values of these accumulations, which helps ensure fair market value in lease sale bid evaluations. The majority of BOEM business processes where oil and gas resources are assessed – such as the reserve inventory program, fair market value analysis, and resource assessment – are based on the analysis of large volumes of G&G data. The primary source of the G&G data BOEM uses is acquired by the oil and gas industry. As a condition of the permit that BOEM issues for each industry activity (such as seismic data acquisition), companies are required to provide a copy of the G&G data and information to BOEM upon request. BOEM uses the data internally, while maintaining it in a proprietary term that generally ranges from two to 25 years. The extensive amount of acquired data and information are used by BOEM and BSEE geologists, geophysicists, and petroleum engineers to perform a variety of analyses leading to resource estimates, reserve inventories, and determining leased tract fair market value.



Processed 3D seismic data showing oil and gas reservoirs below salt formations in the Gulf of Mexico

Atlantic OCS: BOEM supports both the acquisition of modern, robust scientific information about the scope and location of potential oil and gas resources in the Atlantic and the resolution of significant potential conflicts between OCS uses in this area.

In recent years, three Atlantic G&G permits for airborne gravity/magnetic surveys have been issued. They were issued in FY 2015, FY 2016, and FY 2020. All permits expired with no data collection.

New Orleans Office: Both BOEM and industry are expanding their use of 3D technology to study and evaluate the complex geologic picture of the Gulf of Mexico. The New Orleans Office currently manages data from approximately 2,957 three-dimensional surveys, 601 two-dimensional surveys, and other critical data sources encompassing a total volume of 272 terabytes of 32-bit SEG-Y data. The volume of seismic data managed by BOEM increased by 16 terabytes during FY 2023. To manage all of this data effectively, BOEM invests in data management solutions (servers, disk space, hierarchical storage management, database development) needed to securely store, archive, manage, and deliver geophysical data to BOEM and BSEE users, as well as other stakeholders (e.g., other Federal agencies and the public).

Anchorage Office: BOEM continues to acquire and manage G&G data in the Alaska region to support specific mission functions. As of November 2023, BOEM's Anchorage office manages SEG-Y data from approximately 24 3D seismic surveys, 150 2D seismic surveys, and other critical G&G data sources, with a total volume of more than 30 terabytes, plus TIFF images of more than 260 historical 2D seismic permits. Seismic reprocessing of historic lines with impact to national assessments will be completed as funds are available.

***Camarillo Office*:** For FY 2023, BOEM continued expanding its existing database of vintage G&G and engineering data. For FY 2023, the Pacific Regional Office began developing more efficient ways of synthesizing and visualizing data in meaningful ways. For FY 2024 and FY 2025, BOEM Pacific plans to continue incorporating these data in studies covering the entire Pacific OCS Region.

➢ Fair Market Value and Bid Adequacy

Ensuring the receipt of fair market value for OCS resources is mandated by OCSLA and is one of BOEM's critical responsibilities for oil and gas leasing. Under its bid adequacy procedures, BOEM reviews all oil and gas lease sale bids and evaluates all blocks using either tract-specific bidding factors or detailed tract-specific analytic factors as it seeks to ensure that fair market value is received for each OCS lease issued. The bid adequacy process relies on evidence of market competition and in-house estimates of tract value. The bid review process incorporates G&G data along with reserve, resource, engineering, and economic information into a sophisticated discounted cash flow computer model that estimates economic value of the corresponding tract. The goal of that model is to achieve independent estimates of fair market value on tracts receiving bids. If a bid is rejected and a company appeals the rejection, BOEM staff review and consider the appeal, and make a recommendation to the Director.

In response to an October 2019 report from the Government Accountability Office titled, "Offshore Oil and Gas: Opportunities Exist to Better Ensure a Fair Return on Federal Resources," in January 2023 BOEM proposed changes in BOEM's bid adequacy procedures, including:

- Eliminating the use of the delayed valuation methodology and adopting a statistical lower bound confidence interval at a 90 percent confidence level as a measure of bid adequacy for OCS oil and gas lease sales. The lower bound confidence interval relies on established statistical concepts and is widely accepted as a standard approach. It also increases clarity and transparency in the bid adequacy process.
- Discontinuing the use of tract classification, which has had minimal impact on the procedural analysis of fair market value.
- Making other, minor revisions to clarify and streamline processes.

BOEM published the finalized revised bid adequacy procedures in the *Federal Register* on January 22, 2024. The new bid adequacy procedures will be implemented for lease sales in the 2024-2029 National OCS Oil and Gas Leasing Program.

Since 1983, bid adequacy reviews and fair market value determinations have resulted in an average bid rejection rate of 4.3 percent. Bid adequacy procedures have consistently resulted in higher returns in subsequent sales for tracts bid on and rejected in previous sales. From 1983 through 2023, BOEM rejected approximately $753 in total high bids. Subsequently, the same blocks were re-offered and drew high bids of $1.97 billion, a total net dollar gain of $1.28 billion and a return on rejected high bid amounts of 162 percent. The fair market value determinations from bids received in BOEM's Gulf of Mexico Sale 259, held in March 2023, resulted in rejecting $12.6 million dollars in high bids.

New Orleans Office: In FY 2023, BOEM conducted Gulf of Mexico region-wide Lease Sale 259, held in the second quarter of FY 2023. This Lease Sale resulted in 295 new leases covering over 1.5 million acres and generated over $248 million in bonus payments.

Anchorage Office: Lease Sale 258 was held on December 30, 2022, and BOEM received a bid on one block, and the fair market value review of this bid resulted in issuance of the lease. To ensure consistency of future lease sales, BOEM Alaska Regional Office staff updated an internal standard operating procedures manual for conducting fair market value analysis. In FY 2023, BOEM began to integrate a spatially referenced, Esri Portal-enabled prospect database capturing the results of historic prospect-based fair market value analysis. This database will be used to inform future sales and as a resource for the National Resource Assessment.

➢ Carbon Sequestration Efforts

BOEM has initiated the analyses required to identify and characterize CO_2 sites for potential carbon sequestration lease sales in the Gulf of Mexico. The initial geologic and engineering effort is being conducted in preparation for the evaluation of carbon sequestration projects and plan submittals. To support these reviews, BOEM will conduct several carbon sequestration related evaluations including storage assessment, site characterization, geologic and geomechanical modeling, and plume modeling and monitoring. In FY 2024 and continuing into FY 2025, BOEM plans to investigate the relevant economics associated with these projects to better understand the factors influencing a successful carbon sequestration project offshore. The economics assessment will include full discounted cash flow analysis utilizing modern geologic, cost, and revenue inputs.

BOEM has commenced a National Carbon Storage Assessment that will include an evaluation of the Gulf of Mexico, Pacific, Alaska, and Atlantic storage capacity. While several external groups provided assessments of CO_2 storage capacity across various parts of the OCS using a variety of modeling approaches, a comprehensive aggregated assessment of CO_2 storage capacity for the entire OCS does not exist. BOEM is utilizing expertise across all regions to develop a national-level assessment of OCS CO_2 storage capacity, including the development of a modeling methodology and model structure in FY 2023 and the presentation of initial BOEM efforts at industry events. In FY 2024, the project published the technical BOEM methodology for storage assessment and made it available for public review. In FY 2024 and continuing into FY 2025, BOEM will develop regional storage assessment units and quantify the input parameters for each unit, and modify and recompile the internal model code for the new BOEM storage assessment model.

The national carbon storage assessment is a multi-year project and will provide stakeholders, industry, and policymakers an understanding of the quantity and location of storage resource and will inform BOEM and BSEE efforts to regulate commercial storage of CO_2 on the OCS.

ECONOMIC EVALUATION

As mentioned above, a critical component of BOEM's mission is seeking to ensure the receipt of fair market value for OCS natural resources. To accomplish this, BOEM employs an interdisciplinary team that provides economic analyses for DOI, other Federal agencies, and Congress. To aid in receipt of fair market value, BOEM designs fiscal and lease terms for OCS lease sales; develops various resource and economic evaluation approaches; prepares bid adequacy guidelines, procedures, and economic inputs; and coordinates reviews of appeals of bid rejection decisions. BOEM's economic analysis expertise is often called upon to analyze and implement regulatory and legislative actions affecting OCS leasing, exploration, development, and production activities that generate significant supplies of domestic oil and gas, resulting in the receipt of billions of dollars each year to the U.S. Treasury. BOEM also undertakes studies, as needed, to analyze and address specific policies and compilations of data affecting overall OCS program responsibilities and initiatives.

➢ Economic Analysis and Revenue Estimates

BOEM conducts economic analyses to support the development of regulations, evaluation of policies for lease terms, and conditions and bidding systems for oil and gas and renewable energy lease sales. BOEM's work supports internal and Department-wide projects, such as the development of the National OCS Program, and other Federal agency projects, such as the U.S. Department of Transportation's assessment of fair market rental value for construction of offshore liquefied natural gas ports. BOEM's economic experts review and design policies and methods for forecasting receipts from offshore energy programs, including the estimation of the manner and rate at which reserves and resources of oil and gas are discovered and produced. BOEM generates the receipt estimates used to project revenue and offsetting collections amounts identified in the President's annual budget and mid-year review processes. BOEM's economists also annually assess the present value of the future Federal royalty stream of OCS proven reserves for use in the Nation's accounting statements.

➢ Economic Modeling for Policy and Decision-Making

BOEM's efforts contribute significantly to the development of national energy strategies. BOEM develops and maintains economic and statistical models and databases that are the basis for lease sale design, National OCS Program formulation, resource evaluation, post-sale and operational activities, rulemaking, revenue sharing, and royalty relief programs. The economic assumptions and scenarios that BOEM generates are used in post-sale tract evaluations, national resource assessment studies, and in BSEE's discretionary royalty relief evaluations. BOEM also provides economic analyses and fiscal forecasts for energy leasing policies, regulatory and legislative alternatives, and national energy strategies. Finally, BOEM's economic models inform BOEM's resource needs by projecting rental receipt estimates, which contribute toward BOEM's offsetting collections total.

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FISCAL YEAR 2025 BUDGET

Bureau of Ocean Energy Management

Marine Minerals

Table 12: Marine Minerals Budget Summary

Activity: Marine Minerals

Dollars in Thousands ($000)

Marine Minerals	2023 Actual	2024 Annualized CR	2025 Fixed Costs (+/-)	2025 Program Changes (+/-)	2025 President's Budget	Change from 2024 Annualized CR (+/-)
Marine Minerals	**14,383**	**14,383**	**+193**	**+269**	**14,845**	**+462**
FTE	*25*	*25*	*0*	*0*	*25*	*0*

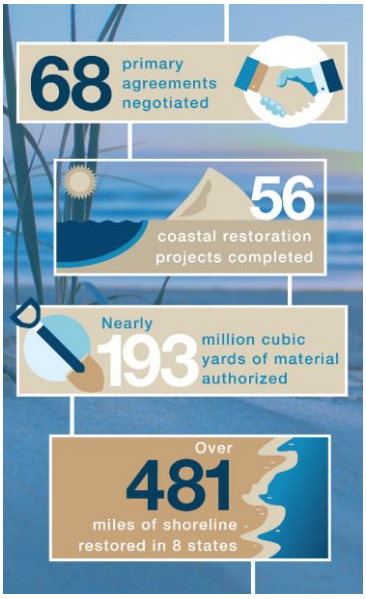
OCSLA designates BOEM as the Federal authority for overseeing the use of marine minerals across billions of acres of the OCS. BOEM's Marine Minerals Program facilitates access to and manages these OCS resources to support resilient coasts, natural disaster preparedness, climate change adaptation, and critical infrastructure development and protection. In addition, BOEM gathers information about OCS critical minerals that are vital to the advancement of clean energy technology, as well as the Nation's security and economy. BOEM's marine minerals mission involves environmentally responsible stewardship, mineral resource exploration and leasing activities, coordination with governmental partners, engagement of stakeholders, and scientific research to improve decision-making and manage risk.

The Bureau may convey, on a noncompetitive basis, the rights to sand and other sediment to Federal, State, and local government agencies for use in shore protection, beach and wetlands restoration projects, or other construction projects funded or authorized by the Federal Government. BOEM also oversees marine mineral geological and geophysical exploration. BOEM continues to assess which of the currently identified critical minerals may be located on the OCS and collects baseline information on the ecological communities and conditions associated with potential critical mineral deposits.

The 2025 budget will support:

- **Coastal Resilience:** BOEM continues to advance its marine minerals activities that facilitate the restoration and protection of shoreline infrastructure vital to the Nation's security, economy, and ecosystems, as well as beach and coastal wetlands restoration projects. These activities contribute toward the Administration's goal of increasing climate change resilience. BOEM supports and applies state-of-the-art science to make informed decisions, applies nature-based solutions and other adaptation strategies, and builds strong partnerships to ensure our Nation's coasts are sustainably managed, protected, and preserved for current and future generations.

- **National Offshore Sand Inventory:** BOEM continues to develop the National Offshore Sand Inventory, focusing in priority areas along the Gulf of Mexico and south and mid-Atlantic coasts. The Inventory helps BOEM and its partners identify the location, quantity, and character of sand and sediment that may be appropriate for use in beach nourishment, coastal restoration, and infrastructure protection efforts. The Inventory enables BOEM's partners to act quickly and responsibly in emergency or post-storm situations and supports scenario and resilience planning to forestall climate change effects. BOEM also uses the Inventory to identify and manage multiple use conflicts, such as when there is an overlap in sand resources with a wind energy transmission cable or oil and gas pipeline, and to avoid or minimize environmental impacts from dredging activities.



Program Statistics as of February 1, 2024

- **Use of Sand and Sediment Resources:** As of February 1, 2024, BOEM has conveyed the rights to nearly 193 million cubic yards of OCS sediment and executed 68 negotiated agreements for projects in eight States that have restored over 481 miles of coastline. BOEM expects to facilitate additional solid mineral exploration and leasing through FY 2025 on the Gulf of Mexico and Atlantic OCS, including the first negotiated agreement in the State of Texas.

- **Marine Minerals Information System:** BOEM manages and uses the Marine Minerals Information System (MMIS) to organize marine minerals data. BOEM populates the MMIS with data from National Offshore Sand Inventory activities, as well as project-specific leasing and monitoring activities. The MMIS is publicly accessible and provides stakeholders with reliable information on sand and gravel resources on the OCS. In FY 2025, BOEM will host the MMIS on GeoSEAS, and continue to update data and metadata for geologic information, OCS sand resource areas, OCS dredge areas, and shoreline placement reaches.

- **National Offshore Critical Mineral Inventory:** BOEM is building the National Offshore Critical Mineral Inventory to centralize information about potential OCS critical mineral resources and environmental conditions associated with critical mineral-bearing deposits (e.g., polymetallic nodules and hydrothermal vents). In FY 2024 and FY 2025, BOEM will conduct baseline assessment and environmental characterization work in the Atlantic, Alaska, Pacific, and Gulf of Mexico regions.

SUMMARY OF 2025 PROGRAM CHANGES

Summary of 2025 Program Changes for Marine Minerals

Program Changes:	($000)	FTE
Baseline Capacity	+269	+0
TOTAL Program Changes	**+269**	**+0**

* Changes listed in order of budget activity, not priority.

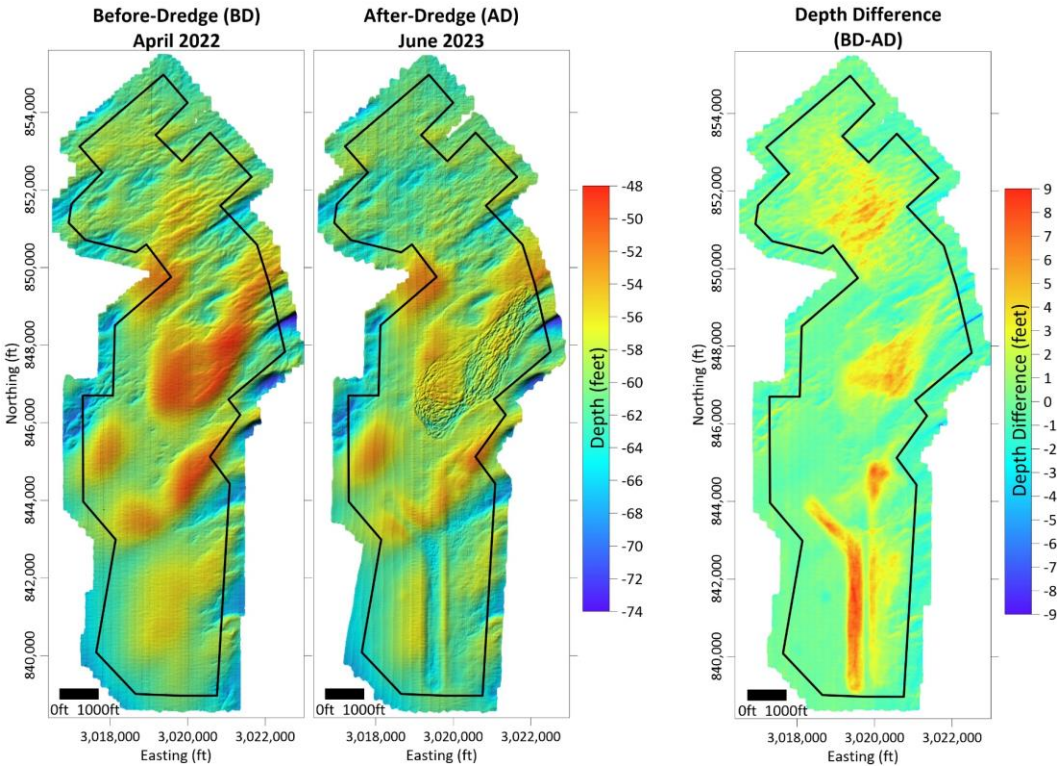
Maintain Baseline Capacity (+$269,000). The 2025 budget includes important investments in programs needed to help strengthen America and be more competitive as the world continues to change. These investments include funding needed to maintain a strong, talented workforce and the core capacity needed to continue to fulfill BOEM's mission. The budget includes $269,000 in this budget activity, which reflects the incremental amount needed to cover the fixed costs associated with mission operations in FY 2024. This request in combination with the FY 2025 fixed costs amounts will allow the program to sustain core capacity and avoid impacts to ongoing program activities.

PROGRAM OVERVIEW

During FY 2025, BOEM will continue to:

- Manage the exploration and development of OCS sand and gravel resources supporting the Interior's coastal resilience and climate adaptation mission;
- Identify sand and restoration-quality sediment resources for future use and advance the National Offshore Sand Inventory in high-demand areas or in proximity to resilience hubs;
- Populate, maintain, and deliver information in the MMIS;
- Engage stakeholders and coordinate with key partners on potential projects;
- Conduct environmental research, reviews, and consultations;
- Design dredge plans and associated stipulations to ensure potential environmental impacts are avoided or minimized;
- Develop leasing agreements that incorporate borrow area use plans;
- Oversee operational research and monitoring related to dredging activities and resource stewardship;
- Explore the potential for critical minerals on the OCS and continue development of the National Offshore Critical Mineral Inventory; and
- Support scientific research and technology development related to the exploration and recovery of critical minerals.

Figure 14: Seafloor Change for OCS Borrow Area Used for the Dare County Beach Nourishment Project (NC) in 2022-2023



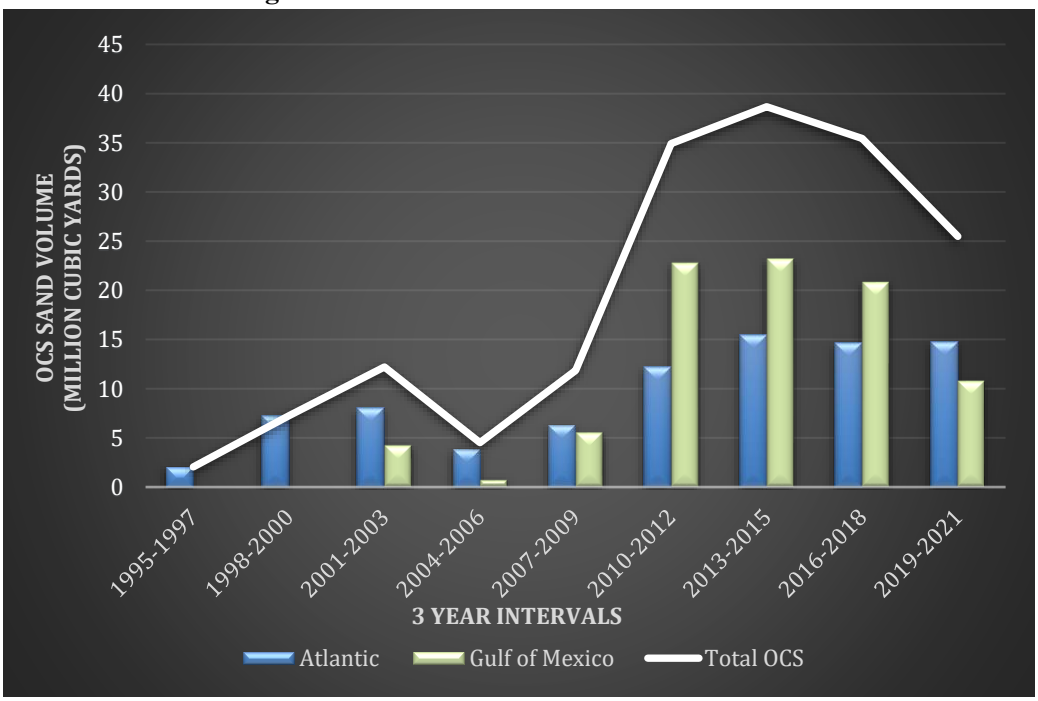
BOEM leased approximately 3 million cubic yards of OCS sand to restore almost 12 miles of shoreline along portions of the Towns of Duck, Southern Shores, Kitty Hawk, and Kill Devil Hills (North Carolina). Project construction was completed in 2023. For additional information, see text box on page 90.

In FY 2025, BOEM anticipates processing additional requests for marine minerals exploration authorizations and noncompetitive leasing agreements. Related stewardship responsibilities include monitoring of dredging operations, borrow area change, and potential environmental impacts. BOEM works with project partners to ensure performance of resilience projects and prudent and efficient use of OCS resources in those projects. BOEM plans to sponsor new strategic research focused on the identification and responsible use of OCS sand resources. Separately, BOEM will continue to leverage Environmental Studies Program funds to support research on priority environmental issues, such as evaluating the effectiveness of emerging technologies to improve mitigation practice, assessing the impact of dredging in borrow areas home to endangered species, and evaluating unique, slow-growing biological communities associated with critical mineral deposits. BOEM may also process scientific research notices or prospecting permits related to critical mineral deposits.

GROWING DEMAND FOR MARINE MINERALS

OCS sand and sediment resources are critical to the long-term success and cost-effectiveness of many shore protection, beach nourishment, and wetlands restoration projects along the Gulf of Mexico and Atlantic coasts. Over the past three decades, BOEM has authorized use of an increasingly large volume of OCS material in coastal resilience projects, amounting to almost 20 percent of all source material used in these types of projects in the U.S. These trends are driven by diminishing resources in State waters and frequent tropical and winter storms along the Gulf of Mexico and Atlantic coasts. Over the next ten years, BOEM expects project partners to request the use of several hundred million cubic yards more across 13 coastal States. Final project requirements depend on ongoing planning, findings of BOEM-sponsored resource evaluation, and future erosion and storm damage. BOEM anticipates potential growth into New York, Texas, and one or more New England states by the end of the decade. A greater number of projects in Florida, North Carolina, and New Jersey are also expected. Timely access to OCS resources is critical to restoration and recovery efforts in the aftermath of natural disasters, and to build resilience in the face of rising sea levels and stronger storms being driven by climate change.

Figure 15: Demand for OCS Sand Resources



Use of OCS sand resources has increased drastically over the last three decades.

With early identification of sand resources, BOEM facilitates the protection of shoreline infrastructure vital to the Nation's security, economy, and ecosystems, through beach and coastal wetlands restoration projects. The availability of proven, technically recoverable sand is limited in comparison to future demand in some locations. As resources in State waters are depleted, there is increased focus on resources from the OCS. Further, coastal planners recognize the benefit of adding to the near-shore coastal sediment budget by bringing in OCS resources, instead of simply moving sediment around within the active sediment transport system. Knowing where resources are and how much material is available up-front

reduces project construction timelines and costs, as sources do not have to be discovered, characterized, or identified as part of a project's schedule or budget. Advanced regional-scale planning also enables project planners to consider economies of scale when designing and constructing projects. BOEM continues to work proactively with partners, such as the U.S. Army Corps of Engineers (USACE), Federal Emergency Management Agency, and State and local governments to identify and provide sand for projects so that communities can recover quickly from storms and be better prepared for future events.

In FY 2023, BOEM administered the use of OCS sand for beach nourishment projects under negotiated agreements in Florida and North Carolina. BOEM contributed to environmental documents and borrow area planning in Texas, Louisiana, Florida, Maryland, North Carolina, Virginia, and New Jersey. BOEM anticipates receiving up to 12 requests for new agreements and amendments in FY 2024 and FY 2025 for projects in Texas, Louisiana, Florida, South Carolina, North Carolina, Virginia, Maryland, and New Jersey. BOEM also expects continued applications for non-commercial geophysical and geological exploration for sand resources in these areas, especially Louisiana, Florida, and North Carolina. There are no near-term projects expected along the Pacific or Alaska coastlines.

Sand is a finite resource. OCS sand is critically important to the future of coastal resilience projects. As traditional on-shore or near-shore sand resources dwindle, more communities and government agencies turn to OCS sand. The discovery of, availability of, or access to marine sand is increasingly being impacted by competing uses like offshore energy development. BOEM's mission includes ensuring responsible stewardship of sand and the environment.

As a responsible environmental steward, BOEM strives to ensure that any potential environmental impacts associated with OCS marine minerals activities are avoided or mitigated whenever possible. The Bureau complies with the requirements of NEPA and consults with NMFS and FWS on endangered species and essential fish habitat prior to leasing OCS resources. BOEM ensures coastal consistency and undertakes archaeological resources reviews to protect cultural artifacts. BOEM also sponsors targeted environmental studies (primarily through the Environmental Programs budget activity) to evaluate the effects of proposed dredging operations and to design mitigation measures to minimize their impacts.

➢ National Offshore Sand Inventory

As the steward of OCS mineral resources, one of BOEM's top priorities is to advance the National Offshore Sand Inventory — the comprehensive catalog of the location, character, quantity, and accessibility of identified OCS sand resources and reserves. The process of inventorying sand and

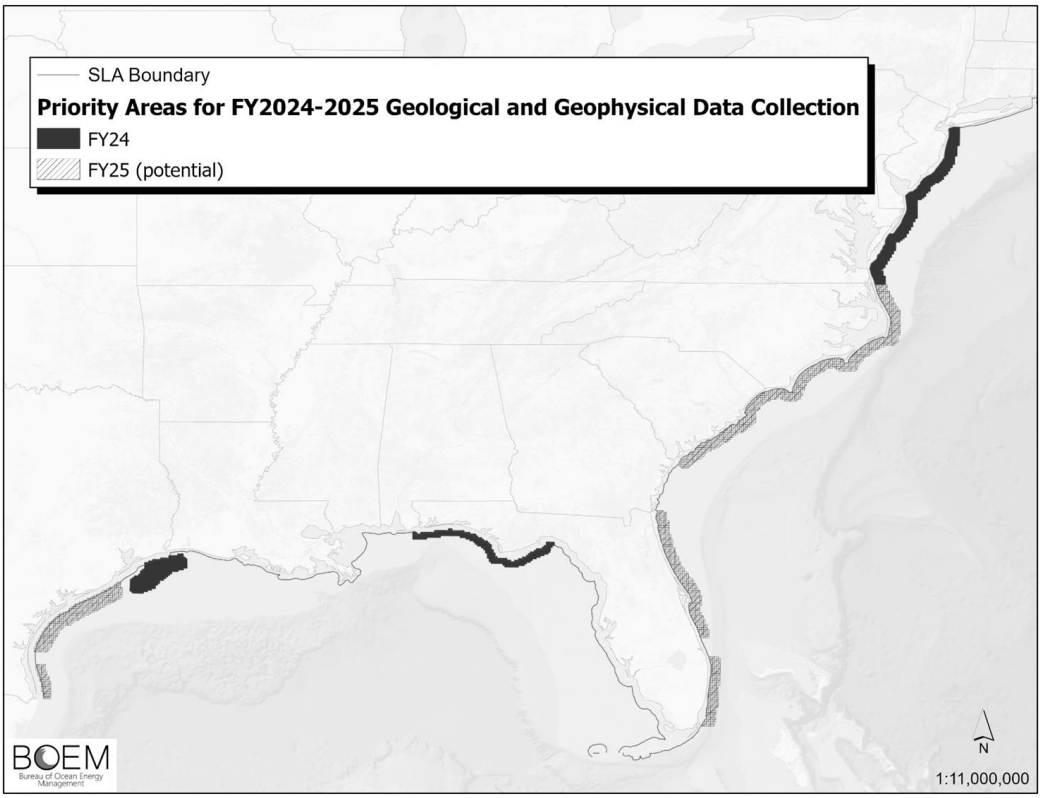
sediment that is useable in coastal restoration projects is multifaceted and subject to continual learning and refinement.

Figure 16: Facets of the National Offshore Sand Inventory

As the National Offshore Sand Inventory expands, BOEM's information base and degree of confidence in resource estimations increase. The estimation of resources and reserves depends on constantly changing data and continually improving interpretations derived from the expanding data. The National Offshore Sand Inventory reflects the Administration's goal to build resilience "against the impacts of climate change that are already manifest and will continue to intensify according to current trajectories."

BOEM uses supply and demand assessments, as well as modeling results and gap analyses prepared by other Federal agencies, State partners, and researchers, to identify priority areas where more or better information is needed about nearby sand resources. For example, in collaboration with the USACE and through participation in the *National Shoreline Management Study*, *South Atlantic Coastal Study*, and *Sand Availability and Needs Determination* initiatives, BOEM identified multiple high priority areas for future resource identification from Texas to North Carolina. The rapid expansion of wind energy areas in the Atlantic also presents new space use challenges since radial or mesh transmission cables must traverse the shallow inner shelf to coastal interconnection points. BOEM is working with several mid-Atlantic States to create long-term projections of sand demand and supply to facilitate sustainable project planning and resource access.

Figure 17: Priority Areas for New FY 2024-2025 Geological and Geophysical Data Collection



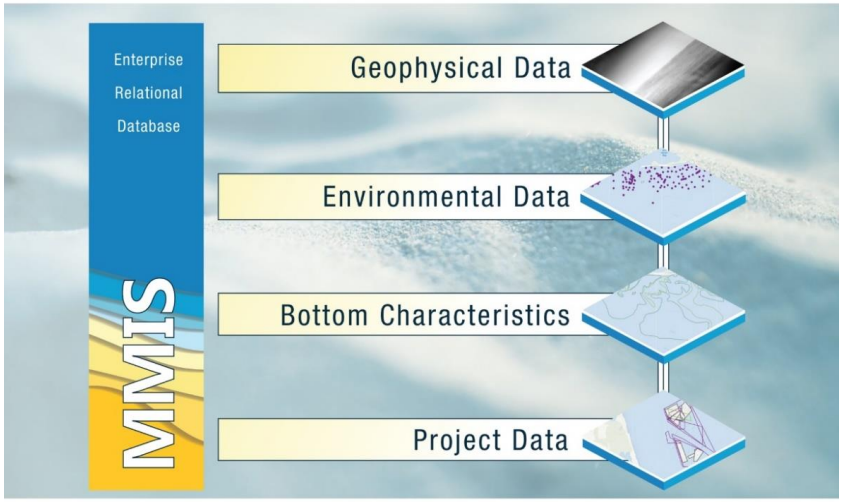
BOEM advances the National Offshore Sand Inventory by collecting and processing new G&G data. Those data are used by BOEM and key partners to identify additional sediment resources in priority areas to support coastal resilience projects. BOEM scientists also use these data, as well as new and legacy data available from oil and gas or renewable energy sectors and other Federal and State agencies, to conduct regional or basin-scale assessments of resource potential or reserve volumes. In FY 2024 and FY 2025, BOEM plans to use a mix of specialized contracts, interagency agreements with USACE and the U.S. Geological Survey (USGS), as well as State cooperative agreement partners and academic institutions, to acquire new G&G data in priority areas. New data are integrated with existing information to improve the Bureau's understanding of how much resource is available and refine plans for how the resource can be used responsibly over the life of a project. All new investment in the National Offshore Sand Inventory is harmonized with the *National Strategy for Mapping, Exploring, and Characterizing the United States Exclusive Economic Zone*.

BOEM will continue its large-scale assessments in the Gulf of Mexico and Atlantic OCS regions to classify and describe near-surface sediments. These assessments apply a regional geological framework approach and integrate other BOEM data and investments to identify the quantity, quality, and location of sand and mixed sediment resources found beneath the shelf. The assessment integrates legacy geophysical and geological data, other data sources, and new interpretive results into a common classification, analytical, and geospatial scheme.

Key BOEM Marine Mineral Partnerships
Federal Agencies
United States Army Corps of Engineers; United States Geological Survey; National Aeronautics and Space Administration; National Oceanic and Atmospheric Administration; United States Fish and Wildlife Service; National Park Service; United States Navy; Federal Emergency Management Agency; Department of Energy; Department of State.
State Agencies and Geological Surveys
Alabama; California; Delaware; Florida; Georgia; Louisiana; Maine; Maryland; Massachusetts; Mississippi; New Hampshire; New Jersey; New York; North Carolina; Rhode Island; South Carolina; Texas; Virginia.
Universities
Boston University; Columbia University; East Carolina University; Louisiana State University; Rutgers University; Stony Brook University; University of Alabama; University of Delaware; University of Florida; University of Georgia; University of Hawaii; University of Louisiana at Lafayette; University of Maine; University of Massachusetts; University of New Hampshire; University of New Orleans; University of North Carolina at Wilmington; University of Rhode Island; University of South Florida; University of Southern Mississippi; University of Texas; Virginia Institute of Marine Science; University of Washington.

BOEM uses the MMIS and GOM Core and Sediment Sample Database to organize, analyze, update, and disseminate marine minerals data. The MMIS provides a comprehensive understanding of existing marine minerals information, such as geophysical data, environmental data, bottom characteristics, and project data. The MMIS helps BOEM address marine use conflicts, such as the potential for submarine cables, oil and gas pipelines, and transmission lines from offshore wind facilities to cross sand resource areas. Ultimately, the MMIS supports Bureau and stakeholder decisions regarding the use and sustainability of offshore sand resources by identifying potential sources proactively and helps to shorten recovery efforts after hurricanes and other natural disasters.

Figure 18: Marine Mineral Information Management System



➢ Responding to Natural Disasters

BOEM continues to be a key player in restoration and recovery following natural disasters. BOEM's immediate response efforts include communication and coordination with stakeholders in areas of need, site analysis and resource availability, resource compatibility analysis, and identification of site-specific environmental concerns. In the aftermath of a hurricane, the scale and volume of requested sand projects often increases by 25 to 30 percent. This is because post-disaster projects generally encompass larger project areas and require a larger volume of resources to mitigate significant storm-related losses and support additional protection measures (i.e., dunes) to reduce future potential damages. Consequently, the scope of information needed to process project requests increases substantially after major storms.

Project Profile: Dare County (North Carolina)

The Towns of Duck, Southern Shores, Kitty Hawk, and Kill Devil Hills, in cooperation with Dare County, restored 12.1 miles of beach between June 2022 and May 2023. In total, 3.1 million cubic yards of OCS sand were placed along the shoreline within Dare County. The project is critical to Dare County's long-term strategy to support the local economy and maintain the tax base for each town. The project provides infrastructure protection, storm damage mitigation, improved recreation, and habitat conservation benefits.

➢ Protecting Federal Infrastructure and National Defense

Building on more than 35 years of research experience, BOEM continues to partner with coastal communities, States, and other Federal agencies to facilitate critical coastal infrastructure projects, including some that are key to our Nation's defense and economy. BOEM's support demonstrates its commitment to help coastal States and communities and acknowledges the importance of climate considerations for national security.

national security facilities

critical coastal infrastructure and economies

NASA and Air Force operated launch facilities

key energy and port facilities

roads and transportation infrastructure

DOI and State parks and lands

Examples include –

- Caminada Headlands (Grand Isle, Louisiana): This project protects the petroleum storage, transport, and support facilities associated with Port Fourchon, which services over 90 percent of

Gulf of Mexico deepwater oil production. The project performed to design conditions during Hurricane Ida in 2021.

- Mississippi Coastal Improvements Program (Gulf Islands National Seashore, MS): BOEM, the National Park Service, the USACE Mobile District, and the State of Mississippi completed a multi-phase project restoring Ship Island, which was severely eroded during Hurricane Camille in the late 1960s.
- Patrick Space Force Base (Canaveral, Florida): This project protects fighter, tactical, and transport aircraft and SPACE Coast launch facilities.
- Dare County Shore Protection Project (Outer Banks, North Carolina): This multi-township project protects public streets, utilities, commercial properties, and maintains the public beach.
- Navy Dam Neck Facility (Virginia Beach, Virginia): This project protects approximately $135 million of assets, including training facilities, housing, and support facilities.
- National Aeronautics and Space Administration (NASA) Wallops Island Flight Facility (Wallops Island, Virginia): This project protects approximately $1 billion in launch pads and associated infrastructure, as well as test and training facilities.

Project Profile: St. Johns County (Florida)

Drone photograph of Vilano Beach, Florida, under construction in September 2023. The preconstruction shoreline position can be seen at the top of the image.

The U.S. Army Corps of Engineers will place 1.3 million cubic yards of sand along 2.6 miles of shoreline. This project represents the second historical use of OCS sand in St. Johns County.

➢ Interagency Coordination

In the *National Shoreline Management Study, North Atlantic Coast Comprehensive Study*, *South Atlantic Coastal Study*, and *Coastal Texas Protection and Restoration Feasibility Study*, USACE identified priority locations where beach nourishment projects should be implemented to address erosion risk and other vulnerabilities from Texas through New England. These same studies included forward-looking recommendations to tackle the long-term challenge of responsible sediment management and finite source material for an increasing number of resilience projects needed due to climate change. In FY 2023 and FY 2024, BOEM sponsored collection of new geophysical and geotechnical data offshore the Gulf and Atlantic coasts of Florida, central and lower Texas, and priority areas in the mid-Atlantic. In FY 2025, additional work will focus on the existence of sand resources in the mid-Atlantic and central and western Gulf of Mexico.

Project Profile: Sand Mapping offshore Mississippi

Mississippi barrier islands are currently eroding rapidly due to sea-level rise, frequent hurricane impacts, subsidence, as well as anthropogenic interruptions of sediment supply. These coastal features are important to recreation and tourism, support critical infrastructure, and provide mainland and ecosystem protection. Nearby sediment resources are critical to sustain the resilience of the Mississippi and Northern Gulf of Mexico coast.

BOEM has partnered with the University of Southern Mississippi to conduct geophysical and geological surveys offshore Mississippi. The research will improve understanding of the geologic evolution of late Quaternary deposits and yield updated estimates of restoration quality sediment. To date, over 10,000 kilometers of legacy and newly acquired sub-bottom data have been analyzed. Data from over 1,100 previously collected sediment cores and up to 100 new cores will be integrated with the geophysical data. The study has already identified a total of over 9 million cubic meters of sand-rich deposits near the seabed, and an additional 10 million cubic meters of sand-rich deposits contained within buried paleochannels. This information will help Gulf Coast restoration planners design future coastal restoration projects and promote the sustainable use of resources.

BOEM has forged key partnerships with State partners, including the Delaware Geological Survey, New Jersey Geological and Water Survey, Gulf of Mexico Alliance, Louisiana Coastal Protection and Restoration Authority, and the Texas General Lands Office to coordinate sediment resource identification data. For example, the mid-Atlantic States are working with BOEM to make long-term projections about the project-specific use of OCS sediment for adaptation to climate change, including potential changes in volume requirements and frequency of use.

BOEM also works closely with other DOI Bureaus to assist in beach nourishment, coastal and wetlands restoration, and infrastructure protection efforts. The USGS, National Park Service, and FWS are important partners and collaborators on offshore sand resource evaluation and coastal vulnerability assessments, as well as projects restoring or protecting federally-managed lands including national parks and wildlife refuges.

CRITICAL MINERALS

Minerals found in the marine environment are used in a wide range of applications from electronics to renewable energy to military materials. While most known seabed critical mineral deposits appear beyond U.S. waters, OCS mineral deposits such as heavy mineral sands, polymetallic nodules, ferromanganese crusts, and seafloor massive sulfides contain at least half of the 50 critical minerals designated by the USGS (86 FR 10381, February 24, 2022). BOEM invests in state-of-the-art science to be well positioned to consider any potential future critical mineral exploration and mining proposals on the OCS. This includes continued engagement with the State Department and the International Seabed Authority as international regulators consider initial proposals for deep seabed critical mineral development. BOEM, USGS, and NOAA continue to work together to determine which areas of the OCS have potentially significant critical mineral resources, with a focus on cobalt, manganese, and rare earth elements.

BOEM leads the development of the National Offshore Critical Mineral Inventory to identify potential areas of offshore critical minerals under U.S. jurisdiction. BOEM also plays a leading role in the National Science and Technology Council's Critical Minerals Subcommittee and the Interagency Policy Committee on Seabed Mineral Resources. Critical minerals are an important component of EO 14017, *America's Supply Chains*, and the Bureau participated in development of the 100-Day Supply Chain report in response to the EO. In addition, BOEM also contributes to implementation of the 2019 *Memorandum on Ocean Mapping of the United States Exclusive Economic Zone and the Shoreline and Nearshore of Alaska*.

Critical mineral deposits may exist in Pacific territorial areas (e.g., Northern Mariana Islands, Guam, American Samoa) and in the Atlantic north of Puerto Rico. The Pacific territorial areas may contain ferromanganese crust deposits on their seamount flanks and polymetallic nodules on the surrounding abyssal plains. The Federal Exclusive Economic Zone north of Puerto Rico, which includes part of the Atlantic abyssal plain, may contain polymetallic nodule deposits. Exploration of Pacific territories is currently supported through collaboration with USGS researchers, who participate on relevant research cruises on an opportunistic basis.

Multiple Federal agencies working together launched BOEM's National Offshore Critical Mineral Inventory. This included a collaborative effort with USGS and NOAA to fund the first U.S.-based offshore critical mineral expedition since the early 1980's. This multiyear effort explored the massive sulfide mineralization and associated ecosystems of the Escanaba Trough offshore northern California. The Escanaba Trough is a deep water, sediment-covered seafloor spreading center with large, massive sulfide deposits. BOEM has complemented that effort with a multi-year, ongoing collaboration with NOAA and USGS to investigate the Aleutian Island Arc in the Pacific for potential hydrothermal systems and mineral potential. This multi-phase project includes an expedition to map the seafloor followed by deepwater sampling of specific locations with potential offshore critical mineral deposits.

In 2022, BOEM, in collaboration with USGS and NOAA, investigated a polymetallic nodule area on the Blake Plateau approximately 150 miles offshore Georgia. The Blake Plateau was used in 1970 to test nodule extraction equipment and could provide unique insight into the rates and types of ecological recovery that occur in exploited areas. In FY 2024, BOEM will continue the work with USGS and NOAA on a study to gather additional physical samples and establish a long-term monitoring program at this unique site. BOEM, in partnership with USGS, has initiated a project within the OCS offshore Hawaii to investigate the polymetallic nodule potential and to document environmental conditions with abyssal-depth seafloor mapping in late 2023 and bottom sampling in mid-2024. In the Gulf of Mexico, BOEM will kick-start a multi-year study to examine the critical mineral potential of submerged salt brine pools that will extend into 2025 and beyond. In FY 2024, BOEM plans to collaborate with USGS to investigate the critical mineral resources of the territorial OCS, beginning with Puerto Rico. BOEM also plans to engage the National Academy of Sciences, Engineering, and Medicine and academic experts to assist in developing a longer-term strategy for critical mineral-related environmental studies and environmental baseline information acquisition and assessment standards. In FY 2025, BOEM also plans to participate in an interagency science expedition to Alaska's remote western Aleutian Islands to characterize potential hydrothermal mineral deposits and their environs.

Although there is increased interest from industry, the military, and the international community regarding critical mineral development, the quantity and characteristics of the critical resources on the OCS, as well as the potential environmental impact of attempting to develop those resources, remain uncertain. There is a need to identify areas that have high economic potential but low ecological value, making them suitable for further study of the environmental impacts of seabed mining on the OCS.

Project Profile: Critical Minerals offshore Hawaii

In FY 2022, BOEM and USGS began a two-phase research program exploring ecosystems and critical mineral resources offshore Hawaii. The poorly characterized area is an abyssal plain (>5,000 m deep) interrupted by several relatively small submarine seamounts. The study area is adjacent to the Clarion-Clipperton Zone, an area of the international seabed known for large quantities of critical mineral-rich polymetallic nodules. These nodules often contain high concentrations of manganese, titanium, aluminum, magnesium, cobalt, lithium, nickel, and other critical minerals. This research program seeks to establish the density and extent of polymetallic nodules on the U.S. OCS and document the relationship of polymetallic nodules to the surrounding deep-sea environment. In Phase 1, BOEM partnered with USGS and NOAA to conduct a 10-day multibeam mapping cruise. Phase 2, planned for 2024, will investigate specific locations within the newly mapped area. In Phase 2, an interdisciplinary team of experts from BOEM, USGS, and academia will also visit sites on the *R/V Kilo Moana* research vessel and collect water quality, ecological, and geologic data.

FISCAL YEAR 2025 BUDGET

Bureau of Ocean Energy Management

Environmental Programs

Table 13: Environmental Programs Budget Summary

Activity: Environmental Programs

Dollars in Thousands ($000)

Environmental Programs	2023 Actual	2024 Annualized CR	2025 Fixed Costs (+/-)	2025 Program Changes (+/-)	2025 President's Budget	Change from 2024 Annualized CR (+/-)
Environmental Programs	**82,373**	**82,373**	**+1,106**	**+3,256**	**86,735**	**+4,362**
FTE	*143*	*149*	*0*	*+1*	*150*	*+1*

BOEM's Environmental Programs budget activity is cross cutting and foundational to the Bureau's work. This activity advances Administration priorities by ensuring that environmental protection is a foremost and indispensable consideration in BOEM decision-making. Furthermore, this budget activity supports BOEM's role in advancing engagement with Federally recognized Tribes, Alaska Native communities, Native Hawaiian organizations, communities with environmental justice concerns, and underserved communities.

BOEM's Environmental Programs budget activity plays a critical role in providing environmental safeguards for development of renewable energy, oil and gas, non-energy minerals, and sub-seabed storage of carbon dioxide. To advance the Administration's goals and ensure adequate environmental safeguards, BOEM must help decision-makers and the public understand how projects and operations affect the marine, coastal, and human environments and how adverse effects may be mitigated. The scientific research supported by this budget activity is essential to advancing project reviews for OCS energy and mineral development and to comply with applicable Federal laws, such as NEPA, MMPA, ESA, NHPA, the Coastal Zone Management Act (CZMA), and the Magnuson-Stevens Fishery Conservation and Management Act.

The 2025 budget will:

Advance Offshore Wind Energy Development with Environmental Research, Review, and Safeguards: In FY 2025, BOEM will continue considering potential environmental risk and impacts as renewable energy projects move from leasing to construction. BOEM will evaluate environmental, social, and cultural impacts, particularly impacts on marine mammals and avian species, viewsheds, and recreational and commercial fishing industries. BOEM will engage Tribal Nations, local communities, ocean users, and stakeholder groups to evaluate potential impacts and help identify potential mitigation solutions.

Move Forward with the Commitment to Environmental Justice: BOEM is committed to using the Bureau's policies, programs, activities, and decision-making processes to address disproportionate adverse impacts and achieving sustainable and equitable environmental outcomes for all people. BOEM partners with Federal, Tribal, State, and local governments, non-governmental organizations, and community leaders. Together, BOEM and its partners coordinate efforts in job creation, education, risk analysis and mitigation, and workforce development, particularly in communities with environmental justice concerns. In FY 2025, BOEM plans to provide technical assistance, tools, and resources to remove barriers; assist in facilitating meaningful and informed public participation; and broaden the geographic scope of its environmental justice engagement.

Increase Understanding and Addressing of Climate Change: BOEM-authorized offshore energy and marine mineral activities have the potential to significantly impact the course of climate change, both positively and negatively. BOEM strives to quantify the cumulative effects of its activities on climate change to inform decision-making. At the same time, climate change has the potential to significantly impact the environment in which BOEM-authorized activities take place. In FY 2025, BOEM will advance environmental studies to expand our ability to understand, quantify, and address the risks and effects of climate change in natural and human environments as they relate to BOEM-authorized offshore activities.

Assess Carbon Sequestration Through Environmental Research and Review: To help assess the cumulative and reasonably foreseeable impacts of offshore carbon sequestration activities, in FY 2025 BOEM will advance studies needed to look holistically at offshore carbon sequestration, including cumulative potential long-term effects on marine resources and the communities that depend on them. These studies will engage stakeholder groups and consider environmental, socioeconomic, and cultural impacts to inform program development.

Expand Availability of Information and Tools to Assess Trade-Offs: In FY 2025, BOEM plans to expand and improve the tools it needs to make sound decisions by continuing development in the following critical areas:
1) *Status of the OCS* (a one-stop shop for environmental information on the OCS)—sustain development of this tool, provide internal access throughout BOEM, and plan to make information available to the public;
2) *Multi-program approach to cumulative analysis* — develop a methodological approach based on recommendations from the National Academies of Sciences, Engineering, and Medicine;
3) *Ecosystem-based management*—implement an approach to visualize and evaluate the trade-offs of management decisions on the OCS, particularly for offshore wind energy siting decisions; and
4) *Compensatory mitigation*—expand BOEM's mitigation toolbox by developing guidance to operationalize compensatory mitigation across all BOEM programs.

Implement Collaborative and Cooperative Stewardship with Tribes and the Native Hawaiian Community: Through its environmental programs, BOEM conducts engagement and informal consultation with Federally recognized Tribes and the Native Hawaiian Community. BOEM supports Tribal co-stewardship of Federal lands and waters that contain cultural and natural resources of significance and value to Tribes and their members, including sacred religious sites, burial sites, wildlife, and sources of Indigenous foods and medicines. BOEM helps to implement the multi-agency commitment to Tribal co-stewardship and the Joint Secretarial Order signed by the Secretaries of the Interior and Agriculture, *Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters*.

Advance Innovative Science to Inform Resource Management Decisions: BOEM serves as a national hub for comprehensive OCS environmental monitoring that informs BOEM's resource management decisions. In FY 2025, BOEM will utilize a nimble acquisition strategy that enables greater use of emerging technologies to procure the best available data in support of OCS resource management decision-making.

SUMMARY OF 2025 PROGRAM CHANGES

Summary of 2025 Program Changes for Environmental Programs

Program Changes:	**($000)**	**FTE**
Baseline Capacity	+1,603	+0
Offshore Carbon Sequestration	+263	+0
Tribal Co-Stewardship	+500	+1
Environmental Studies Program	+890	+0
TOTAL Program Changes	**+3,256**	**+1**

* Changes listed in order of budget activity, not priority.

Maintain Baseline Capacity (+$1,603,000). The 2025 budget includes important investments in programs needed to help strengthen America and be more competitive as the world continues to change. These investments include funding needed to maintain a strong, talented workforce and the core capacity needed to continue to fulfill BOEM's mission. The budget includes $1,603,000 in this budget activity, which reflects the incremental amount needed to cover the fixed costs associated with mission operations in FY 2024. This request in combination with the FY 2025 fixed costs amounts will allow the program to meet sustain core capacity and avoid impacts to ongoing program activities.

Offshore Carbon Sequestration (+$263,000; 0 FTE). BOEM requests resources within the Environmental Programs ($263,000) budget activity to establish a dedicated Offshore Carbon Sequestration Program that will help ensure that offshore geological storage of carbon dioxide is done in a safe and effective manner. (This is in addition to funding requested in the Bureau's Conventional Energy request.) BOEM proposes resources to contribute toward environmental studies and reviews related to carbon sequestration as well as personnel development in support of this emerging area. Funding would contribute toward environmental studies to better understand the environmental effects of offshore carbon sequestration and related activities.

Tribal Co-Stewardship (+$500,000; +1 FTE). Proposed resources support engagement and informal consultation with Federally recognized Indian Tribes and the Native Hawaiian Community. This funding supports one dedicated FTE to serve as a Tribal liaison. BOEM supports Tribal co-stewardship of Federal lands and offshore waters that contain cultural and natural resources of significance and value to Indian Tribes and their members, including sacred religious sites, burial sites, wildlife, and sources of indigenous foods and medicines. The request reflects increased offshore leasing interest in new areas.

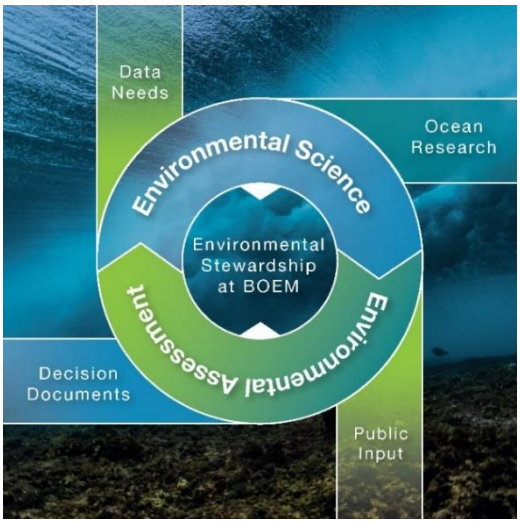
Environmental Studies Program (+$890,000; 0 FTE). This funding will better equip BOEM to conduct the environmental studies that support clean energy development, climate science, and conservation, and that inform BOEM understanding and policy decisions. Section 20 of OCSLA requires BOEM to consider the impacts from OCS development on the marine, coastal, and human environments. The FY 2025 budget supports environmental studies to enable research and leveraging of funds through partnerships and collaborative efforts to advance scientific progress on renewable energy, conventional energy, and marine minerals, and provide information for mission critical decision-making. BOEM also utilizes the information collected to inform environmental reviews and consultations with Tribes, States, and natural resource agencies. Information from studies also aids the Administration as it works to achieve its goal of conserving at least 30 percent of our lands and waters by 2030. This program is a priority area for BOEM and supports the Administration's desire for advancing our Nation's clean energy future, as well as responsible development of our Nation's energy and mineral resources.

PROGRAM OVERVIEW

BOEM's environmental work is organized administratively into headquarters functions of the Office of Environmental Programs (OEP) in the Washington, DC, area (comprising the Environmental Assessment Division, Environmental Sciences Division, and Center for Marine Acoustics) and program functions within the Office of Renewable Energy Programs and Office of Strategic Resources (including marine minerals); and BOEM regional offices (Gulf of Mexico Regional Office in New Orleans, Louisiana; Alaska Regional Office in Anchorage, Alaska; and Pacific Regional Office in Camarillo, California).

BOEM is committed to continuous staff improvement and recruitment and retention of the best available talent. BOEM employs staff in diverse fields: marine and coastal biology; chemical, biological, and physical oceanography; avian and marine mammal biology; acoustic science; geology; meteorology; atmospheric science; risk modeling; sociology; marine archaeology; anthropology; economics; and environmental policy.

BOEM's Environmental Programs budget activity includes an environmental assessment function and environmental studies function, which work together to support BOEM's mission. In addition, there are many environmental issues that span both functions.



➢ Tribal Engagement

Tribal fishermen with their inflatable boat.

Because of its responsibility to assess impacts to the human environment, OEP provides central leadership for BOEM's Tribal Program, including conducting relationship-building activities with Tribal Nations. BOEM will continue government-to-government consultations in FY 2025 as the Bureau implements its Tribal Consultation Guidance.

BOEM expects to conduct training for BOEM staff on Tribal consultation and engagement in FY 2024 and FY 2025. Tribal trainers will lead content development and delivery, and training exercises will be tailored to BOEM's process and organization, including focusing on cultural competency and specific regional elements.

➢ Environmental Justice

BOEM prioritizes equity in its policies, programs, and decision-making processes by consistently applying sound science to understand environmental justice communities and advancing meaningful engagement. In FY 2024 and 2025, BOEM will finalize and implement methodologies and best practices that will provide a consistent and science-based approach to the Bureau's environmental justice analyses.

In FY 2023, BOEM created the New York and New Jersey Offshore Wind Environmental Justice Forum to advance meaningful engagement with environmental justice communities around the review of offshore wind development in the New York Bight region. Community organizations, individuals, Federal and State agencies, and lessees meet quarterly to advance environmental justice issues, support underserved communities, and work toward a just clean energy transition. In FY 2024 and FY 2025, BOEM plans to expand these forums geographically to other locations along the Atlantic seaboard and into the Gulf of Mexico and Pacific, as well as into other program areas, such as carbon sequestration.

➢ Climate Change

BOEM analyzes greenhouse gas emission data to inform new offshore energy development and to generate new approaches to achieving the Administration's goals of reducing greenhouse gas emissions. Where BOEM has air quality jurisdiction, BOEM assesses greenhouse gas emissions data and supports a greenhouse gas emissions inventory conducted every three years as part of a larger emissions inventory. Most recently, BOEM analyzed data from oil and gas operators in FY 2022 and FY 2023. BOEM started another round of emissions data collection and analysis in FY 2023, which will be finalized and folded into its analyses in FY 2024 and FY 2025.

Calving glacier

BOEM also developed a leading model in the Federal government for estimating lifecycle emissions related to energy development and consumption and will conduct an annual update to data inputs. BOEM uses the Greenhouse Gas Lifecycle Energy Emissions Model in conjunction with its Offshore Environmental Cost Model and the Market Simulation Model to estimate the anticipated emissions associated with the full lifecycle of OCS activities from production and transportation through to refining and ultimate consumption. These three models collectively estimate the lifecycle emissions associated with OCS activities as well as those that would result from energy market substitutes (e.g., additional imports, onshore production, coal), in the absence of future OCS activities. BOEM has invested in ecosystem-based approaches to researching and understanding whole-system effects of energy development, and will work through FY 2025 to establish a framework for dynamic modeling of multiple wind project buildouts in the context of climate change.

Past analysis typically treated emissions from BOEM-authorized activities as potential climate stressors. In FY 2024, OEP is also evaluating climate change as a stressor for BOEM-authorized activity areas. The environment and ecosystems in which BOEM-authorized activities take place are rapidly changing due to ocean acidification, warming, and shifts in physical, chemical, and biological oceanographic regimes. Therefore, our assessment, review, protection, mitigation, and conservation efforts must be able to take these changes into consideration.

- **Marine Acoustics**

Atlantic spotted dolphins

Protecting marine life from industrial noise is an important component in all phases of all offshore energy and minerals development activities. In FY 2021, BOEM established the Center for Marine Acoustics (CMA) to strengthen and service all BOEM programs and regional offices in addressing this highly sensitive and technical issue (https://www.boem.gov/center-marine-acoustics). Through expertise, collaboration, innovation, and leadership, the CMA works with BOEM regional offices and programs — and key partners such as Federal agencies, academia, and industries — to

improve risk assessment tools and models, answer key science questions, develop better policy solutions, and educate stakeholders.

During FY 2024 and continuing in FY 2025, the CMA will build and augment its state-of-the-art acoustic impact model to better predict impacts; implement its Acoustic Science Strategy in concert with government and non-government partners; develop a quieting performance metric for impact pile driving that protects whale hearing; work with DOE and industry to release a Notice of Funding Opportunity announcement to incentivize further development of noise abatement technology and quieter foundation installation techniques; develop methodologies to better assess acoustic impacts from multiple wind facilities on marine species, including the highly endangered North Atlantic right whale; and implement modeling and sound source field verification guidelines that assist wind operators in better understanding how to meet mitigation requirements.

In FY 2024 and 2025, the CMA will also seek certification of BOEM's acoustic model workbench; continue buildout of a regional passive acoustic monitoring network in the Atlantic (cost-shared with industry and other partners); institute a noise mitigation plan across all programs that supports quieting goals; expand its partnerships internationally for more global solutions, including developing and leading an international forum of government representatives focused on offshore renewables and noise impact issues; and develop a fee-for-service business model so the CMA can assist other Federal agencies with marine noise impact assessment needs.

- **Inflation Reduction Act: Timely and Efficient Environmental Reviews**

As authorized by Section 50303 of the IRA, BOEM will collect environmental data and conduct analyses that facilitate timely and efficient environmental reviews between FY 2023 and FY 2027. Specific plans include conducting studies, workshops, and monitoring identified in the BOEM and NOAA North Atlantic Right Whale and Offshore Wind Strategy; undertaking baseline environmental and sociocultural studies around the U.S. Territories to prepare for the potential of wind energy development in those areas; conducting coding and seeking certification of its acoustic model; developing a regional passive acoustic monitoring network in the Atlantic capable of detecting changes in whale distribution and density; and completing 18 environmental studies that inform decisions on energy and mineral development.

ENVIRONMENTAL ASSESSMENTS

BOEM's environmental assessment function reviews the available science and synthesizes information for Bureau decisions on energy and mineral activities. The assessment function supports all BOEM's core activities: potential impacts of proposed offshore wind activities; authorization of G&G exploration; planning for the National OCS Oil and Gas Leasing Program; conducting lease sales and site assessments; evaluating oil and gas exploration and development plans and offshore wind COPs; and supporting more specific authorizations and permits, including for decommissioning.

BOEM's environmental analyses not only evaluate potential environmental impacts and alternatives to proposed actions but also identify impact mitigating measures that may be incorporated through regulatory vehicles such as permit conditions, lease stipulations, and terms and conditions of plan approval. The environmental assessment and mitigations developed address the requirements of many statutes, including NEPA, ESA, MMPA, NHPA, CZMA, the Magnuson-Stevens Fisheries Conservation and Management Act, the Clean Air Act, and the Clean Water Act.

- **Programmatic Solutions**

As offshore wind continues to expand in OCS waters, BOEM will establish programmatic approaches to impact assessment, application of mitigation measures, and adaptive monitoring. In early FY 2025, BOEM will complete its development of a programmatic EIS that evaluates the environmental effects of possible future wind energy construction and operations on renewable energy leases in the New York Bight. Further NEPA analysis for each COP would tier from the programmatic EIS.

During FY 2024 and FY 2025, BOEM will continue to develop and update clear guidance and reusable content for the development of offshore wind COP EISs and Essential Fish Habitat and ESA consultations. This initiative streamlines reviews and supports consistent analyses in current and future renewable energy projects. BOEM continues to work with NMFS to develop and implement a framework for ESA and Essential Fish Habitat compliance for offshore wind.

One example of this holistic approach to mitigating potential impacts is the North Atlantic right whale strategy. BOEM initiated and co-leads with NOAA this multi-stakeholder "living" strategy aimed at better understanding and avoiding potential impacts to North Atlantic right whales from offshore wind. BOEM engages with key partners (such as State agencies, the offshore wind industry, environmental non-governmental organizations, and academia) to collaboratively implement and adapt the strategy through research, improved risk assessment methods, mitigation (with a focus on avoidance), and monitoring for effects during construction and operation. During FY 2025, BOEM will continue to work with its partners to implement the top 20 priority actions identified in the final strategy.

BOEM's programmatic environmental analyses and comprehensive planning are a centerpiece for continuing needs around conventional energy. In FY 2023, BOEM published the final EIS for the 2024-2029 National OCS Oil and Gas Leasing Program, as well as regional EISs to support potential oil and

gas lease sales. Throughout FY 2025 and beyond, BOEM will continue to develop environmental analyses under NEPA. BOEM uses a phased approach to environmental review, wherein national or programmatic-level analyses are prepared first, followed by increasingly site-specific analyses at subsequent stages of approval for decisions on activities, such as geophysical survey and geological sampling permit applications, operators' plans for exploration and development, and other related industry activities.

BOEM will continue to address the challenges of climate change and work to meet the Administration's goals of a carbon pollution-free electric sector by 2035 and net-zero emissions economy-wide by 2050. In FY 2024 and FY 2025, BOEM will conduct analyses needed to understand BOEM's contribution and possible paths towards achieving these goals and to better understand the options for addressing not just the offshore contribution of OCS production to greenhouse gas emissions, but also the contributions from onshore processing and consumption of OCS oil and gas resources. BOEM expects to continue assessments like its recently completed lifecycle greenhouse gas analysis.

In FY 2024 and FY 2025, BOEM will continue to develop and update tools to facilitate comprehensive and meaningful environmental analysis under all BOEM programs, such as the *Status of the OCS* and an ecosystem-based management trade-off model. The *Status of the OCS*, launched in FY 2023, is an internal OCS information portal for environmental users designed to facilitate consistency and efficiency in preparation of environmental documents. In FY 2025, BOEM will expand access to provide the content related to emissions and climate change, environmental justice, and renewable energy.

BOEM's work requires advanced coordination with other expert agencies, including NMFS, FWS, BSEE, the Environmental Protection Agency, and the National Park Service. Consultation with resource agencies helps BOEM identify effective mitigation practices designed to avoid or minimize harm to protected or managed species and habitat. BOEM must consider, and in some cases incorporate, the results of these consultations within its decisions and authorizations. Additionally, certain permits and approvals issued by BOEM require operators to obtain incidental take authorizations for marine mammals from NMFS. In FY 2023, BOEM and NMFS finalized a detailed ESA and MMPA permitting streamlining plan. The plan's data and tools continue to provide a consistent approach to expediting MMPA incidental take authorization requests and ESA consultations across all BOEM's programs. Throughout FY 2024 and into FY 2025, BOEM will continue to work with NMFS and FWS to continually improve framework consultations for use in offshore wind energy.

- **Assessments: Atlantic OCS**

Coastal Virginia Offshore Wind, VA

BOEM conducts environmental analyses in the Atlantic OCS for core program-related activities, including renewable energy and marine minerals. Most of BOEM's renewable energy effort has centered on potential wind energy in the Atlantic. BOEM's Office of Renewable Energy Programs oversees offshore wind in the Atlantic, with OEP playing a central role in supporting this work, including through development of the programmatic EIS for the New York Bight set to be finalized in FY 2025. Through FY 2025, OEP will work in collaboration with the proposed Atlantic Regional Office and the Office of Renewable Energy Programs as well as Federal and Tribal partners, State and local agencies, and underserved communities to identify and assess programmatic-level mitigation measures that may reduce impacts associated with expected offshore wind development in the six New York Bight lease areas. In FY 2024 and 2025, OEP will continue to support field research and data analysis on potential critical mineral deposits in the Atlantic.

- **Assessments: Gulf of Mexico OCS**

Killer whale observed in the Gulf Stream

BOEM's Gulf of Mexico Regional Office primarily conducts environmental analyses, consultations, and reviews for renewable energy, conventional energy, and marine minerals in the Gulf of Mexico OCS. The work described here for FY 2023 and FY 2024 to date will continue through FY 2025 and beyond at the same or greater level of activity.

Due to the high volume of oil and gas activity in the Gulf of Mexico, BOEM prepares hundreds of NEPA documents and completes thousands of resource-specific reviews every year. In FY 2023, BOEM conducted approximately 700 site-specific NEPA environmental reviews for plans and ancillary activity notifications, G&G permit applications, pipeline permit applications, and structure removal permit applications.

In FY 2023, BOEM continued environmental reviews to support the first-ever Gulf of Mexico wind energy auction and initiated preparation for a proposed second Gulf of Mexico wind energy auction tentatively scheduled for FY 2024. This work includes the publication of an environmental assessment and completion of consultations with Tribal partners, States, NMFS, and FWS.

Beginning in FY 2022, the Gulf of Mexico environmental program has become central to the development of a carbon sequestration program on the OCS. This role will continue going forward as BOEM and BSEE establish regulations and build out their carbon sequestration programs. In FY 2024, BOEM will undertake the initial steps toward preparing a programmatic environmental analysis to streamline reviews and consultations for future lease sales and project approvals. Program activities currently underway include efforts to identify key stakeholders and potential activities and related environmental issues.

The need for OCS sand and gravel for coastal restoration and beach nourishment projects in the Gulf of Mexico has also increased in recent years, leading to an increase in the development of NEPA documents in support of these activities.

- **Assessments: Alaska**

BOEM's Alaska Regional Office conducts environmental analyses for conventional energy activities. The Office also actively supports headquarters, the Gulf of Mexico Regional Office, and the Pacific Regional Office to advance high-priority renewable energy analyses and will continue that support in FY 2025.

Bearded Seal resting on sea ice

BOEM completed an EIS in FY 2023 for a lease sale conducted in the Cook Inlet Planning Area in December 2022, as required by the IRA. The Alaska Regional Office is expecting the re-submission of an exploration plan for Cook Inlet leases sometime in FY 2025. BOEM continues to identify information needs to support NEPA analyses associated with possible future activities in Cook Inlet and other Alaska planning areas that have potential for conventional or renewable energy and marine mineral development. In FY 2025, BOEM will continue to provide NEPA and consultation support to BSEE for oil spill drill exercises.

- **Assessments: Pacific OCS**

BOEM's Pacific Regional Office conducts environmental analyses for conventional and renewable energy activities on the Pacific OCS, with activity expected to increase in FY 2025 compared to recent years.

There are currently 30 active oil and gas leases offshore California. BOEM's conventional energy assessments continue to focus on development and production from active leases, as well as anticipated upcoming decommissioning proposals for eight of the 23 existing platforms. These activities include the development of NEPA documents, development of and compliance with mitigation measures, and review of the mitigation measures' effectiveness. BOEM collaborated with BSEE on a programmatic EIS for

decommissioning oil and gas platforms in the Pacific OCS; the draft was published in FY 2023 and the final in FY 2024.

BOEM will continue working with agencies and other stakeholders to advance research to support decisions regarding commercial renewable energy projects on the California, Oregon, Washington, and Hawaii OCS. In FY 2023, BOEM published two draft WEAs offshore Oregon and received over 1,000 public comments. Additionally, in FY 2023, BOEM held the first-ever lease sale for wind energy off the West Coast and issued five wind leases offshore northern and central California for floating wind.

On December 19, 2023, BOEM published a Notice of Intent to begin a programmatic EIS regarding offshore wind development on the five leases offshore California; this activity is being partially funded through the IRA. BOEM also anticipates beginning an environmental assessment in Oregon to review potential impacts from offshore wind leasing.

ENVIRONMENTAL STUDIES PROGRAM

The OCSLA 1978 amendments mandated that the Department have a comprehensive environmental studies program to provide sound scientific analysis of the potential impacts of offshore development and an Oil and Gas Information Program to provide offshore operators and Federal and State Governments with data and information from OCS activities. BOEM collects data and monitors human, marine, and coastal environments to identify potential ecological, economic, and social impacts resulting from potential OCS activity.

BOEM's Environmental Studies Program (ESP) oversees the environmental research undertaken by the Bureau. ESP developed, and periodically updates, a strategic framework that details what BOEM needs to know, what strategic questions should be posed, and what criteria should be used to prioritize studies for addressing these questions.

To ensure ESP-funded studies effectively address BOEM's science needs, ESP carefully evaluates potential studies and seeks input from the National Academies of Sciences, Engineering, and Medicine's Committee on Offshore Science and Assessment when developing its National Studies List, which details the studies BOEM will fund in a given fiscal year. More information regarding ESP's study development process can be found in ESP's *Strategic Framework* (https://www.boem.gov/Strategic-Framework-2017) and *FY 2024-2025 Studies Development Plan* (https://www.boem.gov/environment/environmental-studies/environmental-studies-planning).

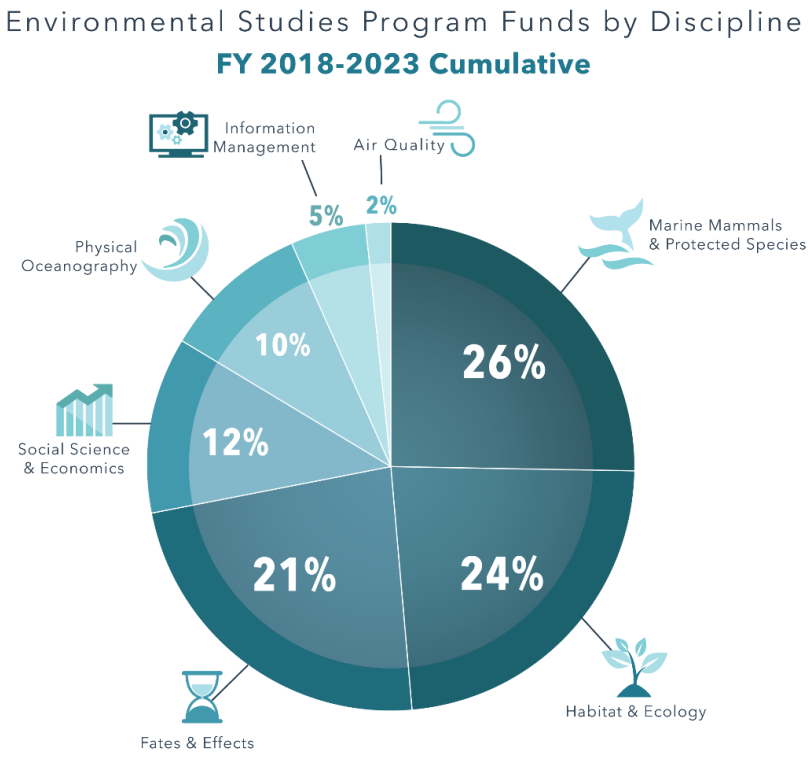
To generate the best possible information, ESP studies extend across multiple disciplines (see figure below). Continuing emphases are on the impacts of renewable and conventional energy and solid mineral development, as well as on monitoring efforts, analyses to improve baseline characterizations, and trend analyses. Research to understand the release, transport, fate, and effects of oil and other materials that may be discharged or spilled in the marine environments is also a priority. In FY 2025, BOEM will continue its effort to assess and employ, where it makes sense technically and fiscally, innovative technologies such as environmental DNA, satellite remote sensing, and machine learning.

Understanding how Bureau activities may affect traditional ways, subsistence, and Indigenous cultural resources is a key element to the Bureau's decision-making processes. BOEM is at the forefront of collaborating with Tribal communities and traditional practitioners on Indigenous Knowledge. Over the last few years, the Bureau sponsored approximately a dozen projects that have included Tribal communities to collect data on marine mammal observations, social networks, and harvest patterns through a Tribal lens. During FY 2025, the Bureau anticipates even more robust engagement with Tribal Nations through collaborative and co-productive research efforts and improved communications about BOEM's environmental work, which the Budget supports.

ESP disseminates environmental data sets, reports, and other study products to the public on its website (https://www.boem.gov/environment/environmental-studies/environmental-studies-information). Final reports are also available on the ESP Hub (https://esp-boem.hub.arcgis.com) and in the BOEM GovInfo repository (https://www.govinfo.gov/collection/boem). BOEM has a long-standing commitment to ensure that publications and samples are archived to meet future information needs.

In FY 2023, BOEM provided $13.9 million to ongoing studies and $10.5 million to new studies. In FY 2024, BOEM anticipates providing $14.5 million to ongoing studies and $11.7 million to new studies. In addition to the appropriated dollars, during FY 2023 BOEM spent $2.1 million in IRA funding on environmental studies. The Budget supports BOEM's ability to conduct further studies as OCS renewable energy, solid mineral, and carbon sequestration activities continue to increase.

Figure 19: Environmental Studies Program Funds by Discipline, FY 2018- 2023 Cumulative



ESP Funds by Discipline, FY 2018 – 2023 Cumulative
This chart includes obligations for all studies supporting environmental information needs for all energy types and marine minerals.

➢ Research Partnerships

ESP data also are used by stakeholders, other Federal agencies, and State and local governments. Leveraging partnerships to satisfy common scientific needs is a central component of BOEM's approach to gathering robust scientific information for its decisions and consultation processes. BOEM does not possess certain research assets (such as ships and autonomous underwater vehicles), so partnerships are necessary to achieve BOEM's applied science mission. By contributing personnel, equipment, facilities, and funds, BOEM and its partners can expand the scope of research to obtain maximum results.

Partnerships with Federal agencies (such as the National Science Foundation, NOAA, USGS, DOE, and FWS) are typically established through interagency agreements and through the National Oceanographic Partnership Program, a collaborative community of Federal agencies working to improve knowledge of the ocean environment. From FY 2018 to FY 2023, BOEM provided almost $68 million to Federal partners to conduct BOEM-designed scientific environmental work. In FY 2023 BOEM finalized 18 studies, eight of which were conducted with or by BOEM's Federal and State partners.

Examples of effective BOEM ESP partnerships include the following:

- **Offshore Analysis of Seafloor Instability and Sediments (OASIS Partnership) with Applications to Offshore Safety and Marine Archaeology.** BOEM began a multi-disciplinary investigation in FY 2022 of selected known and potential shipwreck sites within the Mississippi River Delta Front as markers to identify previous and predict future impacts from gravity flows. BOEM leads an interagency working group (OASIS Partnership) of Federal agencies with scientific research and resource management interests related to gravity flows in the Mississippi River Delta Front. The OASIS Partnership includes BOEM, BSEE, USGS, NOAA, Naval Research Laboratory, Naval Oceanographic Office, National Energy Technology Laboratory, and National Geospatial-Intelligence Agency. In FY 2023, BOEM awarded a cooperative agreement to the Louisiana State University to coordinate and lead the OASIS effort with additional contracted partners from the private sector and a non-governmental organization.
- **Partnership for Offshore Energy Regional Observation Network (POWERON).** This initiative is a new multi-stakeholder effort to determine whether there is any change in the distributions of baleen whales as a result of offshore wind development by utilizing passive acoustic monitoring in the Atlantic OCS. Initial support comes from BOEM's IRA Section 50303 funding. The work will be accomplished via a cooperative agreement with the Regional Wildlife Science Collaborative for Offshore Wind as well as an inter-agency agreement with NOAA's Northeast Fisheries Science Center (who is also providing in-kind funds). This program is in its infancy but is likely to run for at least a decade and expand.
- **NASA Aircraft Measurements in the Gulf of Mexico.** BOEM is tasked with reducing greenhouse gas emissions from its offshore energy activities. However, BOEM's emissions inventories contain estimates based on calculations using operational data rather than actual measurements of emission levels in the atmosphere. NASA will conduct flights in the Gulf of Mexico with their Johnson Space Center Gulfstream-V aircraft to measure column nitrogen dioxide. This data can be utilized to validate NASA's emission monitoring satellite data, improve BOEM's emissions inventories, and evaluate methods for using the NASA data to monitor offshore emissions into the future.

- **Expanding Pacific Research and Exploration of Submerged Systems (EXPRESS).** EXPRESS is a pioneering effort to improve Federal coordination of deepwater mapping and exploration. BOEM, NOAA, USGS, and the Monterey Bay Aquarium Research Institute initiated EXPRESS in 2018 to enhance West Coast resource and hazard management. To date, the EXPRESS campaign has included 28 research expeditions and amassed 575 days at sea on ten vessels, logging over 257 remotely operated and autonomous underwater vehicle dives. BOEM's financial contribution has been about 20 percent of total overall costs. BOEM is considering partial funding for three additional surveys in FY 2024 and early FY 2025. Much of the data and information provided from prior EXPRESS efforts have been crucial to supporting offshore wind energy planning in California and Oregon.
- **Next Generation of Animal Telemetry.** One tool BOEM uses to understand animal movement in the ocean is animal telemetry—using satellites to track animals to learn about their movement and behavior. In partnership with NASA, BOEM is working to develop the next generation of animal telemetry by leveraging inexpensive, coffee-cup size, open-source satellites. The team is developing receivers that will be able to localize animal positions much more accurately for a free flying experiment in FY 2024.
- **Impacts of Offshore Wind Development on the Environment.** BOEM and DOE are jointly funding four research projects to support the growth of offshore wind, totaling $15.1 million. The four awards began in FY 2022 and will last five years. The projects are focusing on: (1) a risk assessment of offshore wind development for birds, bats, and marine mammals along the East Coast; (2) a survey of changes in commercial fish and marine invertebrate populations and seafloor habitats at an offshore wind development site on the East Coast; (3) visual surveys and acoustic monitoring of marine mammals and seabirds to develop predictive density maps of species present in potential wind energy development areas off of northern California and Oregon; and (4) bat acoustic monitoring at fixed and mobile sites along the West Coast.
- **DNA Sequencing.** BOEM continues its long-term partnership with the Smithsonian's National Museum of Natural History (NMNH) to preserve biological specimens — including invertebrates and sequenceable DNA acquired from Federally funded research — and to maintain and provide quality assurance for the specimen databases. Many of these invertebrates have not had DNA sequencing and must be identified and archived. NMNH will target invasive species or species critical to seafloor impact assessment. NMNH also seeks to bring in more new samples from ongoing environmental studies. BOEM will take a closer look at these results at the end of 2024 and evaluate whether to continue the collections research under a planned new agreement.
- **Academic Partnerships.** BOEM collaborates with the academic community through several avenues. For example, BOEM spent approximately $96,000 in FY 2023 and plans to spend $250,000 in FY 2024 for new and continuing cooperative agreements with Coastal Marine Institute, located at the University of Alaska. Also, the Cooperative Ecosystem Studies Unit Network provides access to a collaborative network of academic and non-profit researchers and technical experts at a reduced overhead cost. Many projects through the Network include opportunities to train students and build a pipeline for the next generation of environmental science leaders. BOEM provided $1.96 million in FY 2022, $1.64 million in FY 2023, and plans to provide up to $5 million in FY 2024 for cooperative

agreements with Network institutions, much of which is enabled by the BOEM IRA funds and will focus on studies in the U.S. Territories.

- **Acknowledging, Including, and Applying Indigenous Knowledge.** The best way to apply Indigenous Knowledge to research used to inform decisions is to involve the appropriate Indigenous experts at the very beginning of proposal development before studies are designed and funded. BOEM will continue to establish cooperative agreements to improve Indigenous engagement and better understand Indigenous concerns and goals for community wellbeing, food security, and avoidance of conflicts with subsistence hunting, fishing, and gathering in and near Indigenous homelands. Forming and equipping panels of Indigenous experts and individual knowledge holders with scientists and managers is one way to support more consistent and formalized inclusion and application of Indigenous Knowledge in Federal research and decision-making.

➢ National Studies

Squat lobster in coral

National studies differ from regional studies in that they address issues of broad interest rather than specific interest to a region or program. National studies are managed centrally by BOEM's OEP, though BOEM staff from regional and program offices participate and lead projects.

In FY 2024, BOEM funded several new studies, including a study to assess the effectiveness of offshore wind lease stipulations on engagement with underserved communities; an investigation into sociocultural and economic impacts of changing energy trends; a synthesis of climate change sensitivity and information gaps in priority management areas of the OCS; a study that will use Coast Guard's Automatic Identification System vessel and Federal Aviation Administration's NextGen helicopter data to track BOEM-authorized activities; and a study that will use very high-resolution satellite imagery to detect cetaceans.

BOEM's priority in FY 2025 will be studies focusing on offshore wind, such as environmental monitoring and cumulative effects. Pursuant to EO 14008, BOEM will continue to collect data on greenhouse gas emissions from offshore oil and gas activities and will strengthen oversight to reduce emissions in support of the Administration's goals for a carbon pollution-free electric sector by 2035 and net-zero emissions economy-wide by 2050. BOEM will continue to investigate and incorporate in its studies and assessments the effects of climate change on fisheries, marine mammals, and other resources.

- **Atlantic OCS Studies**

During FY 2024, BOEM will continue to collect baseline information about the marine environment, which is critical for assessing offshore wind energy development. Studies will address key questions to identify mitigations for post-construction offshore wind infrastructure. Notably, studies will use the latest techniques to model impacts to the endangered North Atlantic right whale. Interactions between commercial fishing and existing offshore wind leases will be evaluated. BOEM will also continue to work jointly with DOE on regional research studying fisheries and marine life impacts. BOEM studies will include research on the impacts of sound on fish and sea turtles, monitoring construction activities at wind facilities, and improving our knowledge base about seabirds.

BOEM continues to plan and conduct studies in the Mid- and South Atlantic Planning Areas. Baseline studies are of special importance in this region and need to extend to ultra-deep waters.

Partnerships play an important role in baseline studies, including the *Atlantic Marine Assessment Program for Protected Species*, now in its third phase, and the *Mid-Atlantic Deepwater Canyons and Shipwrecks* study, involving NOAA, FWS, the U.S. Navy, and USGS. BOEM plans to implement long-term environmental monitoring capabilities in Atlantic deep waters to assess the present state of the environment and possible trends over time related to natural and human-induced variability. An interdisciplinary monitoring approach will be adopted to understand biological species densities and distributions, the physiochemical mechanisms driving change, and human uses of the environment. These measurements will test the efficacy of mitigations, such as for minimizing noise impacts on marine mammals, and will contribute to oil spill risk analysis, air quality, and predictive fisheries modeling.

Moving forward into FY 2024 and 2025, studies will cover a range of topics, including understanding shoal use by highly migratory species to help identify habitat preferences, assessing the behavioral and spatial ecology of ESA-listed species to inform risk associated with BOEM activities, testing the viability of deploying commercially available autonomous underwater vehicles for shallow-water geophysical mapping, and assessing temporal and spatial dimensions of sturgeon occurrence and behavior to determine impacts to the species from dredging and associated activities. In a study proposed in FY 2024, BOEM also is collaborating with NOAA and USGS on a study on the Blake Plateau off the southeast Atlantic Coast to test hypotheses regarding environmental impacts from deep sea mining as an important first step in understanding the environmental impacts of deep-sea mining.

➢ Gulf of Mexico OCS Studies

BOEM's Gulf of Mexico OCS studies support all three BOEM programs—conventional energy, renewable energy, and marine minerals—and cover the entire Gulf of Mexico. Studies analyze and explore ocean ecology from coastal marsh to ocean abyss, recognizing that oil and gas activities affect all habitats and that new technologies are facilitating activities in deeper waters. BOEM's scientific contributions are especially significant with respect to development of environmental and socioeconomic information needed to support all BOEM programs and anticipated information needs of new frontiers, such as carbon sequestration on the OCS.

In support of renewable energy development, including the offshore wind auction held in the Gulf of Mexico in FY 2023 and the next Gulf of Mexico wind auction planned for FY 2024, BOEM is targeting specific information gaps related to assessing the potential impacts of offshore wind in the region. In FY 2024, BOEM will begin assessing avian collision risk in the region using remote sensing. In FY 2023, BOEM launched a study focusing on coastal infrastructure needs to support offshore renewable energy projects and potential effects to Gulf Coast communities.

To advance environmental justice and Tribal engagement in the Gulf of Mexico region, BOEM is working with coastal communities and Tribes to identify archaeological sites and traditional cultural properties at risk from sea level rise and climate change. These efforts will help BOEM make informed decisions about how to manage, document, and/or mitigate impacts to these resources with input from affected communities. Another new study awarded in early FY 2024 and continuing in FY 2025 will help BOEM develop best practices for identifying submerged pre-contact archaeological sites on the Gulf of Mexico OCS.

In FY 2025, BOEM will continue the long-term coral reef monitoring efforts at the Flower Gardens Banks National Marine Sanctuary with NOAA. This long-standing monitoring work demonstrates that energy production can co-exist with a healthy, productive marine coral ecosystem, and helps ensure the long-term health of the sanctuary. In FY 2024, two ongoing studies awarded in FY 2023 are contributing to BOEM's adaptive environmental management and compliance in all BOEM program areas.

In FY 2023, BOEM began a new investigation of air and water quality at abandoned oil and gas wells to determine if abandoned wells are leaking and, if so, to what extent. The first research cruise was successfully completed in FY 2023, and a second is planned for FY 2024. BOEM expects that continued funding for this work will be needed in FY 2025.

In support of marine minerals, a continuing study investigating the long-term recovery of benthic and fish communities and primary production following dredging sediment resources within Ship Shoal in the Gulf of Mexico has been extended for an additional year with current secured funding through FY 2024.

Two new FY 2024 studies will focus on: (1) developing a regional modeling tool to predict seabed state across the Gulf of Mexico OCS to identify regions of high, moderate, and low sediment mobility to inform optimal buffer distances around critical assets, such as infrastructure and cultural resources; and (2) evaluating the use and cost of thermal detection technologies for nighttime protected species observer monitoring procedures.

- **Alaska OCS Studies**

BOEM's Alaska Regional Office conducts research studies in the Cook Inlet, Beaufort Sea, and Chukchi Sea Planning Areas. The Office continues to conduct research studies on marine mammals, migratory birds, fish, planktonic and benthic invertebrates, water quality, and sociocultural and economic potential impacts to Alaska Native peoples and other rural Alaskans.

Strengthening collaborative research opportunities is a priority, particularly incorporating Indigenous Knowledge. Other priorities include data synthesis, updating and improving oil spill risk analysis models, synthesizing the potential impacts to biological organisms from energy and marine mineral exploration and development activities, improving ice forecast modeling, and generating a revised baseline for subsistence activities in coastal communities.

New studies in FY 2024 will assess the abundance, distribution, and species diversity of seabirds in over 300 breeding colonies in Cook Inlet; develop a Cook Inlet water circulation model; support the Coastal Marine Institute, University of Alaska; compile baseline information regarding the relative importance of ocean-dependent and ocean-enhanced recreation and tourism for residents and visitors of the Cook Inlet area; and evaluate frequency and impacts of accidental pipeline gas releases on the OCS.

Climate warming in the Arctic is occurring at four times that of the rest of the world, with summer sea ice extent reaching record lows.[1] The loss of ice cover and resulting changes to ocean currents, water chemistry, and productivity influence marine mammal, migratory bird, and fish migration, habitat selection, foods and foraging ecology, productivity, health, and availability to local subsistence harvesters that rely on these resources for food security. Climate change effects also include increased shoreline erosion and permafrost melt that threaten Arctic communities and infrastructure. Current environmental baselines must be understood to analyze the potential environmental impacts of OCS energy and marine mineral activities.

[1] Rantanen, M., Karpechko, A.Y., Lipponen, A. et al. The Arctic has warmed nearly four times faster than the globe since 1979. Commun Earth Environ 3, 168 (2022). https://doi.org/10.1038/s43247-022-00498-3

In FY 2024 and 2025, BOEM will continue to examine the effects of a warming climate and increased sea surface temperatures on biological communities, including range expansions of species and introductions of non-native species; reduction and changes in the timing of freezing and melting of sea ice; and the occurrence, distribution, and availability of resources as cultural, traditional, and nutritional foods for Alaska Native peoples.

BOEM developed a partnership study (*Feasibility Study for Renewable Energy Technologies in Alaska Offshore Waters*) with the DOE's National Renewable Energy Laboratory to provide an estimate of the offshore wind, wave, and tidal renewable energy resources on the Alaska OCS and in State waters, and then assess the feasibility of developing these resources. This study also describes the potential for the co-production, distribution, and end-use opportunities of hydrogen produced using offshore renewable energy. The major steps in developing this report include a renewable energy resource assessment, a demographic analysis, a stakeholder engagement and conflict strategy, and a techno-economic analysis. The study is scheduled to be completed in FY 2024.

- **Pacific OCS Studies**

BOEM studies in the Pacific continue to evolve in response to changes in: (1) the geographic areas of activity; (2) the information needs for the mature oil- and gas-producing area offshore California; (3) renewable energy interest offshore California, Oregon, Washington, and Hawaii; (4) prospective interest in marine minerals; and (5) expanded BOEM jurisdiction in the U.S. Pacific Island Territories. BOEM expects the level of activity of its Pacific work to increase in FY 2025, building on the past, current, and planned new work described here.

In FY 2023, three Pacific OCS environmental studies were completed: (1) *Supplemental Data Regarding the Behavioral Response of Rock Crabs to the EMF of Subsea Cables and Potential Impact to Fisheries;* (2) *A Demonstration Marine Biodiversity Observation Network (MBON) for Ecosystem Monitoring;* and (3) *A Vulnerability Index to Scale Effects of Offshore Renewable Energy on Marine Mammals and Sea Turtles of the U.S. West Coast (VIMMS)*.

In FY 2024, new Pacific OCS environmental studies in process or underway inform planning or expected decisions regarding renewable energy, oil and gas decommissioning, and marine minerals.
New studies to acquire or refine information about environmental conditions and biological communities in areas of offshore renewable energy and marine mineral development include:

(1) *BOEM-MARINe (Multi-Agency Rocky Intertidal Network);*

(2) *Pacific Marine Assessment Partnership for Protected Species (PacMAPPS) II: California Current;* and

(3) *Characterization of Water Column Habitats to Understand Potential Impacts from Deepwater Energy and Mineral Development*.

New studies about cultural or socioeconomic aspects of planning for renewable energy and marine minerals development include:

(4) *O`ahu's Traditional Cultural Landscapes;*

(5) *Maritime Heritage of American Samoa;*

(6) *Port Infrastructure Needs of Commercial and Recreational Fisheries along the US West Coast;* and

(7) *Traditional Native Hawaiian Voyaging and Cultural Fishing and Boating Practices on the OCS.*

A new socioeconomic study to inform communications with the public during oil and gas decommissioning is: (8) *Limited English Proficiency Characterizations for Pacific Coast Communities Impacted by Outer Continental Shelf Offshore Oil and Gas Platform Decommissioning*.

In November 2023, the Pacific OCS Regional Office invited stakeholders to suggest FY 2025 Pacific study ideas to support BOEM's highest-priority mission areas.

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FISCAL YEAR 2025 BUDGET
Bureau of Ocean Energy Management
Executive Direction

Table 14: Executive Direction Budget Summary

Activity: Executive Direction
Dollars in Thousands ($000)

Executive Direction		**2023 Actual**	**2024 Annualized CR**	**2025 Fixed Costs (+/-)**	**2025 Program Changes (+/-)**	**2025 President's Budget**	**Change from 2024 Annualized CR (+/-)**
Executive Direction	$	**18,899**	**18,899**	**+510**	**+1,570**	**20,979**	**+2,080**
	FTE	*66*	*84*	*0*	*+2*	*86*	*+2*

Executive Direction supports Bureau-wide leadership, direction, management, coordination, communications strategies, outreach, and regulatory development, including managing the budget planning and execution processes, integrating budget and performance activities, Freedom of Information Act activities, overseeing official documents, international affairs, managing administrative services, information technology management and governance, congressional and public affairs, and policy analysis. As BOEM's programmatic activities grow, so too does its workload, as its experts oversee and coordinate overarching policies, regulations, and management practices. Specialists work closely with – and sometimes in – the program and regional offices and provide a holistic view and approach for Bureau-wide activities. Executive Direction activities ensure the necessary strategic planning, policy analysis, and regulatory support are available to decision-makers as they work to advance the Administration's priorities.

The 2025 budget will support:

- **Strategic Leadership:** Provide BOEM policy guidance and leadership, including the implementation of Administration priorities and policies.

- **Diversity, Equity, Inclusion, and Accessibility (DEIA):** Foster DEIA and equal employment opportunity throughout BOEM and all of its activities. BOEM strives to implement justice, equality, diversity, and inclusion within the Bureau workplace and in its program effects through its Justice, Equality, Diversity, and Inclusion (JEDI) Committee. In June 2022 BOEM developed a Director-approved DEIA Step-Down Implementation Plan, which incorporates goals from both the DOI DEIA Strategic Plan and the JEDI work plan.

- **Budget:** Manage the budget formulation and execution processes, from the development of the annual budget justification through the expenditure of appropriated funds, in conformance with all necessary policies, regulations, and statutes.

- **Planning and Performance:** Implement BOEM's planning and performance activities mandated by the Government Performance and Results Modernization Act of 2010 as well as Administration activities to improve Bureau performance and accountability to taxpayers. Examples of activities include: ensuring BOEM's performance goals track progress for strategic objective requirements within the Department's "Annual Performance Report;" integrating budget and performance information within budget, performance, and planning documents and data call responses; contributing toward the Department's Evidence Act Program; and, tracking the two-year Agency Priority Goal milestones.

- **Freedom of Information Act (FOIA):** Ensure timely resolution of FOIA and Privacy Act requests, as well as implement any legislative actions that pertain to FOIA policy.

- **Communications:** Coordinate communication and outreach efforts, including announcements about BOEM milestones and processes, especially those requesting public comment; development of website content and informational materials; and direct engagement with members of Congress, Tribal Nations, Federal, State and local government agencies, the media, the regulated community, ocean users, academia, environmental organizations, and the general public.

- **Policy:** Support BOEM mission areas and help achieve Departmental and Administration priorities on national-level issues, emerging issues, external coordination, information sharing, and project management to support the resolution of complex energy, mineral, geological, and environmental issues.

- **International Affairs:** Support U.S. government international initiatives related to emerging issues, the environment, and energy, mineral, and geological resources, and collaborate with other countries' regulators on issues of mutual interest.

- **Administration and Compliance:** Oversee and coordinate Bureau-level programs and management initiatives with BOEM offices and regions, including strategic human capital programs and plans, continuity of operations and emergency management program, directives and delegations, external audit liaison activities, and internal control programs.

- **Information Technology:** Provide Bureau-wide information technology management and governance, ensuring that technology aligns with mission delivery requirements. In addition to technology, data management, privacy, and records management are also addressed.

- **Regulations and Guidelines:** Lead and oversee the development of BOEM regulatory actions and interagency reviews. In addition, maintain oversight responsibility for BOEM's compliance with Paperwork Reduction Act requirements.

SUMMARY OF 2025 PROGRAM CHANGES

Summary of 2025 Program Changes for Executive Direction		
Program Changes:	**($000)**	**FTE**
Baseline Capacity	+902	+0
Office of Diversity, Inclusion and Civil Rights	+668	+2
TOTAL Program Changes	**+1,570**	**+2**
* Changes listed in order of budget activity, not priority.		

Maintain Baseline Capacity (+$902,000). The 2025 budget includes important investments in programs needed to help strengthen America and be more competitive as the world continues to change. These investments include funding needed to maintain a strong, talented workforce and the core capacity needed to continue to fulfill BOEM's mission. The budget includes $902,000 in this budget activity, which reflects the incremental amount needed to cover the fixed costs associated with mission operations in FY 2024. This request in combination with the FY 2025 fixed costs amounts will allow the program to meet sustain core capacity and avoid impacts to ongoing program activities.

Office of Diversity, Inclusion and Civil Rights (+$668,000; +2 FTE). In FY 2025 and in support of the Administration's priorities outlined by EOs 13985 and 13988, BOEM proposes two FTE to advance the efforts of the Office of Diversity, Inclusion and Civil Rights. Requested funding will enable BOEM to establish its own equal employment opportunity functions, as required by the Elijah E. Cummings Federal Employee Antidiscrimination Act of 2020, and combine them with its JEDI Committee efforts to create a holistic office to advance all aspects of equal opportunity, diversity, and inclusion. Proposed FTE will enable this office to design, develop, and recommend Bureau-wide equity, diversity, and inclusion strategies, policies, and programs that align with and contribute directly to the DOI's mission and strategic goals and ensure compliance with title VII of the Civil Rights Act of 1964, as amended; the Equal Pay Act of 1963; the Age Discrimination in Employment Act of 1967, as amended; sections 501 and 505 of the Rehabilitation Act of 1973, as amended; title II of the Genetic Information Nondiscrimination Act of 2008; Departmental directives; and other related statutes and orders. The Office will also provide advisory recommendations including BOEM-wide goals and objectives, and action plans designed to eliminate the underlying causes of problems or barriers to equal employment. The Office will work collaboratively with internal and external stakeholders and the Department to address systemic equal employment opportunity problems and advance equity, diversity, and inclusion as core values of the Department and its strategic human capital objectives. BOEM's goal is to ensure workforce activities are inclusive and that they promote the full utilization and exchange of skills and talents.

PROGRAM OVERVIEW

- **Office of the Director**

The Office of the Director includes the BOEM Director and Deputy Director and their immediate staff, as well as the offices of the Regional Directors and their immediate staff. These components of the BOEM staff are responsible for providing policy guidance and overall leadership within BOEM.

- **Chief of Staff**

The BOEM Office of the Chief of Staff manages the day-to-day operations of the Bureau directorate, provides general administrative direction, and conducts a variety of other management functions for the Bureau to ensure effective and efficient completion of mission-related activities. The office includes administrative support staff for the Director and Deputy Director and the Office of Document Management and is responsible for coordinating communication between the bureau and the Assistant Secretary for Land and Minerals Management.

- **Freedom of Information Act Office**

The FOIA office is responsible for planning, developing, analyzing, evaluating, and administering the BOEM FOIA program, including policy and training development in accordance with Departmental FOIA Office parameters and instruction, oversight of FOIA program functions, providing guidance on FOIA-related matters, and implementing and assessing FOIA activities.

- **Office of Communications**

The Office of Communications implements BOEM's internal and external communications strategies, including management of web content on BOEM's internal and externally facing webpages, development of informational materials highlighting BOEM's programs and milestones, media engagement, and extensive public and stakeholder outreach efforts. In addition, Communication's Office of Congressional and Intergovernmental Affairs is responsible for engaging with and providing information for members of Congress and their staffs, as well as for State and local government officials, and certain stakeholders.

- **Office of Diversity, Inclusion, and Civil Rights**

During FY 2023, BOEM began the process of creating the Office of Diversity, Inclusion, and Civil Rights in support of the Administration's priorities outlined by EOs 13985 and 13988 and aligned with the Elijah E. Cummings Federal Employee Antidiscrimination Act of 2020. In FY 2023, BOEM hired a Diversity and Inclusion Officer, who reports to the Director and oversees the Office. In the future, this Office will also include BOEM's equal employment opportunity function. This Office is responsible for monitoring and reporting progress made towards DEIA Step-Down Implementation Plan implementation and achieving a vision in which justice, equality, equity, diversity, and accessibility are fully integrated into BOEM's mission, organization, and workforce, and the impacts of BOEM's programs on all people.

- **Office of Regulations**

The Office of Regulations leads and oversees BOEM's national regulatory policy and evaluation programs and provides the Director with independent review and analysis of regulatory issues. The Office of Regulations directs cross-program Bureau initiatives to develop new and revise existing regulations, and publish associated guidance documents, that directly support Congressional, Presidential, Departmental, and Bureau directives, laws, orders, proposals, and mandates. The Office of Regulations provides BOEM oversight in several critical areas including regulatory planning, development,

promulgation, and related policy initiatives and interfaces directly with the Assistant Secretary for Land and Minerals Management and the Office of the Executive Secretariat and Regulatory Affairs on regulatory matters. In addition, the Office of Regulations has oversight responsibility for BOEM's compliance with the Paperwork Reduction Act and processing of any documents that may require OMB approval for a collection of information.

- **Office of Strategic Policy and International Affairs**

The Office of Strategic Policy and International Affairs provides policy and strategic analysis, internal and external coordination, and project management services to support the resolution of complex national and international energy, mineral, and environmental issues. In this role, the Office of Strategic Policy and International Affairs ensures adequate support to Bureau decision-making in advancing Departmental and U.S. Government priorities through effective collaboration across the Bureau's offices and subject matter experts, other Federal agencies, international governments and organizations, and external parties. In addition to these responsibilities, the Office of Strategic Policy and International Affairs functions as the lead for strategic planning, analysis, and coordination on emerging issues that may impact multiple program or regional offices.

- **Office of Budget and Administration**

The Office of Budget and Administration is responsible for managing the budget formulation and execution processes, performance and planning activities, activity-based costing, cost recovery fees, and administrative services. The organization assesses current budgetary resources, provides recommendations for program and budget initiatives to senior BOEM executives, manages the personnel allocation system, and formulates and assists in the defense of BOEM's budget submissions to the Department, Office of Management and Budget, and Congress. Additionally, the Office of Budget and Administration is tasked with developing, refining, and verifying activity-based costing data and conducting planning and performance management activities to identify, establish, monitor, and report on BOEM's strategic objectives and associated performance measures. The organization is responsible for overseeing coordination with administrative service providers in the management of BOEM administrative activities and serves as the point of contact for any service-related questions. In addition, the office conducts emergency management and continuity of operations, strategic human capital management, talent management, directives and delegation management, external audit liaison functions, enterprise risk management, and internal controls. The Office of Budget and Administration organizes Bureau-wide information technology management and governance, ensuring that technology aligns with mission delivery requirements. Responsibilities in this area include the oversight of new and ongoing information technology initiatives, improved service delivery through application development, technology refresh, data governance, privacy, and records management.

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FISCAL YEAR 2025 BUDGET
Bureau of Ocean Energy Management
Appropriations Language

Below is the Appropriations language for the Ocean Energy Management account within BOEM. In FY 2025, BOEM proposes changes to an existing General Provision and one new General Provision.

OCEAN ENERGY MANAGEMENT

For expenses necessary for granting and administering leases, easements, rights-of-way, and agreements for use for oil and gas, other minerals, energy, and marine-related purposes on the Outer Continental Shelf and approving operations related thereto, as authorized by law; for environmental studies, as authorized by law; for implementing other laws and to the extent provided by Presidential or Secretarial delegation; and for grants and cooperative agreements, both with or without a non-federal share, $242,045,000, of which $183,434,000 is to remain available until September 30, 2026, and of which $58,611,000 is to remain available until expended: Provided, That this total appropriation shall be reduced by amounts collected by the Secretary of the Interior and credited to this appropriation from additions to receipts resulting from increases to lease rental rates in effect on August 5, 1993, and from cost recovery fees from activities conducted by the Bureau of Ocean Energy Management pursuant to the Outer Continental Shelf Lands Act, including studies, assessments, analysis, and miscellaneous administrative activities: Provided further, That the sum herein appropriated shall be reduced as such collections are received during the fiscal year, so as to result in a final fiscal year 2025 appropriation estimated at not more than $183,434,000: Provided further, That not to exceed $3,000 shall be available for reasonable expenses related to promoting volunteer beach and marine cleanup activities: Provided further, That not to exceed $5,000 shall be available for official reception and representation expenses.

Note.--A full-year 2024 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2024 and Other Extensions Act (Division A of Public Law 118-15, as amended). The amounts included for 2024 reflect the annualized level provided by the continuing resolution.

Explanation of Appropriations Language

The following provides a provision-by-provision explanation and citation of authority for each component of the appropriations language.

1. *For expenses necessary for granting and administering leases, easements, rights-of-way and agreements for use for oil and gas, other minerals, energy, and marine-related purposes on the Outer Continental Shelf and approving operations related thereto, as authorized by law;*

This provision authorizes BOEM to expend funds for specific, mission-related purposes pursuant to BOEM's primary authorization, the OCS Lands Act, as amended, as well as myriad additional statutes that guide its activities, such as the National Environmental Policy Act of 1969 (NEPA), the Submerged Lands Act of 1953, the Energy Policy Act of 2005, and others.

2. *…for environmental studies, as authorized by law;*

This provision authorizes BOEM to expend funds for environmental studies, pursuant to law. Specifically, BOEM's Environmental Studies Program function was established in 1973 by the OCS Lands Act, which directed the Secretary of the Interior, now through BOEM, to –

". . . conduct a study of any area or region included in any oil and gas lease sale or other lease in order to establish information needed for assessment and management of environmental impacts on the human, marine, and coastal environments of the Outer Continental Shelf and the coastal areas which may be affected by oil and gas or other mineral development in such area or region." 43 U.S.C. §1346(a)(1).

". . . to predict impacts on the marine biota which may result from chronic low level pollution or large spills associated with Outer Continental Shelf production, from the introduction of drill cuttings and drilling muds in the area, and from the laying of pipe to serve the offshore production area, and the impacts of development offshore on the affected and coastal areas." 43 U.S.C. §1346(a)(3).

"Subsequent to the leasing and developing of any area or region, [to conduct] such additional studies as he deems necessary and shall monitor the human, marine, and coastal environments of such area or region in a manner designed to provide time-series and data trend information which can be used for comparison with any previously collected data for the purpose of identifying any significant changes in the quality and productivity of such environments, for establishing trends in the areas studied and monitored, and for designing experiments to identify the causes of such changes." 43 U.S.C. §1346(b).

3. *…For implementing other laws and to the extent provided by Presidential or Secretarial delegation;*

This provision authorizes BOEM to expend funds on activities related to its mission that are delegated to BOEM by either the President of the United States or the Secretary of the Interior. For instance, Section 388 of the Energy Policy Act of 2005 amended the OCS Lands Act to give the Secretary of the Interior the authority to issue leases, easements, and rights-of-way on the OCS for activities that produce or support production, transportation, or transmission of energy from sources other than oil and gas. The Secretary has delegated this responsibility to BOEM, and this provision allows BOEM to fund renewable energy activities on the OCS on behalf of the Secretary.

4. *… and for grants and cooperative agreements, both with or without a non-federal share,*

This language provides authority for BOEM to utilize grants and cooperative agreements, without the requirement of a matching component, to carry out mission-related functions. BOEM uses cooperative agreements with Federal and non-Federal partners to conduct environmental studies and to implement renewable energy and OCS sand projects.

5. *…$242,045,000, of which $183,434,000 is to remain available until September 30, 2026 and of which $58,611,000 is to remain available until expended:*

This provision identifies the amount of BOEM's total budget authority for FY 2025 ($242,045,000). Of this total budget authority, $183,434,000 is designated as two-year money, to be available from FY 2025 through the end of FY 2026. Meanwhile, $58,611,000 of BOEM's budget authority – the amount associated with offsetting collections – is designated as no-year money with no expiration date. This enables BOEM to use no-year money to fund long-term projects such as environmental studies.

6. *… Provided, That this total appropriation shall be reduced by amounts collected by the Secretary of the Interior and credited to this appropriation from additions to receipts resulting from increases to lease rental rates in effect on August 5, 1993, and from cost recovery fees from activities conducted by the Bureau of Ocean Energy Management pursuant to the Outer Continental Shelf Lands Act, including studies, assessments, analysis, and miscellaneous administrative activities:*

Since 1995, annual appropriations language has provided BOEM (and its predecessor agencies) authority to keep rental revenues above the $3.00/acre rate in effect on August 5, 1993, up to an annual cap, to fund current operations. This provision allows BOEM to use these rental receipts – as well as cost recovery fees for specific activities authorized by the OCS Lands Act, as authorized by the Independent Offices Appropriations Act – to partially fund mission-related activities. A listing of the specific cost recovery services and associated fees can be found on BOEM's website in the "Fees for Services" section (http://www.boem.gov/Fees-for-Services/).

7. *…Provided further, That the sum herein appropriated shall be reduced as such collections are received during the fiscal year, so as to result in a final fiscal year 2025 appropriation estimated at not more than $183,434,000*:

This provision pertains to the availability of offsetting collections. The timing difference between the collection of rents and cost recovery fees and the availability of the funding for use as offsetting collections created significant operational challenges for BOEM, so the language was amended to include this "safety clause" in FY 2014. The language allows BOEM to derive initial funding from the general fund of the Treasury, with amounts returned to the general fund at the end of the year once all collections have been received.

8. *…Provided further, That not to exceed $3,000 shall be available for reasonable expenses related to promoting volunteer beach and marine cleanup activities.*

This provision has been included annually since 1998 (P.L. 105-83) and authorizes BOEM to expend up to a certain amount for the promotion of volunteer beach and marine clean-up activities.

9. …Provided further, That not to exceed $5,000 shall be available for official reception and representation expenses.

The 2025 budget proposes appropriations language to enable BOEM to use up to $5,000 of appropriated amounts for courtesy and social responsibilities associated with official duties, including outreach and engagement with Tribal partners to honor traditions. This request would provide the Bureau similar authority provided to other agencies to extend hospitality to official visitors without bureau employees bearing expenses from their own personal funds.

GENERAL PROVISIONS

The language provided below reflects the General Provision directly applicable to BOEM. For a complete, detailed discussion of the Department's proposed General Provisions, please refer to the General Provision section of the Office of the Secretary FY 2025 budget justification.

- **CONTRIBUTION AUTHORITY**

Public Law 113-76 (the Consolidated Appropriations Act, 2014) included a Title I General Provision (Section 113) stating –

> *In fiscal years 2014 through 2019, the Secretary of the Interior may accept from public and private sources contributions of money and services for use by BOEM or the Bureau of Safety and Environmental Enforcement (BSEE) to conduct work in support of the orderly exploration and development of Outer Continental Shelf (OCS) resources, including preparation of environmental documents such as impact statements and assessments, studies, and related research.*

The Consolidated Appropriations Act, 2019 (Public Law 116-6), amended the law to enable BOEM authority through FY 2024 to accept contributions for environmental and technical work related to the development of OCS resources.

> "SEC. 114. Section 113 of Division G of Public Law 113-76, is amended by striking "2019," and inserting "2024,".

As a result of this authority, through FY 2024 BOEM is able to accept and use contributions in a manner that (1) promotes and enhances its programs and activities on the OCS consistent with applicable laws, for example by expanding BOEM's capacity to conduct environmental reviews; (2) does not create a conflict or the appearance of a conflict of interest between BOEM and the entities it regulates or any other prohibited source; and (3) maintains BOEM's high standards for scientific and technical adequacy.

Proposal: In FY 2025, BOEM proposes the following change:

SEC. ___. Section 113 of Division G of Public Law 113–76, as amended by Public Law 116-6, is further is amended by striking "2024," and inserting "2029,".

Explanation of Proposed Change: This authority is set to expire at the end of FY 2024; therefore, BOEM proposes to extend the authority through 2029. This proposed language change will not affect the totals identified in BOEM's FY 2025 Budget.

➢ DECOMMISSIONING ACCOUNT

BOEM requires OCS oil and gas and renewable energy lessees to provide financial assurance to cover lease obligations, primarily for decommissioning of facilities when they are no longer supporting production. Through regulations implementing the OCS Lands Act (43 U.S.C. 1331 et seq.), BOEM is authorized to call for the forfeiture of that financial assurance and collect bond proceeds or other security forfeitures from an OCS permittee, lessee, or right-of-way holder that does not fulfill the requirements of its permit, lease, or right-of-way or does not comply with the regulations or orders of the Secretary. See 30 CFR § 556.907. Such forfeitures cover the cost to the United States of any improvement, protection, or rehabilitation work rendered necessary by the action or inaction that led to the forfeiture. The determination to call for the forfeiture of a bond or security is made by the Regional Director for the BOEM regional office where the lease, permit, or right-of-way is managed. Because the statute identifies the Royalty and Offshore Minerals Management account (which is now BOEM's operating account, hereinafter referred to as the "OEM" account) as the one in which funds will be collected, forfeited moneys are credited to the OEM account to remain available until expended, and any funds in excess of the amount expended in performing the necessary work are returned to the permittee, lessee, or right-of-way holder. See 43 U.S.C. 1338a.

Under the OCS Lands Act and Secretarial delegations, BOEM has the authority to collect bankruptcy settlements or disbursements on behalf of BSEE. BSEE may receive distributions in bankruptcy proceedings to reimburse it for actual, necessary costs and expenses incurred in performing decommissioning during the pendency of the bankruptcy that had been the responsibility of a debtor or in correcting other regulatory violations. Additionally, BSEE may receive a pro rata distribution from the bankruptcy estate based on the proof of claim for the expected future costs of decommissioning. In both instances, the funds are received to remedy a specific problem and not for general governmental purposes. Similar to forfeited bonds or other securities, the bankruptcy settlements and distributions may be credited to BOEM's OEM account until expended.

During the reorganization of the Minerals Management Service into three separate entities, the specific authorities regarding bond forfeitures were not clearly assigned or updated. As a result, BOEM has the authority to call bonds and collect the associated funds, but BSEE receives bankruptcy settlements and distributions. However, although BSEE is responsible for ensuring the necessary decommissioning work is done, it has no clear authority to retain funds received in bankruptcy and therefore, such funds are placed into BOEM's OEM account, to which BSEE has no access. While BOEM can utilize a reimbursable service agreement to effectively transfer funds – resulting from a bond forfeiture or a bankruptcy distribution - from the OEM account to BSEE, this is neither a practical nor efficient long-term solution.

Proposal: BOEM proposes to separate collections of forfeitures (of bonds or other securities) and bankruptcy distributions or settlements (associated with failure to perform or noncompliance) from the appropriations in its OEM account and administer them through a new Treasury account. To accomplish this, BOEM requests authority to transfer such funds to this new account and to direct all future such funds to the new account as well. BOEM will work with the Department, OMB, and Treasury to establish the Treasury account in which decommissioning funds can be managed, but in order to utilize this new

account for the collection and Administration of funds specific to decommissioning activities, the underlying statute will need to be amended. Therefore, BOEM requests the following language be included either as an administrative or general provision:

> *SEC. 114. The fifth and sixth provisos under the amended heading "Royalty and Offshore Minerals Management" for the Minerals Management Service in Public Law 101–512 (104 Stat. 1926, as amended) (43 U.S.C. 1338a) are further amended by striking and replacing them with— "Provided further, That notwithstanding section 3302 of title 31, any moneys hereafter received as a result of the forfeiture of a bond or other security by an Outer Continental Shelf permittee, lessee, or right of-way holder that does not fulfill the requirements of its permit, lease, or right-of way or does not comply with the regulations of the Secretary, or as a bankruptcy distribution or settlement associated with such failure or noncompliance, shall be credited to a separate account established in the Treasury for decommissioning activities and shall be available to the Bureau of Ocean Energy Management without further appropriation or fiscal year limitation to cover the cost to the United States of any improvement, protection, rehabilitation, or decommissioning work rendered necessary by the action or inaction that led to the forfeiture or bankruptcy distribution or settlement, to remain available until expended: Provided further, That amounts deposited into the decommissioning account may be allocated to the Bureau of Safety and Environmental Enforcement for such costs: Provided further, That any moneys received for such costs currently held in the Ocean Energy Management account shall be transferred to the decommissioning account: Provided further, That any portion of the moneys so credited shall be returned to the bankruptcy estate, permittee, lessee, or right-of-way holder to the extent that the money is in excess of the amount expended in performing the work necessitated by the action or inaction which led to their receipt or, if the bond or security was forfeited for failure to pay the civil penalty, in excess of the civil penalty imposed.".*

Explanation of Proposed Change: The requested language would do the following:

1. Establish a new parent-child account to hold funds from forfeitures of bonds and other securities and from bankruptcy settlements and distributions.
2. Clarify the treatment of funds from bankruptcy settlements and distributions in addition to bond forfeitures.
3. Amend this provision in the OCS Lands Act (43 USC 1338a) to add the word “decommissioning” to the list of purposes for which the funds in this account can be collected and used. This is because “decommissioning” is the term used in the BSEE and BOEM regulations and by the offshore energy industry, and adding it to the statute clarifies the purposes for which the funds in this new account shall be used.
4. Allow BOEM to transfer existing funds from the OEM (current account) to a new parent-child account and allow BSEE access to the funds contained in the child account arising from the forfeitures (of bonds or other securities) and bankruptcy distributions or settlements.

This proposal seeks to simplify how these funds are accounted for in the U.S. Treasury, and it would have no impact to Federal revenues or budgetary scoring.

FISCAL YEAR 2025 BUDGET
Bureau of Ocean Energy Management
Disclosure of Program Assessments

This appendix is provided in compliance with section 403 Division G of Public Law 117-328, the Consolidated Appropriations Act, 2023, which states:

> *DISCLOSURE OF ADMINISTRATIVE EXPENSES*
> *SEC. 403. The amount and basis of estimated overhead charges, deductions, reserves, or holdbacks, including working capital fund charges, from programs, projects, activities and subactivities to support government-wide, departmental, agency, or bureau administrative functions or headquarters, regional, or central operations shall be presented in annual budget justifications and subject to approval by the Committees on Appropriations of the House of Representatives and the Senate. Changes to such estimates shall be presented to the Committees on Appropriations for approval.*

The majority of BOEM's external assessments are associated with the costs of the shared services approach that allows it to meet its administrative and information technology needs. BOEM implements this approach through reimbursable services agreements with BSEE, which are identified in the table below. Under this arrangement, BSEE provides a full suite of administrative services including acquisition management, equal employment opportunity,[1] finance, human resources, information technology management, management support, personnel security, and support services. Maintaining these critical administrative functions within the Department provides the following benefits:

- Minimizing duplication of administrative entities across multiple organizations and optimizing efficiency.
- Providing a centralized administrative function that can, over time, allow the Department to pursue additional efficiencies.

The Department has strongly supported the expansion of business cross-servicing to strategically expand high-quality, high-value shared services to improve performance and efficiency throughout the Department.

Through this effort, BOEM and BSEE support the Department's and the Administration's efforts to increase the efficiency of core operations, reduce duplication and waste, enable investments in innovation, use shared services and common infrastructure, facilitate agency collaboration and co-funding, and implement innovative approaches to budgeting and resource management. Specifically, this arrangement

[1] Equal employment opportunity services are proposed to be transferred to BOEM's new Office of Diversity and Civil Rights over the course of FYs 2024-2025 and would no longer be part of the reimbursable services agreement thereafter.

has the added benefit of implementing standardized practices that further increase the productivity for highly skilled resources in both Bureaus. By utilizing the shared services model, BOEM and BSEE continue to improve their best practices and optimize the use of administrative funds.

BOEM and BSEE regularly evaluate these support arrangements in joint, quarterly meetings, and final costs are determined at the end of the year based on FTE levels and hours billed. BSEE's costs to provide these services are also carefully managed and jointly approved. Because these costs are regularly reevaluated, estimated out-year costs are based on prior year actuals and the stated billing methodology. Amounts shown in the table below are estimates and may not reflect final agreements or end of year obligations. Additionally, because BOEM has no dedicated budget line to pay for its administrative overhead, all external assessments are paid through internal assessments to the Ocean Energy Management account.

Table 15: Disclosure of Program Assessments

Bureau of Ocean Energy Management Disclosure of Program Assessments *(dollars in thousands)* **Cost Description**	**2025**
External Administrative Costs	
Administrative RSA with BSEE	19,994
IT Labor RSA with BSEE	4,812
IT Technology RSA with BSEE	20,886
Solicitor Support	2,400
Working Capital Fund Centralized Billing	2,500
Working Capital Fund Direct Billing	1,400
NARA	121
Total, External Administrative Costs	$ 52,113
Internal Bureau Assessments	
Ocean Energy Management	52,113
Total, Internal Bureau Assessments	$ 52,113
* External administrative costs are charged to the Ocean Energy Management account for a total cost to the Bureau of $52,113 thousand.	

Multiple IT support contracts provide operations, maintenance, management, and enhancement services to the enterprise and the TIMS investment. In addition to the administrative contracts with BSEE, BOEM also contracts with the Office of the Solicitor for legal support. Other external assessments include the Department's Working Capital Fund, which supports Department-wide systems, such as the Financial and Business Management System, which bureaus use for accounting and finance. BOEM is also externally assessed for information archiving through the National Archives and Records Administration.

FISCAL YEAR 2025 BUDGET

Bureau of Ocean Energy Management

Employee Count by Grade

(Total Employment)

Table 16: Employee Count by Grade

Bureau of Ocean Energy Management
Employee Count by Grade
(Total Employment)

Employee Count by Grade	2023 Actuals	2024 Estimate	2025 Estimate
Executive Level V ……..	0	0	0
SES ……..……	8	8	8
Subtotal ……..……	**8**	**8**	**8**
SL - 00 ……..……..	2	2	2
ST - 00 ……..……..	0	0	0
Subtotal ……..……..	**2**	**2**	**2**
GS/GM -15 ……..……....	55	56	58
GS/GM -14 ……..……....	179	191	209
GS/GM -13 ……..……....	204	220	236
GS -12 ……..……....	84	88	90
GS -11 ……..……..…..	38	41	44
GS -10 ……..……..…..	0	0	0
GS - 9 ……..……..……..	16	19	19
GS - 8 ……..……....	5	5	5
GS - 7 ……..……..	3	4	4
GS - 6 ……..……..	6	7	8
GS - 5 ……..……..	1	1	1
GS - 4 ……..……..	0	0	0
GS - 3 ……..……..	0	0	0
GS - 2 ……..……..	0	0	0
GS - 1 ……..……..	0	0	0
Subtotal ……..……..…….	**593**	**634**	**676**
Other Pay Schedule Systems ……..……..	0	0	0
Total employment (actuals & estimates) ……..	601	644	686

Notes on this table:

- All grades presented in this table include career, career-conditional, temporary, and political employees.

- GS refers to employees covered by the General Schedule classification and pay system established under the Classification Act of 1949, as amended. (5 U.S.C. chapter 53, subchapter III, and 5 CFR part 531).
- GM refers to employees covered by the General Schedule classification and pay system who are covered by the Performance Management and Recognition System termination provisions of Public Law 103-89 (former Performance Management and Recognition System employees).

FISCAL YEAR 2025 BUDGET

Bureau of Ocean Energy Management

List of Acronyms

AIS	Automatic Identification System
ANSI	American National Standards Institute
BDS	Boundary Delineation System
BIL	Bipartisan Infrastructure Law
BOEM	Bureau of Ocean Energy Management
BSEE	Bureau of Safety and Environmental Enforcement
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CMA	Center for Marine Acoustics
COP	Construction and Operation Plan
DEIA	Diversity, Equity, Inclusion, and Accessibility
DOCD	Development Operations Coordination Document
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of the Interior
DPP	Development and Production Plan
eDNA	environmental DNA
EIS	Environmental Impact Statement
EO	Executive Order
EP	Exploration Plan
ESA	Endangered Species Act
ESP	Environmental Studies Program
FAST-41	Title 41 of the Fixing America's Surface Transportation Act
FERC	Federal Energy Regulatory Commission
FGDC	Federal Geographic Data Committee
FOIA	Freedom of Information Act
FTE	Full Time Equivalent
FWS	U.S. Fish and Wildlife Service
FY	Fiscal Year
GAO	Government Accountability Office
GeoSEAS	Geospatial Shared Enterprise Architecture & Services
GIS	Geographic Information System
G&G	Geological and Geophysical
GOM	Gulf of Mexico
GW	Gigawatts
IEA	International Energy Agency
IIJA	Infrastructure Investment and Jobs Act
IRA	Inflation Reduction Act

IREIMS	Integrated Renewable Energy Information Management System
IT	Information Technology
JEDI	Justice, Equality, Diversity, and Inclusion
JIP	Joint Industry Project
MOA	Memoranda of Agreement
MOU	Memoranda of Understanding
MMIS	Marine Minerals Information System
MMPA	Marine Mammals Protection Act
MW	Megawatts
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NMNH	National Museum of Natural History
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NOPP	National Oceanographic Partnership Program
NOS	Notice of Sale
OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
OEM	Ocean Energy Management
OEP	Office of Environmental Programs
OMB	Office of Management and Budget
OMC	Offshore Marine Cadastre
OSW	Offshore Wind
PFP	Proposed Final Program
P.L.	Public Law
ROD	Record of Decision
SAP	Site Assessment Plan
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USCG	U.S. Coast Guard
USGS	U.S. Geological Survey
WEA	Wind Energy Area